Publications of the Academy of Finland 12/06

RESEARCH PROGRAMME ON FINNISH COMPANIES AND THE CHALLENGES OF GLOBALISATION (LIIKE)



Evaluation report





Publications of the Academy of Finland 12/06

RESEARCH PROGRAMME ON FINNISH COMPANIES AND THE CHALLENGES OF GLOBALISATION (LIIKE)

Evaluation report

ACADEMY OF FINLAND IN BRIEF

The Academy's mission is to finance high-quality scientific research, act as a science and science policy expert and strengthen the position of science and research. The Academy's activities cover all scientific disciplines.

The main focus of the Academy's development activities is on improving opportunities for professional careers in research, providing resources and facilities for high-profile research environments and making the best possible use of international opportunities in all fields of research, research funding, and science policy.

The Academy has a number of funding instruments for various purposes. In its research funding, the Academy of Finland promotes gender equality and encourages in particular women researchers to apply for research posts and research grants from the Academy.

The Academy's annual research funding amounts to more than 240 million euros, which represents some 15 per cent of the government's total R&D spending.

Each year Academy-funded projects account for some 3,000 researcher-years at universities and research institutes.

The wide range of high-level basic research funded by the Academy generates new knowledge and new experts. The Academy of Finland operates within the administrative sector of the Ministry of Education and receives its funding through the state budget.

For more information on the Academy of Finland, go to www.aka.fi/eng.

Taitto PixPoint ky ISBN 951-715-618-9 (print) ISBN 951-715-619-7 (pdf) Paino: Edita Prima Oy, Helsinki 2006

Kuvailulehti

Julkaisija	Suomen Akatemia	Päivämäärä 16.8.2006					
Tekijä(t)	Sten Jönsson, Michael Bromwich, Paula Liukkonen, Veli-Matti Virolainen						
Julkaisun nimi	Research Programme on Finnish Companies and the Challenges of Globalisation 2001-2004 (LIIKE), Evaluation Report						
Tiivistelmä	Suomen Akatemia käynnisti vuonna 2000 Suomalaiset yritykset ja globaalin kilpailun haasteet -tutkimusohjelman (LIIKE), joka toteutettiin vuosina 2001-2004. Ohjelman tavoitteena oli tutkia suomalaisen yritystoiminnan ja liikkeenjohdon muutoksia globaalin tieto- ja osaamispohjaisen kilpailun sekä jatkuvasti vahvistuvan finanssivetoisuuden muodostamassa toimintaympäristössä. Suomen Akatemian ohella ohjelmaa rahoitti Teknologian kehittamiskeskus Tekes. Lisäksi yhteistyötahona oli Työsuojelurahasto. Tampereen yliopisto koordinoi ohjelmaa.						
	Ohjelman päätyttyä kansainvälinen arviointiryhmä arvioi ohjelman. Arvioinnin tavo teena oli tarkastella ohjelman tavoitteiden toteutumisen onnistumista. Erityisesti arvitiin ohjelmakokonaisuuden toteutumista ja sen synnyttämää lisäarvoa alan tutkimuk kehittymisen kannalta. Huomiota kiinnitettiin varsinkin tutkimuksen kansainvälisyy tutkijoiden verkostoitumiseen sekä tutkimustulosten julkaisemiseen. Tämä julkaisu sarviointiryhmän raportin.						
Suomalaiset yritykset ja globaalin kilpailun haasteet -tutkimusohjelmasta muo sangen tuloksekas varsinkin ohjelman piirissä suoritettujen tutkintojen lukum ilmestyneiden julkaisujen suhteen. Ohjelmaan valittujen hankkeiden heteroge huolimatta myöskin eri yliopistoissa työskentelevät tutkimusryhmät löysivät mahdollisuuksia. Toisaalta tutkimusryhmien aikaisempaa tasapainoisempi rake tuottaa entistä parempia tuloksia niin väitöskirjantekijöiden, post doc -tutkijot työnohjaajienkin kannalta. Samansuuntaisia vaikutuksia voisi olla koordinaatie parantamisella.							
Asiasanat	Liiketoimintaosaaminen, suomalaiset yritykset, globaali talous, arviointi, tutkimusohjelman koordinaatio						
Julkaisusarjan nimi ja numero	Suomen Akatemian julkaisuja 12/06						
ISSN	0358-9153						
ISBN	Painetulle kirjalle 951-715-618-9 annettu tunnus	Pdf-versiolle annettu tunnus	951-715-619-7	7			
Sivumäärä	25						
Julkaisun jakaja	Suomen Akatemia, PL 99, 00501 Helsinki, viestinta@aka.fi						
Julkaisun kus- tantaja	Suomen Akatemia						
Painopaikka ja -aika	Edita Prima Oy, Helsinki 2006						
Muut tiedot	www.aka.fi/julkaisut						

DESCRIPTION

Publisher	Academy of Finland Date 16 Aug 2006						
Author(s)	Sten Jönsson, Michael Bromwich, Paula Liukkonen, Veli-Matti Virolainen						
Title	Research Programme on Finnish Companies and the Challenges of Globalisation 2001-2004 (LIIKE), Evaluation Report						
Abstract	The Finnish Companies and the Challenges of Globalisation Research Programme (LIIKE) was launched by the Academy of Finland in 2000 and implemented from 2001 to 2004. The specific objective of the programme was to study the challenges of Finnish companies and their management under the increasing pressures of knowledge-based competition and a finance-driven economy. The programme was funded by the Academy of Finland and the National Technology Agency of Finland (Tekes). Partner organisations also included the Finnish Work Environment Fund. The programme was coordinated by the University of Tampere.						
	An international expert panel evaluated the programme after its completion. The objective of the evaluation was to estimate to what degree the programme had succeeded in fulfilling the objectives listed in the programme memorandum. Of specific interest were the programmatic approaches as well as the added value gained. In particular, attention was devoted to international cooperation and networking as well as to dissemination of research results. This publication includes the report of the evaluation panel.						
	The Finnish Companies and the Challenges of Globalisation Research Programme was particularly successful with regard to the PhDs taken and articles published within the programme. Despite the rather scattered nature of the programme's research topics, even geographically isolated research groups found common ground. Even so, a more balanced ratio between PhD students, postdoctoral researchers and senior researchers could lead to an even better outcome. The same effect could be gained by giving more resources to the coordinator for networking						
Key words	business competence, Finnish companies, research programme, evaluation, research funding						
Name and number of series	Publication of the Academy of Finland						
ISSN	0358-9153						
ISBN	Print 951-715-618-9 Pdf 951-715-619-7						
Number of pages	25						
Distributed by	Academy of Finland, POB 99, FI-00501 Helsinki, viestinta@aka.fi						
Published by	Academy of Finland						
Place and date of printing	Edita Prima Oy, Helsinki 2006						
Other information	www.aka.fi/publications						

Contents

	Introduction					
	1.1 Background	8				
	1.2 Preparation and organisation					
	1.3 Selection of the projects	11				
	1.4 Funding of the projects					
	1.5 Evaluation process					
	Evaluation of the Programme					
	2.1 Remarks on the focus and scope of the evaluation	13				
	2.2 The programme and its networks	13				
	2.3 Remarks on the structure of the programme	14				
	2.4 Assessment of programme fulfilment					
	2.5 Conclusion.	21				
Δ.	nnendiy 1	23				

i Introduction

1.1 Background

As many other countries, Finland saw major changes in the business environment during the late 1990s. This process included, among other things, the rapid development of information technology and telecommunications as well as the emergence and maturing of real-time global capital markets. The world's financial centres and multinational companies continued to move towards forming a single, unified capital network in which capital and commodity flows are no longer static but move more rapidly. To a great extent, these movements are dictated by the actions of institutional investors, who seek the highest yield, interesting investments, and current and future centres of development.

As a result of this dynamic, the late 1990s were seen as a threshold of a new era in the Finnish economy in many ways. The 'old' industrial economy was declining in terms of production and market expansion, whereas the nature and structure of the new economy was only gradually taking shape. Commercial business enterprises were seen as key engines for this change. These enterprises were often seen to play a dual role. On the one hand, they were driving the changes in economic structures through new functions and ways of operating. On the other hand, they were changing themselves. One of the key agents and forces within the enterprise is the management, whose task is to bring together and combine different forms of expertise, technology and capital. In this way, management aims to shape and develop technology, organisational forms and professional practices. The rapid increase in cooperation and collaboration between companies and other organisations had facilitated the rapid spread of innovations all over the world, and it can be said that the company management is thus capable of shaping the structure of markets and economic sectors.

The growing role of markets and finance as driving forces in the economy and society had reinforced the exploratory potential of internal company processes. Therefore, a more systematic study of the processes and structures within enterprises could yield a deeper understanding of both macro-level phenomena such as changes in sectors, markets, networks and societies, as well as micro-level phenomena such as changes in the nature of work, occupational structure, and consumption.

Finland as a small, open economy, well advanced in information technology, was considered as an excellent research environment for studying new forms of business activity and expertise. The fact that Finnish enterprises had quickly adapted to the changes in the business environment and responded successfully to the challenges of global competition gave added international interest in research focusing on contemporary Finnish companies and their company-level management structures and processes.

Finland became one of the world's most competitive economies mainly due to a major increase in the export of telecommunication devices during the late 1990s. This competitive edge has remained during the early 2000. At the same time, however, Finnish companies have faced many challenges. Developments in information and communication technology, intensifying competition, electronic commerce, and the new forms of business networking, have presented Finnish business managers with new management and leadership problems and challenges. On the other hand, new

opportunities have also emerged. It also needs to be considered that Finnish research during the 1990s was mostly technology-oriented, which manifested in successful high-tech companies and top-quality research in the field.

With the new millennium, however, it became increasingly apparent that only by combining technological expertise with high-level business know-how and business competence, could future challenges be met. Under these circumstances, the Academy of Finland, as the leading basic research funding organisation in Finland, undertook the task of giving close attention to the training of researchers in the field of management and business economics. Another task was to strengthen the somewhat scattered and fragmented field of Finnish management and business research. With regard to these objectives, the concept of a research programme, as a funding instrument focused on a defined subject area under a coordinated management, provided an indispensable platform.

The most topical research questions with regard to Finnish companies and business management in the new millennium had their origins in the ongoing global transition phase. These included, somewhat paradoxically, combined weakened national and local ties, and the increased importance of local aspects of business operations. However, competition between enterprises and on the markets had broadened from competition over the price/quality ratio of products to global competition over globally moving capital and its yield. Whereas operating within the globalised economy had already meant that some Finnish companies resembled their multinational exemplars, their resources were – and still are – often more limited than those of their competitors. It could be asked whether this lack of resources could be compensated for by special expertise, better operating models, and with national cultural and human capital.

Under the new circumstances, Finnish companies could not rest solely on expertise in cutting-edge technology; it was rightly asked what kind of new expertise in business and marketing as well as in economic and financial operations was necessary for Finnish companies and for the Finnish economy. The main challenges arose directly from the changing picture of business operations and the emergence and development of related problems. There was a perceived need to question and further explore hierarchical relationships, rigid organisational structures, and conventional business and developing new practices. These could then be described through the concepts of flexibility, networking, customer-orientation, the learning organisation, and constant renewal of companies and corporations. The primary goal of the research programme was to study the changes in Finnish companies and their management under the increasing pressure of knowledge-based competition and the finance-driven economy. Particular attention was devoted to the related development of new management skills and competence in Finnish companies. Another important objective was to open up the company as a "black box", in other words, to specify internal processes that produce outcomes arising from global challenges. There was also a need for empirical and comparative research to identify the precise nature of Finnish businesses and the processes that strengthen or weaken their competitiveness. The task for this research programme was highly demanding scientifically and, simultaneously, highly topical.

1.2 Preparation and organisation

In its performance agreement for 1999–2000, the Academy of Finland Research Council for Culture and Society committed itself to devoting particular attention to researcher training and research in the field of business science. In its meeting on 12 February 1999, the Research Council appointed a working group to prepare a proposal for steps to reinforce researcher training and research in business economics. A member of the Research Council, Professor Risto Tainio was appointed to chair the group, the other members being Professor Anne Kovalainen, Professor Kari Lukka, Professor Kristian Möller, and Dr. Timo Löyttyniemi. The working group presented an assessment of the state of researcher training and made a proposal to develop researcher training and to launch a research programme to promote business competence. In its meeting on 17 December 1999 the Council decided to continue developing the theme for a research programme and appointed a working group comprising Professors Tainio (Chair), Kovalainen, and Paavo Okko. In March 2000, the Council decided to propose to the Board of the Academy of Finland the launch of a research programme on the theme "Finnish companies and the Challenges of Globalisation". On 21 March, the Board decided on a three-year research programme in line with the Research Council's proposal. An exploratory workshop was held in Helsinki in May 2000 with over 70 researchers attending. The purpose of the workshop was to hear a broader spectrum of opinions from the scientific community on the main content and parameters for the programme. A programme memorandum was prepared on the basis of the original programme proposal and the feedback received in the workshop. This 'bottom-up' principle is one way of finding out about the topics suggested by researchers themselves and thus broadening the basis for the programme design and content.

The programme memorandum, on which the call for applications was based, was published in August 2000. Nine thematic fields were identified in the memorandum:

- Innovations in knowledge-intensive companies
- Knowledge formation and organising: from production-driven to knowledgeintensive companies
- Company networks in the global economy
- Emergence and development of the electronic marketplace: threats and opportunities
- Owners and top management
- New challenges for financial control in globally operating businesses
- Entrepreneurship the emergence and development of new companies
- Work, the individual and management in a global business environment, and
- The social and ecological responsibility of enterprises and business management in the global economy

It was expected that research on each theme would be considered from the perspective of management competence, which – as noted earlier – was seen as an integral part of corporate capacity to benefit from technological and knowledge-based intellectual, social and cultural capital. Even though applications were expected to fall into the themes mentioned above, it was the researchers themselves who eventually defined the research themes within the context of the programme.

In September 2000, the Research Council for Culture and Society appointed a preliminary steering group for the programme. Professor Paavo Okko acted as chair of the group, and the other members were Professors Marjatta Hietala and Hannu Uusitalo. In February 2001, the Council appointed a new steering group chaired by Professor Okko. The other members of this steering group were Professors Marja Järvelä, Erno Lehtinen, Lauri Suurpää and Terttu Utriainen (all from the Research Council for Culture and Society), Director Riitta-Liisa Lappeteläinen from the Finnish Work Environment Fund, and Senior Technology Adviser Riku Mäkelä from the National Technology Agency of Finland (Tekes).

The Research Council for Culture and Society signed a coordination contract with the University of Tampere in September 2000 for the period from 1 October 2000 to December 31 2004. Professor Arja Ropo from the Department of Management Studies at the University of Tampere was appointed programme director.

1.3 Selection of the projects

The research projects were chosen through a two-stage application procedure. The deadline for submitting preliminary proposals was in September 2000. The Academy received 77 applications for the first round, and 52 applications were selected for the second round. These were invited to submit their full applications in November 2000. During the first round, project proposals were reviewed by a steering group, and the final decisions were made by a sub-committee of the Research Council for Culture and Society. The applications proper were reviewed by a panel of outside experts. The sub-committee made the final funding decisions in April 2001.

1.4 Funding of the projects

Funding for the research programme was allocated through the Academy of Finland's 2001 budget and the programme was implemented during 2001–2004. The total Academy funding amounted to 4.73 million euros, which included the costs for programme management. Altogether 18 individual projects were funded by the Academy of Finland within this research programme, of which seven projects involved research consortia. The National Technology Agency of Finland funded three research consortia. The total sum of Tekes funding within the LIIKE programme amounted to about 1.3 million euros.

1.5 Evaluation process

The Research Programme LIIKE – Finnish Companies and the Challenges of Globalisation was evaluated by an International expert panel chaired by Professor Sten Jönsson from the University of Gothenburg. Other members of the panel were Professor Michael Bromwich from the London School of Economics, Professor Paula Liukkonen from the University of Stockholm, and Professor Veli-Matti Virolainen from the Lappeenranta University of Technology. The evaluation is based on the following documents, which were sent to the panel members before the panel meeting in Helsinki on 7–8 September 2005:

- Programme Memorandum LIIKE Research Programme: Finnish Companies and the Challenges of Globalisation, Helsinki 2000 (40 p.)
- Extended abstracts from the research projects, summarising activities in 2001– 2004,
- Coordination report, by Professor Arja Ropo, February 2005
- LIIKE Research Programme web pages

The tasks of the evaluation board were expressed in the letter of invitation to the panellists, stating that the programme should be assessed as a whole with an emphasis on the following issues:

1 Planning of the research programme

- Preparation of the programme and planning of the programme content
- Research projects funded and funding decisions creating the necessary preconditions for the programme

2 Scientific quality of LIIKE

- Scientific quality and innovativeness of the research
- Scientific competence of the consortia
- Contribution to the development of sustainable use of natural research

3 Success of the implementation of the programme goals and objectives

- Concordance with the objectives of the research programme
- Functioning of the programme
- Added value of the programme
- Contribution to enhancing inter- and multidisciplinarity in research
- Scientific and administrative coordination

4 Contribution to researcher and expert training

5 Collaboration and networking

- Collaboration within the programme
- Collaboration with other Finnish groups
- International cooperation
- Collaboration with end-users

6 Applicability of research and importance to end-users

- Contribution to promoting the applicability of research results
- Relevance and importance to end-users
- National and international impact of the programme

7 Recommendations for the future (including justification for the recommendations).

The panel members discussed the aforementioned issues. During the two-day meeting, the panel members had an opportunity to meet the representatives of the research projects. In all 14 research projects were present in the meeting. The panel also had a discussion with the programme director.

2 Evaluation of the Programme

2.1 Remarks on the focus and scope of the evaluation

In evaluating these comparatively large and varied research projects, it has been rather difficult to hold on to the structure indicated by the seven themes above. Instead, these have been covered in the text below. Many of the projects reported to the panel were of good quality and the output in the form of articles is impressive in many cases. For example, it is worth noting that each person-month of the grant contribute 0.2 of a submitted article or reviewed conference paper, which is a very high standard of achievement. Though academic quality nowadays is measured in numbers of articles in good journals, the justification for the LIIKE programme, however, takes us beyond this measure, since there is a distinct pragmatic side to LIIKE. To boot, it needs to be considered how this research can be expected to contribute to the competitiveness of a small open economy such as the Finnish one. It is too early to assess this properly, but it still needs to be stressed that the value of promoting an academic culture of producing and publishing results, which we think the LIIKE programme has, is indisputable even if results do not find immediate application in the business practices. Against this background, it is to be hoped that the "terse" language will help make issues clear and that it for its part will help in stimulating a debate on how one of the world's most competitive economies can be made still better by making use of skilled management research focused on issues that carry special weight for Finland. The value of this kind of report lies in the discussion that follows and the new projects it may generate.

The evaluation starts with our views on the organisation and management of the LIIKE programme and its relation to other research groups. Then some points concerning the content of the programme itself will be addressed. Finally, a few recommendations for the future will be presented.

2.2 The programme and its networks

Programme coordination

The programme director was not involved in determining the programme, but was selected through competition to coordinate the activities within the project. She organised the meetings to select the projects in April 2001 and did thematise the funded projects in order to promote integration between individual projects through influencing and by interacting with the projects. She also organised seminars and conferences with a very limited coordination budget¹. It seems the programme steering group was not very active in supporting coordination efforts. It seems to us that the programme director did an admirable job, but the Academy should consider setting aside a more adequate budget (beside the director's salary) for this key task in

¹ Beside two doctoral courses (Academic Writing, and Social Construction of Inquiry – the latter given twice) the programme director organised regional seminars in collaboration with local business organisations, an international seminar on business networks, and a multidisciplinary seminar on social innovations in working life transition, and she also organised thematic tracks at several conferences together with project leaders. She gave approximately 30 speeches to different audiences and was interviewed about 20 times by the media.

programmes such as LIIKE. It seems that the balance between pure coordination tasks and a more pronounced responsibility for content and scientific quality should be considered for future programmes. On the other hand, it is assumed that the university infrastructure should be at use when establishing the coordination office.

Some of the projects within the programme were organised into consortia, but overall, the programme was very fragmented with little interaction between the projects or between the consortia. The concentration on individual PhD projects would seem to have reinforced the separation between projects. Many of the projects had their own existing networks and wished to continue to use these. Even here, it seems that these were generally based on existing personal relationships and that relatively few fully new networks were created though there were exceptions, for example the forestry projects.

Cooperation within the programme

As said above, there was very little cooperation between the projects and attempts to create wider networks were not very successful. The programme director sought to achieve integration but had no authority in this area nor a budget for programme networking. It might not be possible either, given the different kinds of approaches, materials, focuses and aims within each individual research project.

It needs to be considered whether the Academy, prior to initiation, has to make a policy decision with this type of programme as to whether project integration is of crucial importance. If it is, then the Academy needs to structure the programme to achieve this, and provide a sufficient budget for these activities.

International cooperation

As in many other programmes, "international" seems to be interpreted as American, or close to American, with some consideration of Nordic colleagues. Most project reports mention international cooperation with Scandinavia and the USA dominating. As far as Europe goes it is mainly the UK that is cited. Only a few contacts with other European scholars are mentioned. Some projects point out new links with companies as a valuable outcome of the LIIKE programme. It is obvious that the working relations with international colleagues are slow in building, and therefore most networks mentioned in project abstracts were extant prior to LIIKE, but one might have expected some new additions of a multidisciplinary kind as research should be guided by problems rather than disciplines. On the other hand, some of this appeared in the consortia and some openings in the contacts between consumer research and product development processes. Nevertheless, it can be asked why we see so little of Europe in the reports.

2.3 Remarks on the structure of the programme

The most striking feature of the LIIKE programme is the very large proportion of the budgets that has been allocated to doctoral students' thesis work. When we sought reasons for this, project leaders pointed to the "system," including the fact that senior researchers are supposed to do their research as part of the duties of their ordinary employment. We believe that this "system" may be an obstacle to the mobilisation of Finland's best researchers in programmes such as LIIKE, and recommend that a poli-

cy discussion should be initiated concerning how a larger proportion of funding could be directed toward post doc research and even "buying out" established researchers. There is large untapped potential in more active research by professors, but to make concentrated efforts possible they need to be freed from everyday management of the department. Supervision could be limited to very few PhD students – those who cooperate with the professor in specific projects – teaching and administrative duties handed over to others for a period. Obviously, this is difficult to achieve in small departments, but within consortia structures sufficient critical mass of academic staff could be achieved to allow such concentration periods. After periods of empirical work post doc researchers can be very productive in publishing articles, with more limited time allocated to research work. Programmes such as LIIKE could be one vehicle for such post doc research periods. On the other hand, while the funding system of the Ministry of Education rewards universities for production of doctorates, it is understandable that projects become designed the way they have been.

Research programmes such as LIIKE, which are justified by their consequences in changing (business) practices, require extra organising efforts to coordinate the projects and disseminate/translate results. The programme director should be involved in the development of the programme from the very start and also have a budget to promote promising combinations of efforts as opportunities emerge during the project period. Extra efforts should also be directed toward the "afterwork-,", i.e. initiating the further development of co-authored products across projects when possible, editing joint publications, and exploiting the results of individual projects on the overall programme level. We understand, even though it has not been said in so many words, that neither the Academy nor researchers feel responsible for the wider dissemination of results. We believe that the programme director could be given the task to find ways to engage all parties in this important mission.

In the LIIKE programme there have been a few consortia where researchers from several universities have joined forces. We note that this form of mobilisation of joint efforts may be an interesting way forward in a world where Centres of Excellence (where research competence is concentrated in one place – in small countries usually in the capital) is the general trend. The advantage of consortia may be that the mobilisation of critical mass can be accomplished without draining regionally differently located schools – those whose efforts in teaching and research are substantially focused on the neighbourhood of their best researchers. It is beyond doubt that successful management of a consortium requires extra resources for coordination – which have not been present in LIIKE, except for the time professors allocate from their university time, but this may be compensated by the value of engaging researchers across regions. This, however, is a major policy issue in a global perspective. In small economies where there is only room for a few Centres of Excellence, all universities in the country have to prioritise on the basis of a strategy for the development of the school or university. Key factors in such priority work are links to local industry, which may be global, and cooperative links via consortia. Given that not all universities can do everything, it is researcher mobility that needs to be encouraged. This can be accomplished via consortia.

It seems that a policy decision is required as to whether the LIIKE programme and its successors should be seen as either a programme generating synergy and interrelationships between the projects within the programme or as a collection of free standing projects and consortia. Though it is apparent that the former was an important objective for LIIKE, major achievements in this area are not – at least until now - entirely convincing.

It has been difficult to validate claims of success of the projects on the basis of the extended abstracts. On the other hand, the presentations, and especially the opportunity to ask the project leaders questions, were quite helpful. The time available for this should be extended in future evaluations, as in the case of LIIKE the evaluation panel heard seven presentations out of eleven individual projects and seven consortium projects in three hours. In general, it seems that it is too early to judge the output of the LIIKE programme in any detail at this stage, especially as part of the results will appear only as PhDs are completed. As noted earlier, some projects have not reported in spite of reminders, and some projects reported but did not take up the invitation to the presentation. Therefore, there should be an obligation to report and to assist in the evaluation process included in the project contracts.

The LIIKE programme ran for three years, which is a very short time if the intention is to accomplish changes in business know-how or management theories. Against this background, LIIKE 2 as an instrument of continued efforts is most welcomed, but in so far as the programme memorandum of 2005 is concerned, it seems that LIIKE 2 is even more diverse in its themes than the LIIKE programme. This is worrying, and we urge the Academy to consider how resources could be set aside for coordination and cross-fertilisation between projects. It is true that a bottom-up approach where the ideas that come up from several fields via national preparatory workshops may generate creative initiatives and give an overview of the scope and need for financial support, but this must be weighed against the more foreseeable (based on past performance) return on investment in established research groups. Again, a research policy may distinguish between a desire for (risky) innovation and the promotion of academic excellence, the latter usually being the result of sustained nurturing of productive milieus. In the case of the LIIKE programmes, the innovative aspect may have been the important one.

2.4 Assessment of programme fulfilment

In assessing the fulfilment of the programme, there is, first of all, a need to consider what is a reasonable benchmark for this purpose. Ideally, one should use the publicly stated programme goals, but there are at least two reasons to modify those goals when seeking standards of comparison. Experience tells us from research on evaluation and performance auditing that the publicly stated goals usually are somewhat on the optimistic side. This is necessary to get the decision on committing resources to the specific purpose through the decision process. It seems to be a "law of nature" that projects as widely different as building bridges and constructing opera houses often turn out to be more expensive than promised. Consequently, our first question should be 'What can one reasonably expect?' Then we can judge what we have got and, finally, reflect somewhat about what seems to be lacking.

What can one expect?

This programme is the first of its kind in Finland (social science research with a focus on Finnish companies and the challenges of globalisation), with a limited budget

over a fairly short period. With regard to the overall Academy of Finland funding for business and management studies, however, the LIIKE research programme represented a rather considerable funding initiative to these disciplines (see Table 1).

Academy funding for business studies research 1994 - 2004 in euro											
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Research posts	322 837	102 813		388 697	139 597	51 364	242 409	37 893			293 670
Project funding	382 980	339 773	769 726	275 358	656 217	632 435	403 071	811 324	691 970	1 274 210	313 270
Researcher training	80 784	16 819	173 963	605 311	470 101	411 188	136 233	216 141	235 730	251 370	322 000
Grants for research abroad	140 880	92 116	120 958	89 693	163 491	27 966	69 470	91 616	11 216	13 500	15 180
Membership fees to IO's	16 316	7 148	15 978		3 835	3 784	3 811	3 811			
Other funding	10 344		2 692			437			23 330	46 610	13 720
Programme funding	335 642		210 294	15 861	788 799			4 307 490	441 150	1 367 830	75 620
Total:	1 289 783	558 669	1 293 611	1 374 920	2 222 040	1 127 174	854 994	5 468 275	1 403 396	2 953 520	1 033 460

Table 1. Academy funding for business and management studies, 1994-2004

To the extent that the projects under the LIIKE programme have generated published articles those must have been written at the very early stages of the research, bearing in mind that the time from submission to publication is on average two years and rejection rate in leading journals in business administration is about 95 per cent.

A positive effect relating to the funding effect of programmes such as LIIKE is the mobilisation of related projects that occurs locally. We have heard project leaders point out that the fact that the obtaining of the LIIKE grant stimulated related projects to join forces – some doctoral students even reformulated their research to fit the LIIKE project. This mobilisation effect is a noticeable value addition to the otherwise more fragmented picture. Doctoral positions and other within-university forms of financing doctoral studies add to the total financing of research, but makes it more difficult to isolate what was the direct effect of the specific LIIKE money. Not much value can be seen in trying to separate output financed by LIIKE as opposed to other sources of finance that went into the research group. Also several consortia seem to be successful, but it seems fair to conclude that such consortia need to set aside extra resources for the coordination work within them.

As already noted, the most unexpected feature for the non-Finnish part of the panel is the extensive use of the LIIKE grants to finance PhD students' work on their theses and that some KATAJA courses (nationally coordinated doctoral courses) have been considered as belonging to the LIIKE effort. This may have some consequences that seem to be against the intentions of the LIIKE programme. First, it is likely that a doctoral student – in order to be awarded a degree in a given discipline – will shun multidisciplinary work. Furthermore, doctoral students, since they are still in training, are not likely to be as productive researchers as their post doc colleagues. On the positive side, there is the researcher training effect that comes from junior researchers writing articles together with their seniors and, possibly, going through the "hardships" of the review and revision process together.

The general character of the LIIKE programme themes – as presented in the programme memorandum – invites many different theoretical perspectives and data collection methods. This will be reflected in the timing of research output – from finance-oriented projects that collect data from existing data bases and can start analysis after a short period of preparation, to projects with extensive and difficult data collection that takes the larger part of the project period to accomplish. If it takes the same amount of time to write an article once data is collected, field-based studies will publish later than survey-based ones. Furthermore, the more uniquely "Finnish" the article is, the more difficult it is to get through the review process of mainstream journals. In sum, the variety of problems, data capture, and theoretical approaches make it difficult to compare outcomes at this stage.

The panel has relied on extended abstracts (up to 10 pages each) and oral presentations from most projects reporting results, but we have not analysed the large number of individual articles and working papers. We therefore feel obliged to warn that we have little evidence to validate the success claims often stated in these extended abstracts. The limited space available in the abstracts also provided little room for statements on how methods have been matched to problems, and still less for texts (articles, reports or working papers) that would allow the panel to judge the choice of methods.

What did one get?

The projects report output in terms of PhD degrees achieved during the project period yielded 21 PhD theses. Furthermore, eight theses will be expected soon.

Beside the sometimes somewhat far-fetched claimed relations of PhD degrees to the topic of the programme, it is worth noting that the risk of an unbalance between the output of new doctorates and the capacity of industry and universities to provide useful employment for such competence may be rising. We refer to the fact that between 1995 and 2003 the business disciplines in Finland produced 434 new PhDs, while there were only 53 new post doc positions. The effect of this is that an increasing proportion of researchers in the business disciplines in Finland are employed on "external funds," which means short-term employment. (Figure 1).

Though no survey on the frequency of employment in industry of PhDs in business disciplines is attached here, there are apparently fewer opportunities within companies than there are candidates. Therefore, the situation of post doc researchers now needs attention from policy makers. One may ask whether there is an overproduction of PhDs, and is the time ripe to expand post doc research funding in Finland? As Figure 2 shows, the number of researchers employed on external funds is growing rapidly. Employment on research grants is temporary in most countries. Even so, there are several questions to be posed within the Finnish context in particular, such as: How are PhDs in general coping with this situation in Finland and sustaining away from the centre of specific research interests? Has researcher mobility increased? Does mobility help in building productive research groups with enough critical mass? Last but not least, the question remains whether the industry can be encouraged to employ PhDs that could forge better links between academia and practice in the management profession as well?

The most significant measure of academic performance nowadays is the publication of articles in (international) refereed journals. One could question

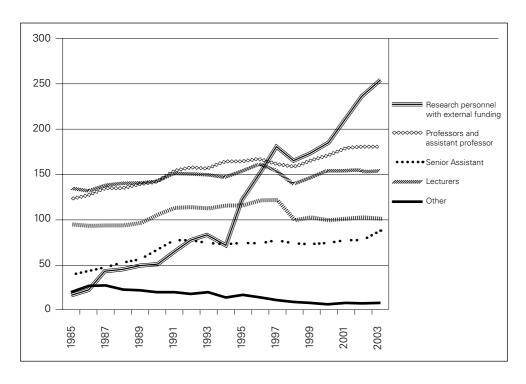


Figure 1. Teaching and Research Personnel in Business Disciplines in Finland, 1985–2003

whether this is the right measure for a programme oriented towards the specific challenges of Finnish companies in a globalised world, but it still is the measure that matters for an individual academic in pursuit of a research career.

A count of published articles across the 17 projects gives the number 123 published and 45 under way, which must be considered an excellent result in terms of international publication, even if the journals are not always top ranking ones and some journals are more prestigious than others. Some projects have contributed more than others to this impressive figure, and it seems that the projects with the largest budgets have the most impressive output at this stage. Thus, there seems to be a slight tendency that the concentration of resources (on larger projects) yields a larger output than the distribution to many smaller projects. However, we should take such figures with great caution since it is likely that some articles were already under way when the projects started, and some may have less than clear links to the projects under which they are listed. As mentioned earlier, a good effect of the drive towards publication is that many junior researchers may get the experience of article publication together with senior colleagues.

It would be interesting to conduct a study of the relation between conference reports and published articles. Some of the projects have markedly more conference reports than articles. It is only to be hoped that those conference manuscripts will be developed to full articles at a later stage. It may be so that many conference papers remain as such even though research behind them has qualities that justify publication. However, it is highly questionable whether research funding should continue with financial support to make publication possible. Instead, it is a matter of making researchers aware of their obligation to continue writing academic (and other)

articles even if the research grant is finished. One may also note that most journal articles in management are written after the grant period. One possibility would be to focus the task of the programme director on stimulating continued efforts ("afterwork") to produce results after the initial grant has ceased to exist.

Multidisciplinary work is difficult to achieve when most researchers in the projects are pursuing PhD degrees in a certain discipline, since multidisciplinary work distracts from their main task. Better to leave the distractions of arguing for and against "exotic" methods to a later career stage where the participants can contribute from a "stable home" based in one of the disciplines. Still the very nature of the themes of the LIIKE programme memorandum called for multidisciplinary attacks on common problems, especially in a small, open economy such as Finland. Even if most of the work under LIIKE appears intradisciplinary, we see some promising examples of multidisciplinary research.

In her report the programme director pointed to the difficulties of coordinating such a fragmented set of projects (especially when the director comes in at a late stage of the development of the programme). Therefore, some further thoughts should be devoted to how the future programme directors should be armed with the resources and authority to get the most out of the joint research efforts. At this point, however, it is sufficient to point to the fact that only a few consortia are included among the projects awarded grants. On the basis of the project presentations, it seems that these consortia require extra coordination efforts and therefore require some financial support for coordination. Since consortia can be quite successful, it should be considered whether consortia can act as an interesting form of Centre of Excellence (CoE) for Finland. Normally, one would think of CoEs as concentrations of qualified researchers in one place, but a consortium that has proven itself as a viable research unit could possibly be further developed toward a CoE and could add the value of linking regional groups in joint efforts. There is no doubt that there are scale effects on quality in management sciences nowadays. Consortia might be the tool to gather critical mass. Another mode of consortia formation could be around strategic industries. Here, a fruitful dialogue between researchers and representatives of the forestry industry has been developed at the same time as the projects involved in this field showed a good publication record. This is interesting because it is likely that the research results may come to be used in industry, as Finnish researchers have a comparative advantage in the study of this industry sector. Multidisciplinary consortia might be the next step.

What one did not get?

There are some gaps that we find worthy of comment. First, we note with some surprise that there was no project under the designated themes "Work" or "Social and ecological responsibility" of the LIIKE programme. Whatever are the reasons underlying this state of affairs, attention should be paid to this area in the future.

Besides the current evaluation, there seems to be no provisions for "afterwork" or continuing work in this first management-oriented programme. Such focused research efforts as the LIIKE programme, however, will provide opportunities, especially with a relatively fragmented allocation of resources as in this case, for combination of results, joint authorships, across-projects analyses. Therefore, it is

worth considering whether the programme director should be given the task of detecting and exploiting such opportunities. This will justify a budget for that purpose and for a continuing monitoring of the different projects with combinations in mind. Textbooks could be an attractive output from such work.

Though it is obvious that the large proportion of PhD financing in this programme is a "system" effect, it is time to consider the possibilities for improvement of quality by directing a larger part of the grants toward post doc research. This is because PhD students, doing their first larger study, can be expected to limit their risk-taking by avoiding to venture outside the mainstream. Theoretical depth and innovations in methods may suffer. It has not been possible to judge to what extent theoretical and/or methodological innovations have resulted from the LIIKE programme. The opportunities are no doubt there, since the programme has been developed from a "practical" problem of globalisation as experienced by Finnish industry. Extended abstracts being a useful format in helping evaluators get an overview, it could be useful if the Academy instructed those who report on their grants in future programmes to devote some space to reflection on theoretical approaches/contributions and methodological innovations that come out of their specific problem conception.

Finally, as we have said, we see in too few European colleagues beside the UK among the international contacts reported by the different projects. Because of the need to publish in (Anglo-Saxon) mainstream journals, and the dominance of US in setting standards of different kinds, this development may be considered natural. Still, large parts of the world, and especially Europe, appear neglected.

2.5 Conclusion

Many of the projects report impressive research outputs in terms of articles and conference papers, in spite of the fact that it takes on average two years to get through the review process in many journals in the management field and that rejection rates are exceptionally high in many areas. For most projects the level of publication is good, and for some it is excellent. It is worth noting that the articles are not assessed by the evaluation panel in this evaluation exercise, since this is done in the review process of the relevant journals.

The projects have served as rallying points for many researchers generating seed money effects that add value to the LIIKE initiative. In spite of the large proportion of funds financing PhD thesis work, the programme has given opportunities for juniors to get their first publishing experience by writing with seniors.

The possibilities of added value via consortia coordination of joint efforts of geographically separated groups of researchers have been discerned, and there are possible interesting long-term effects from the LIIKE programme in continued consortia building. The Academy is advised to monitor how the successful LIIKE consortia fare over the years to come.

Measures should be considered to maintain continued publication efforts after the grant period has ended. It needs to be taken into consideration that the average management researcher only does very few sustained empirical studies such as the LIIKE projects over a career. Such studies will form a basis for publication, comparative or complementing studies for a long time. In that sense the LIIKE

projects are strategic for many participants. Post doc researchers and professors could be stimulated to devote shorter periods to writing up reports and articles after they have collected such interesting material.

The evaluation panel has the impression that a systemic tension is building up in the Finnish management studies disciplines by potential over-production of new PhDs in comparison with the number and availability of new post doc positions. If we are right there is a need for 1) more post doc positions within the university system (because industry is not likely to absorb so many new PhDs), or 2) a shift in research financing from PhD students to post doc researchers.

Appendix 1

LIIKE Research Programme

Research projects funded by the Academy of Finland:

Managing Knowledge Creation and Transfer in Multinational Corporations: A Finnish Perspective Björkman, Ingmar (Swedish School of Economics) 01.05.2001–31.12.2004 453,982 €

Organizational Competence of Experts Eriksson, Marja (University of Tampere) 01.05.2001–31.12.2004 350,080 €

Understanding the Empowered Customer in Relational Contexts Grönroos, Christian (Swedish School of Economics) 01.05.2001–31.12.2004 538,189 €

Consortium:

GLOBAL – The Successful Internationalization of SMEs Kock, Sören (Swedish School of Economics)
01.05.2001–31.1.2004
174,546 €
Kjellman, Anders (Åbo Akademi University)
01.05.2001–31.12.2004
84,600 €
Larimo, Jorma (University of Vaasa)
01.05.2001–31.12.2004
82,110 €

Electronic Commerce and Industrial Dynamics Koski, Heli (Research Institute of the Finnish Economy) 01.05.2001–31.12.2002 134,552 €

Business Competences in the Globalising Forest Industry Firms Laurila, Juha (Helsinki School of Economics)
01.05.2001–31.12.2004
349,882 €

Ownership and Corporate Governance in Finland Liljeblom, Eva (Swedish School of Economics) 01.05.2001–31.12.2004 256,419 €

From Production Intensity to Customer Driven Knowledge Intensity – Managing Competencies and Learning for Successful Transformation
Lähteenmäki, Satu (Turku School of Economics and Business Administration)
01.05.2001–31.12.2004
328,478 €

Venture Capital Activities of Finnish Growth SMEs. A Challenge for Owner/Managers and Venture Capitalists
Malinen, Pasi (Turku School of Economics and Business Administration)
01.05.2001–31.12.2003
252,199 €

Consortium:

VALUENET – Value Creating Business Networks Managing Business Networks Möller, Kristian (Helsinki School of Economics) 01.05.2001–31.12.2004 270,481 €

The "New Economy" in a Traditional Industry Sector: Trajectories of Change in the Business Logic of the Finnish Forest Industry
Alajoutsijärvi, Kimmo (University of Oulu)
01.05.2001–31.12.2004
102,836 €

Relationship Management in Dynamic Business Networks Halinen-Kaila, Aino (Turku School of Economics and Business Administration) 01.05.2001–31.12.2004 229,950 €

Managing Business Networks Törnroos, Jan-Åke (Åbo Akademi University) 01.05.2001–31.12.2004 123,536 €

Managing the Crises 1900–2000. Firm Level Analysis of Strategy Problems with the Short and Long Run Changes in the Market Environment Näsi, Juha (Tampere University of Technology) 01.05.2001–31.12.2004 336,351 €

Finnish Companies and Global Competence Toivanen, Otto (Helsinki School of Economics) 01.05.2001–31.12.2004 283,902 € Industrial Innovation and Region Tulkki, Pasi (University of Tampere) 01.05.2001–31.12.2002 91,897 €

Funding for programme coordination University of Tampere 01.01.2001-31.12.2004 282,474 €

Research projects funded by the Finnish National Technology Agency (Tekes):

Consortium:

Born Globals Autio, Erkko (Helsinki University of Technology) Luostarinen, Reijo (Helsinki School of Economics)

Consortium:

Users and Producers of ICTs – Developing Dialogue in Innovation Contexts Eriksson, Päivi (Helsinki School of Economics) Pantzar, Mika (National Consumer Research Center)

Consortium:

B-WEBS – Strategic Business Networks in Electronic Markets Rauli Svento (University of Oulu) Koivumäki, Timo (University of Oulu) Björk, Bo-Christer (Swedish School of Economics) Heikkilä, Jukka (University of Jyväskylä) The Finnish Companies and the Challenges of Globalisation Research Programme (LIIKE) was launched by the Academy of Finland in 2000 and implemented from 2001 to 2004. The specific objective of the programme was to study the challenges of Finnish companies and their management under the increasing pressures of knowledge-based competition and a finance-driven economy.

This report of the international evaluation panel presents the findings and recommendations of the evaluation of the LIIKE programme. The objective of the evaluation was to estimate to what degree the programme had succeeded in fulfilling the programme objectives. Of specific interest were the programmatic approaches and the added value. Particular attention was devoted to international cooperation and networking as well as to dissemination of research results. The report also includes recommendations for future research programmes.



Vilhonvuorenkatu 6 • PO Box 99, 00501 Helsinki Tel. +358 9 774 881 • Faksi (09) 7748 8299 www.aka.fi/eng • viestinta@aka.fi

