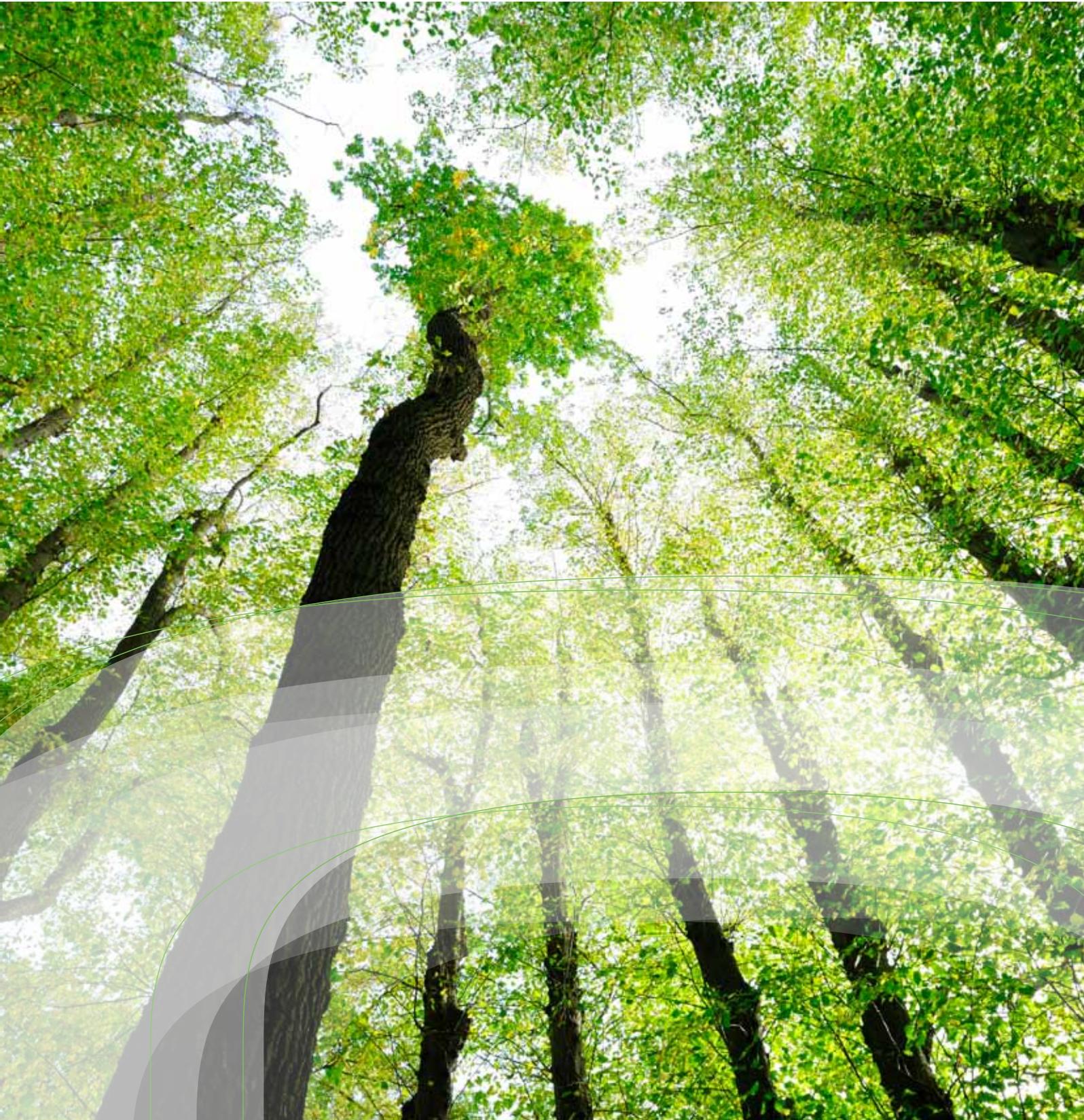




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Nordic Council of Ministers

Nordic Entrepreneurship Monitor



Nordic Entrepreneurship Monitor 2010

ANP: 2010:748

ISBN: 978-92-893-2109-9

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Print: Arco

Layout: Scanad

Cover photo: iStock

Copies: 400

Printed on environmentally friendly paper

This publication can be ordered on www.norden.org/order

Other Nordic publications are available at www.norden.org/publications

Printed in Denmark



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Nordic co-operation

Nordic cooperation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and three autonomous areas: the Faroe Islands, Greenland, and Åland.

Nordic cooperation has firm traditions in politics, the economy, and culture. It plays an important role in

European and international collaboration, and aims at creating a strong Nordic community in a strong Europe.

Nordic cooperation seeks to safeguard Nordic and regional interests and principles in the global community. Common Nordic values help the region solidify its position as one of the world's most innovative and competitive.

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Preface

New and growing enterprises are crucial for the dynamic of our Nordic economies. Entrepreneurship contributes to getting our countries back on the growth track and we will benefit economically from building vibrant entrepreneurship environments.

For the first time ever, entrepreneurship in the Nordic countries has been benchmarked systematically. In 2009, the Nordic Council of Ministers identified a need to shed light on entrepreneurship performance and policies across the Nordic countries. The outcome is the Nordic Entrepreneurship Monitor.

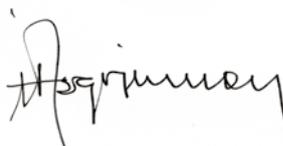
The Monitor offers policymakers, practitioners and academics a unique insight into entrepreneurship across the Nordic region and puts forward a number of Nordic and national policy recommendations to improve Nordic entrepreneurship performance.

It is my hope that the Monitor will serve as a fact-based platform that will lift the discussion on Nordic entrepreneurship to new levels and inspire the Nordic governments to learn from each other and implement effective entrepreneurship policies.

The analysis and conclusions in the Monitor are produced by FORA and do not necessarily reflect the views of the Nordic Council of Ministers. However, I am convinced that it will serve as an essential tool for developing future national entrepreneurship strategies.

An important learning from the Monitor is that there are several areas where the Nordic countries share similar challenges and where a coordinated Nordic effort could lead to better results compared to when the Nordic countries act individually. The Nordic Council of Ministers intend to play a key role in this work and I look forward to contribute to the enhancement of the entrepreneurial culture in the Nordic region through transnational activities.

Copenhagen, 17 June 2010



Halldór Ásgrímsson



Nordic Entrepreneurship Monitor 2010

For the first time, Nordic entrepreneurship has been systematically surveyed using internationally-comparable entrepreneurship data and indicators.

We would like to thank the following entrepreneurship policymakers and experts from the Nordic countries:

- Anders Hoffmann, Deputy Director, Danish Enterprise and Construction Authority, Denmark
- Bent Fester Sunde, Deputy Director General, Norwegian Ministry of Trade and Industry, Norway
- Berglind Hallgrímsdóttir, Director, Innovation Center Iceland, Iceland
- Brenda J Fox, Founder, Global Connexus, USA
- Dan Hjalmarsson, General Director, Tillväxtanalys, Sweden
- Dorte Høeg Koch, Chief Adviser, Danish Enterprise and Construction Authority, Denmark
- Egil Høyem, Senior Adviser, Innovation Norway, Norway
- Elvar Knútur Valsson, Senior Consultant, Innovation Center Iceland, Iceland
- Esa Blomberg, Programme Manager, SME Partnership Programme, Finland
- Jenni Nordborg, Programme Director, VINNOVA, Sweden
- Jón Hörðdal, Chief Operating Officer, CCP Games, Iceland
- Jorun Pedersen, Secretary General, CONNECT Norway, Norway
- Juha Ruohonen, VP Business Development, Supponor Systems, Finland
- Juhani Saukkonen, Global Clusters Director, Oulu Innovation, Finland
- Kalle Westberg, Project Leader, Tillväxtverket, Sweden
- Kasper Lindegaard, Head of Division, Danish Ministry of Economic and Business Affairs, Denmark
- Kimmo Hyrsky, Senior Adviser, SME-Affairs, The Confederation of Finnish Industries EK, Finland
- Line Weber Skjærpe, Municipality of Oslo, Norway
- Maria Corell, Head of Section, Ministry of Enterprise, Energy and Communication, Sweden
- Marika Kurlberg, Head of Section, Ministry of Enterprise, Energy and Communication, Sweden
- Marina Fransson, Head of Section, Ministry of Enterprise, Energy and Communication, Sweden
- Matti Pietarinen, Deputy Director General, Ministry of Employment and the Economy, Finland
- Øystein Jørgensen, Senior Adviser, Norwegian Ministry of Trade and Industry, Norway
- Pertti Hämäläinen, Ministerial Adviser, Ministry of Employment and the Economy, Finland
- Pertti Linkola, Senior Planning Officer, Ministry of Employment and the Economy, Finland
- Peter Torstensen, CEO, Symbion, Denmark
- Pontus Braunerhjelm, Managing Director, Swedish Entrepreneurship Forum, Sweden
- Ragnhild Sund, Adviser, Norwegian Ministry of Trade and Industry, Norway
- Rune Rathsach Andersen, Head of Section, Danish Ministry of Economic and Business Affairs, Denmark
- Sakari Immonen, Head of Division, Growth Ventures, Ministry of Employment and the Economy, Finland
- Sigríður Ingvarsdóttir, Manager of IMPRA Incubator Center, Innovation Center Iceland, Iceland
- Silje K. Jansen, Adviser, Norwegian Ministry of Trade and Industry, Norway
- Sveinn Þórgímsson, Director, Ministry of Industry, Energy and Tourism, Iceland
- Thomas Alslev Christensen, Head of Department, Danish Agency for Science Technology and Innovation, Denmark



- Dr. Þorsteinn I. Sigfússon, Director, Innovation Center Iceland, Iceland
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- Torsten Asbjørn Andersen, Special Adviser, Danish Ministry of Economic and Business Affairs, Denmark

The report has been prepared by a project team in FORA led by Glenda Napier (Manager of Policy Analysis) with the participation of Henrik Lynge Hansen (Economist), Thomas Ebdrup (Project Manager), Anders Munk Ebbesen (Head of Section), Jesper Støvring-Lund (Research Assistant), Tanja Krawack (Research Assistant) and Lasse Nielsen (Research Assistant). A special thanks goes to Jørgen Rosted and Charlotte Kjeldsen Krarup for their input and guidance throughout the project. We would also like to thank Anders Pold, Lars Nordal Jensen, Kristoffer Astrup and Jes Ørberg Ratzter for their contributions.

Executive Summary

Entrepreneurship is important

In the aftermath of the global economic crisis, governments are struggling to find ways to enhance job creation and fuel growth. Over the past decade, there is a growing acknowledgement among policymakers that entrepreneurship plays a key role in innovative societies, and that entrepreneurship is an important driver of wealth creation and economic recovery.

The development of entrepreneurship activities in societies and the provision of favourable environments and framework conditions for starting and growing new businesses will be crucial drivers for economic growth in the coming years.

New enterprises that challenge existing firms are crucial for the dynamic in the economy as a whole. The entrance of new firms increases competitive pressures, forcing existing firms to improve their performance or else shrink and exit. Young firms that grow successfully contribute disproportionately to the creation of new jobs. Therefore, new and young firms act as “life jackets” as they help pull countries out of economic recession.

Knowing that entrepreneurship – and the vibrant environments that foster entrepreneurship – are important for economic growth; the ability to create new and growing firms becomes a crucial task for enterprise policy.

The Nordic Entrepreneurship Monitor

The Nordic Council of Ministers has initiated an in-depth analysis of entrepreneurship across the Nordic region. For the first time, Nordic entrepreneurship performance and framework conditions are benchmarked using internationally-comparable entrepreneurship data. The Nordic Entrepreneurship Monitor offers policymakers, practitioners and academics a unique insight into entrepreneurship across the Nordic region and puts forward a number of Nordic and

national policy recommendations. Furthermore, it includes some completely new (previously unpublished) Nordic data on entrepreneurship performance.

Nordic entrepreneurship performance

A powerful message in the Nordic Entrepreneurship Monitor is that entrepreneurship policy matters. The Nordic countries that have worked most strategically with entrepreneurship have also obtained the best entrepreneurship performance. In other words, governments benefit from working strategically with entrepreneurship policy (within the broader fields of enterprise and innovation policy formulation) – experiencing better entrepreneurship performance as a result.

The Nordic region has high average start-up rates, and the overall Nordic start-up rate is on par with the USA. The Nordic region therefore seems to have overcome the challenge of creating new firms. The major challenge in the Nordic region today is fostering firm growth. The high Nordic start-up rates are not turned into equally high firm growth rates, and the Nordic countries do not reap the full benefit from their high start-up activity with respect to wealth creation. The growth analysis is supplemented with new data indicating that the Nordic region struggles with the ability to scale-up large global companies compared to USA. For instance, while 10 percent of American companies with more than 1.000 employees are less than 10 years old, there are less than 1 percent of such large, young companies in some Nordic countries.

Finally, entrepreneurship performance varies across the Nordic countries. Some Nordic countries perform much better than others (in both start-up and growth activities) – highlighting an opportunity for policy learning between entrepreneurship policymakers and practitioners in the Nordic countries.

Nordic framework conditions

The overall framework conditions for entrepreneurship are competitive in the Nordic region, although some improvement is required in order to catch up with the best performing regions in the world. Access to finance, and knowledge creation and diffusion are the two Nordic strongholds, while entrepreneurial capabilities and culture are particular challenging in the Nordic region. Still, a number of Nordic countries have made substantial improvements – particularly in the field of entrepreneurial culture – over the past five years.

Furthermore, discussions with national policymakers, and Nordic and international entrepreneurship experts highlight the importance of a well-functioning Nordic entrepreneurship ecosystem. Entrepreneurship ecosystem – or entrepreneurship infrastructure – are terms used for describing hubs for business development where start-up companies exist in the right culture, have access to the right networks and interact with the right people to successfully scale up new companies.

Today, the national entrepreneurship infrastructures are well-equipped to service the establishment of new firms. And while some countries have established national or regional growth programmes to help firms get off the ground, no Nordic country offers sufficient infrastructure in order to help firms scale-up after the initial growth phase.

Denmark

In a Nordic perspective, Denmark performs strongly on entrepreneurship performance. Moreover, there are clear and measurable policy targets for entrepreneurship, and Denmark has a strong position on regulatory framework and market conditions. Denmark faces a challenge in attracting highly-skilled foreign entrepreneurs. There is also a lack of a sound Danish entrepreneurial culture and strong entrepreneurial capabilities.

Finland

Finland has a strong entrepreneurship performance and the best overall framework conditions for entrepreneurship in the Nordic region. Finland has particularly strong entrepreneurial capabilities. On the other hand, Finland lacks highly-skilled foreign entrepreneurs, and a rigid Finnish labour market regulation has a negative impact on the possibilities for hiring and firing new employees in firms. Finland also lacks a strong entrepreneurial culture.

Iceland

Iceland differs somewhat from the rest of the Nordic countries because of the Icelandic financial and economic crisis. It is the only Nordic country where sound framework conditions for entrepreneurship have not resulted in good entrepreneurship performance. Iceland ranks highest on regulatory framework, and has the strongest entrepreneurial culture among the Nordic countries. However, Iceland ranks low on entrepreneurship performance, and ranks the lowest on market conditions and access to finance compared to other Nordic countries.

Norway

Norway is the best-performing Nordic country on bankruptcy regulation and access to finance. Norway also has low import and export burdens. Nevertheless, Norway provides the weakest overall entrepreneurship framework conditions among the Nordic countries. This is also reflected in low entrepreneurship performance both on start-up and firm growth. There is room for improvement in Norwegian labour market regulation and entrepreneurial culture.

Sweden

Sweden has excellent conditions for knowledge creation and diffusion, which have positive spill-over effects on entrepreneurs. In recent years, Sweden has had a strong

focus on starting up new businesses by, for instance, improving access to finance. In terms of entrepreneurship performance, Sweden ranks in the middle of the Nordic league both on start-up and firm growth. Sweden is ranked low on bankruptcy regulation and on the ability to attract foreign workers.

Policy implications

The Nordic Entrepreneurship Monitor demonstrates that the Nordic countries and governments are well-positioned to fully benefit from entrepreneurship. The basic framework conditions have improved overall in recent years. Nordic policymakers generally recognize the important role of entrepreneurs, and entrepreneurship is high on the policy agenda in all Nordic countries.

However, some entrepreneurship challenges remain unsolved and could be addressed through policy action. Policy recommendations are put forward both on Nordic and national levels.

Nordic recommendations

Nordic policy actions could be beneficial in areas where the Nordic countries share similar entrepreneurship challenges and where a coordinated Nordic collaboration could lead to better results than that of individual country action. Nordic policy actions require a fair amount of facilitation between the Nordic countries in order to facilitate agreement on concrete actions. The Nordic Council of Ministers could play a key role in this process.

The following Nordic recommendations are suggested:

- *Build a common Nordic Growth Programme*

The Nordic region faces a severe challenge in terms of getting firms to grow – hindering the ability to reap the full benefits of high start-up rates in the region. The firm growth challenge could be addressed at a Nordic level. The Nordic region could build a common Nordic Growth Programme for firms with large global potential (see also Box 1 for more details about the programme). A Nordic Growth Programme could lever the existing national or regional growth programmes by gathering and further developing the best-performing growth firms from national or regional growth programmes in each of the Nordic countries. Moreover, the programme could contribute to the development of a world-class Nordic entrepreneurship ecosystem. It could be easier for the Nordic countries to jointly develop a strong Nordic ecosystem rather than developing five separate national ecosystems. Individually, each of the Nordic countries might be too small to build a world-class ecosystem and attract the necessary expertise from other parts of the world. The Nordic programme would be big enough to attract elite entrepreneurship skills and knowledge to the region and collaborate with leading industry experts and foreign investors from around the world. Finally, if designed properly a Nordic programme could also have spill-over effects on national entrepreneurship ecosystems and growth programmes. The spill-over effect could be in terms of knowledge, skills and international networks, which could help develop the national and

regional infrastructure in the Nordic countries.

- *Establish a Nordic Entrepreneurship Education Programme*

Framework conditions for entrepreneurial capabilities and culture are weak in the Nordic region. To enhance the Nordic entrepreneurial capabilities and culture, a Nordic Entrepreneurship Education Programme, with a focus on “train-the-trainers”, could be introduced together with a Nordic Entrepreneurship Education Forum. It is necessary to develop a broad understanding and knowledge of entrepreneurship allowing students to turn ideas into actions. This entails not only the start-up aspect of entrepreneurship, but also the growth and up-scaling aspect. The main barrier for this is often lack of sufficient entrepreneurship training capabilities in the education system. In order to strengthen the Nordic capabilities within entrepreneurship education, it is suggested to work more strategically with enhancing the abilities to *teach* entrepreneurship. Teachers of entrepreneurship include teachers at all levels of education (university, business school, high-school, secondary and primary schools) as well as other relevant stakeholders working with entrepreneurship such a service providers. A Nordic Entrepreneurship Education could provide training to entrepreneurship teachers in the Nordic countries, also by linking up to and collaborating with elite international entrepreneurship educations focusing on “train-the-trainers” such as the one at Harvard Business School.

- *Create a Nordic Entrepreneurship Policy Forum*

Entrepreneurship performance and framework conditions require further political attention in order to obtain a world-class position in international benchmarks – especially with respect to firm growth. The Nordic countries that have worked most strategically with entrepreneurship have obtained better entrepreneurship performance, and entrepreneurship policy matters. Entrepreneurship policymakers and practitioners need a common forum across the Nordic countries to discuss entrepreneurship policy development on a continual basis. While entrepreneurship practitioners could discuss ways to better make use of the existing entrepreneurship framework conditions, policymakers could discuss ways to improve the current framework conditions and identify new ones – which are deemed particularly supportive for firm growth and a growth-oriented entrepreneurial culture.

- *Improve Nordic entrepreneurship financing opportunities*

Nordic framework conditions for financing are good overall. The Nordic countries offer relatively fine access to venture capital on a national level. However, a Nordic venture capital programme (cutting across the Nordic countries) could provide firms with better access to Nordic venture capital and competencies – helping growth firms to grow even faster.

- *Strengthen Nordic entrepreneurship data, policy analysis and international benchmarks*

Entrepreneurship is still a new policy area. The Nordic Entrepreneurship Monitor has for the first time surveyed Nordic entrepreneurship systematically. But a knowledge gap remains. There is an urgent need to continue the process of collecting comparable entrepreneurship data and statistics in the Nordic countries. This would provide the opportunity to make fact-based analysis of growth firms in order to understand their (disproportionately positive) role in Nordic economies, and to continue the Nordic Entrepreneurship Monitor.

National recommendations

Many aspects of entrepreneurship policies are national, as they are related to regulation (such as labour market regulation, administrative burdens, bankruptcy and taxes). National policy recommendations are therefore provided in areas where a joint Nordic activity is viewed as limited or impossible. The national policy recommendations are formulated based on the specific entrepreneurship challenges identified in the country chapters, and not all policy recommendations in the summary below are relevant for all countries.

Box 1: A Nordic Growth Programme

Purpose

- Gearing the existing national or regional growth programmes by collecting and further developing the best performing growth firms from each Nordic growth programme (gazelles with approximately 10-20 employees and high global potential).
- Building a world-class Nordic entrepreneurship ecosystem and thereby also strengthening the national entrepreneurship ecosystems with spill-over effects on national growth programmes.

A Nordic Growth Programme could offer a number of Nordic advantages

- The participating firms could better access useful networks, contacts and competencies from other Nordic countries. It will be necessary to make a survey among potential participants and existing programmes about the more specific value-added activities provided by a Nordic programme compared to existing programmes.
- A common Nordic programme would offer a spill-over effect in terms of knowledge, skills and international networks, which could help develop the national and regional infrastructure in the Nordic countries.
- It could be easier for the Nordic countries to jointly develop a strong Nordic ecosystem rather than developing five separate national ecosystems. Individually, each of the Nordic countries might be too small to build a world-class ecosystem and attract the necessary expertise from other parts of the world.
- For the programme, it could be easier to attract top international expertise and venture capitalists if the companies within the programme are selected as the best in the Nordic region.
- Finally, it could be easier to get the critical mass needed to pay for the best international experts to contribute to the programme.

Target group

- The Nordic Growth Programme could be an elite flagship programme for the best start-up companies in the Nordic region, and could build on the best international practices within enterprise development and firm growth practices.
- The Nordic Growth Programme could be anchored in existing national or regional growth programmes in each Nordic country. Each Nordic country could identify

the best national or regional growth programme as its anchor-part.

- Each national programme could identify approximately 5 companies with high growth potential, using strict selection criteria. The screening of the participating firms for the Nordic Growth Programme could be the same that are responsible for screening firms for national growth programmes.
- In order to gain access to the Nordic Growth Programme, it should be a prerequisite that the firms have completed or are participating in a national or regional growth programme.
- It is important to get the best universities in the Nordic region to work closely with the companies within the programme.

Activities

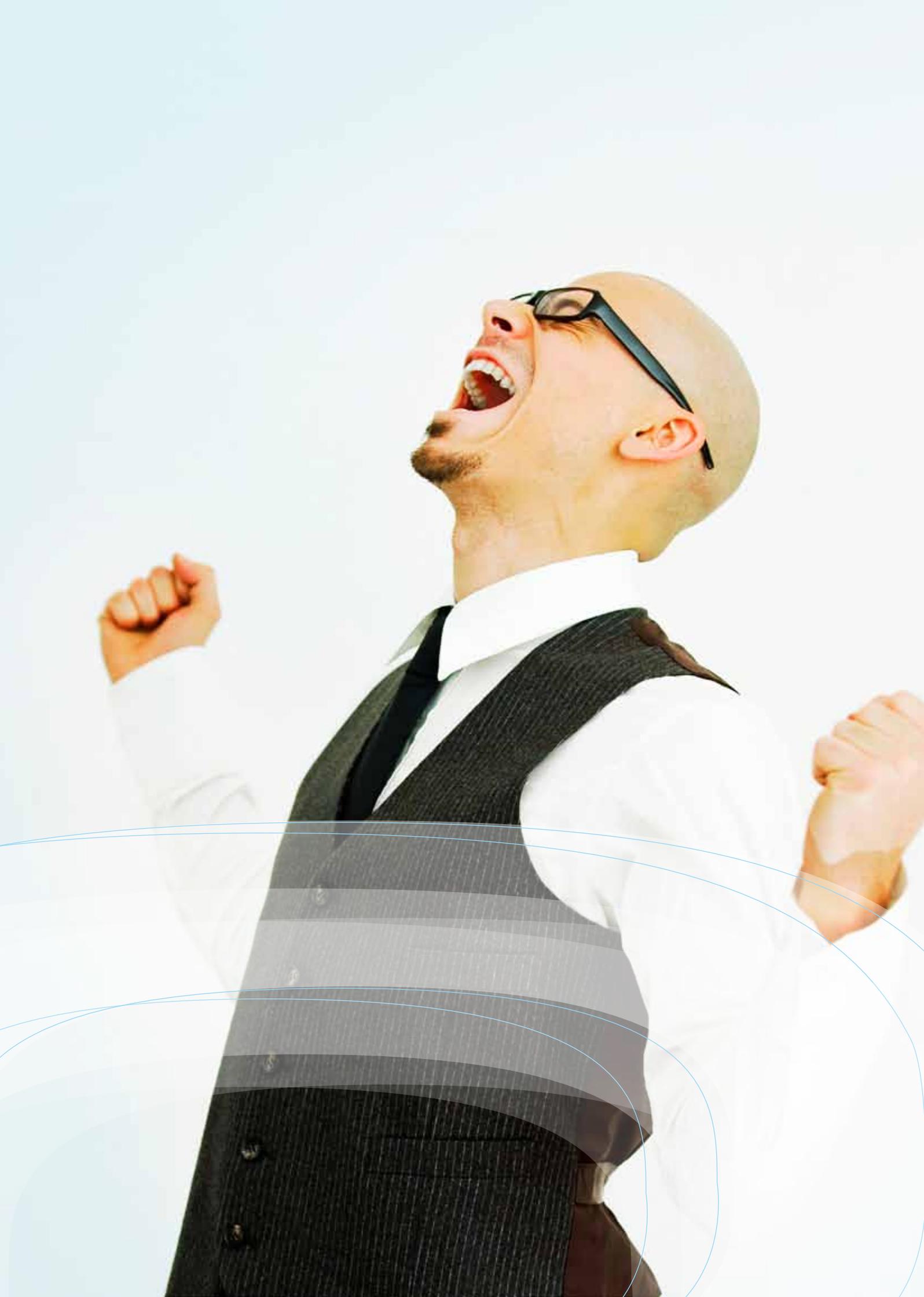
- The Nordic Growth Programme could offer a number of activities for the firms, with the overall objective of enhancing growth within the participating firms. Companies in the programmes could compete in common business-training camps (held, for instance, in regional growth zones such as Silicon Valley) where they could receive coaching from world-class professionals, industry-specialists, and serial-entrepreneurs; develop international networks; experience matchmaking with lead venture capitalists etc.
- Apart from the international training camps, parts of the programme could take place in a Nordic set-up and location, while other parts of the programme would take place nationally and also at the firm's own location. The programme is not an incubation model, and participating firms should be able to run their daily business while also participating in the Nordic Growth Programme.
- There could be the possibility for the Growth Programme to offer investment and/or grants to participating firms to finance certain business development activities or milestones.

Based on the experiences from Silicon Valley, Israel and the existing Nordic Growth Programmes, a number of elements are important premises for a successful growth programme

- It is important to have experienced professionals and serial entrepreneurs to run the programme and select the access criteria.

The following national recommendations are highlighted. Please see the country chapters for more specific national recommendations.

- Countries could benefit from working more strategically with entrepreneurship and formulating clear policy targets for entrepreneurship performance.
- Countries should address the Nordic firm growth challenge on national level by putting in place national growth programmes or initiatives enhancing the ability to upscale firms.
- Countries could improve their overall entrepreneurial capabilities through strengthening entrepreneurship education programmes. This could be accomplished, for instance, by ensuring that national education institutions collaborate with and rely on the surrounding ecosystem (businesses, investors, entrepreneurs) in their entrepreneurship programmes.
- Countries could improve the regulatory framework for entrepreneurship (i.e. labour market regulation and bankruptcy) in order to encourage a stronger entrepreneurial culture.
- Countries could benefit from attracting more highly-skilled foreign entrepreneurs to set up and grow firms in the Nordic countries.



Introduction

The Nordic region is a world leader when it comes to innovation capacity and ICT competitiveness. The region has been ranked highest in a number of international innovation scoreboards and benchmarks, including the Nordic Innovation Monitor 2009.¹

Although Nordic performance is outstanding in certain areas, the average regional entrepreneurship performance lags behind the strongest entrepreneurial countries (such as the USA), in particular regarding the ability to foster firm growth.

Entrepreneurship and young firms are important for wealth creation

In the aftermath of the global economic crisis, policy makers are struggling to find ways to enhance job creation as new jobs drive a broader economic recovery with spill-overs on productivity and innovation. In this perspective, the ability to create new enterprises that grow and challenge existing firms is crucial. Hence, entrepreneurship becomes decisive for governments in achieving their objectives for productivity and future economic growth.

It has often been argued that small firms are important for job creation. However, recent research finds no systematic relationship between firm size and firm growth. Instead firm age seems to matter, and new jobs are created in young firms rather than small firms.² In other words, as people realize an interesting business idea and establish a new firm, they contribute to economic development.

Entrepreneurship fuels economic growth³

New start-ups – and in particular young high-growth firms – spark wealth creation through increased employment and turnover.⁴ A small portion of all new firms experience rapid growth and deliver a disproportional economic contribution compared to their numbers. Over their lifetime, 3–10 percent of new firms end up making 50–80 percent of the total economic impact created by the group of new firms that they started out with.

Entrepreneurs enhance wealth creation through the process of creative destruction. The entrance of new firms increases competitive pressures, forcing existing firms to improve their performance or else shrink and exit.⁵

As a result and in light of the recent financial crisis, studies indicate that entrepreneurs can be important “life jackets” as they can help pull countries out of economic recession because of their ability to create jobs.⁶

Entrepreneurship policy matters

Entrepreneurship is an important driver of wealth creation. But to what extent can entrepreneurship be stimulated by governments through public policies?

There is a solid base of evidence showing that entrepreneurship can be strengthened through a number of underlying factors which can be stimulated by governments. In particular, business environments which provide conducive framework conditions for new and growing enterprises

1) FORA, 2009

2) Haltiwanger, 2010

3) Wennekers and Thurik, 1999

4) Autio and Hölzl, 2008; Acs, Parsons and Tracy, 2008; Audretsch, 2002; Birch, Haggerty and Parsons, 1997; Storey, 1994

5) Bartelsman, Haltiwanger and Scarpetta, 2004

6) Koellinger and Thurik, 2009

have proved to positively influence entrepreneurial activity.⁷ Entrepreneurship performance is correlated with framework conditions for entrepreneurship, and those countries that support entrepreneurship framework conditions also tend to have better entrepreneurship performance.

The recognition that entrepreneurship policy matters has accelerated since the mid-1990s. Policymakers in many countries are beginning to explicitly recognize the importance of entrepreneurship – making general statements about their commitment to increasing entrepreneurship or, at least, to improving the entrepreneurial environment.⁸ Also, entrepreneurship is not just about getting people into self-employment or starting a new firm. It is equally about creating value by fostering firm growth. Countries working strategically with entrepreneurship supplement the policy focus of getting more people to start new businesses with the focus of enhancing the quality of the new firms and their potential growth.⁹

Not all governments have favoured entrepreneurship and developed full-fledged systems of entrepreneurship policies. On the contrary, in many countries entrepreneurship policy thinking is partly “competing” with SME-policy thinking (focusing on the maintenance of SMEs). This could hamper entrepreneurship as the necessary policy toolkits are very different for entrepreneurs and SMEs, respectively. In addition, the lack of adequate focus on entrepreneurship also depends on how the entrepreneurial challenges are perceived. For instance, a low rate of new firms is mentioned as a key challenge for Europe.¹⁰ In other words, although the current political focus is on entrepreneurship, entrepreneurship is perceived as mainly firm formation rather than firm formation and growth.

Therefore, the political interest to focus on entrepreneurship and use it strategically as a tool to foster economic growth differs across countries. Some countries have launched large campaigns to stimulate entrepreneurship, reflecting a strong will to strategize in the area and thereby position entrepreneurship as a key element in the political landscape. Others have kept the policy focus on established firms and promoted entrepreneurship as a sub-domain of SME policy.

This publication surveys entrepreneurship in the Nordic countries in order to understand the specific Nordic entrepreneurship characteristics, and identifies similarities and differences in Nordic entrepreneurship performance and policies.

Monitoring entrepreneurship in the Nordic region

The Nordic Council of Ministers has identified the need to conduct a more in-depth analysis of Nordic entrepreneurship in order to shed light on entrepreneurship performance and entrepreneurship policies across the Nordic countries.

Monitoring and measuring entrepreneurship performance and policy developments are important for countries to benchmark their position and continuously improve their entrepreneurship performance. However, entrepreneurship is only monitored systematically in a few Nordic countries – mostly those countries where entrepreneurship has been given very high political priority (such as in Denmark).

7) Lundström and Stevenson, 2002

8) Lundström and Stevenson, 2005; Hart, 2003; OECD, 2007

9) FORA, 2003; Hoffmann, 2007

10) EU Council, 2006

The outcome is the Nordic Entrepreneurship Monitor. It builds on the international model for entrepreneurship performance and framework conditions developed by Eurostat, OECD and FORA in collaboration.¹¹ For the first time, Nordic entrepreneurship is surveyed systematically. The analysis draws on internationally-comparable data for entrepreneurship, and contains some completely new data for some Nordic countries. The following three questions are addressed in detail:

1. How well do the Nordic countries perform in terms of entrepreneurial performance (i.e. firm formation and firm growth).
2. Is entrepreneurship a political priority for governments in the Nordic countries, and how well do the Nordic countries support entrepreneurship in terms of framework conditions for entrepreneurship?
3. What are some examples of the best entrepreneurship policy practices in the Nordic countries, and what could the Nordic region do to enhance entrepreneurship further?

Structure

The Nordic Entrepreneurship Monitor is structured in the following way. First, entrepreneurship performance (i.e. entry rates and firm growth activities) are compared across the Nordic countries, and particular Nordic challenges are highlighted. Second, framework conditions in the Nordic region are compared with other regions. Third, a review of national entrepreneurship framework conditions is made, and some national policy recommendations are put forward. Fourthly, a short review of the entrepreneurship infrastructure is made in order to see to what extent the Nordic countries address growth challenges. Lastly, policy recommendations are made in a Nordic perspective.

11) No single paradigm or definition of what constitutes the framework condition exists, but many important contributions to the literature have been made. This paper is based on the framework developed in Gabr and Hoffmann 2006 and further developed by the OECD's EIP, Ahmad and Hoffman 2008, "A Framework for Addressing and Measuring Entrepreneurship".

Nordic Entrepreneurship Performance

Highlights

- The Nordic region performs well in terms of firm entry compared to the USA.
- The Nordic region performs modestly on firm growth compared to the USA.
- Entrepreneurship performance varies markedly between the Nordic countries.

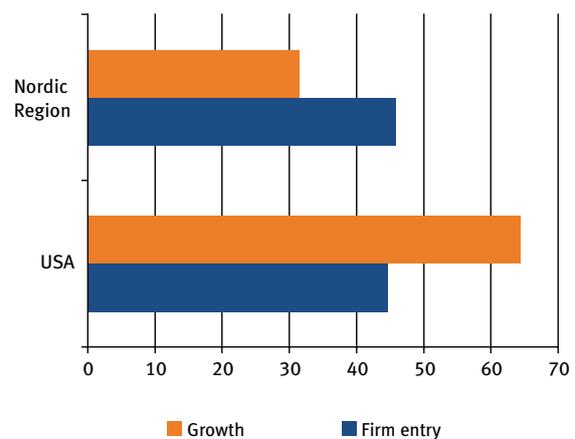
Having a strong entrepreneurship performance is crucial for countries' ability to flourish economically. Increasing firm formation is one element in entrepreneurship. However, the challenge is not only to raise the number of new firms. Equally important is it to enhance the number of high-growth firms.

Entrepreneurship has recently been identified as the most challenging innovation related area for the Nordic region.¹² Although intensified policy focus on entrepreneurship has led to significant increases in start-up rates, the region still faces a challenge on high-growth entrepreneurship.

In the following, Nordic entrepreneurship performance is discussed based on a composite index made up of internationally-comparable indicators for entrepreneurship performance on both firm entry and firm growth (see Box 2 for a description of the composite index and of the individual indicators for entrepreneurship performance).

For the first time ever, data on entrepreneurship performance for Iceland has been collected, making the Nordic

Figure 1: Nordic entrepreneurship performance (firm entry and growth), composite indices



Source: FORA, 2010.

Note:
The figure shows the composite index values on firm entry and firm growth for the Nordic Region and the USA. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100), the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Entrepreneurship Monitor the only monitor describing entrepreneurship performance in all Nordic countries. Nordic entrepreneurship performance is compared to entrepreneurship performance in the USA. The reason for comparing the Nordic region with the USA is that the USA is one of the strongest entrepreneurial economies – making it a valuable benchmark for the Nordic countries.

12) FORA, 2009

Box 2: Composite index and entrepreneurship performance indicators

Composite indices provide a useful tool for policy analysis, i.e. how to optimise framework conditions in order to obtain a high entrepreneurship performance.

Contrary to analysis focusing on a common trend in many different indicators, the advantage of composite indices is that they combine separate indicators into an overall picture thereby providing an easy tool for interpretation.

Composite indices are made up of different indicators which measure different aspects of a certain area. Where single indicators have been missing, an attempt has been made to calculate the rates using national statistics and OECD guidelines for measuring entrepreneurship.

The index for entrepreneurship performance covers in total six entrepreneurship indicators. Together, these indicators cover different dimensions of entrepreneurship activity in the region.

The entry rate activity measures start-ups and is composed of the following indicators:

- 1) The number of new enterprises as a share of the company base
- 2) The number of employer enterprise births, as a percentage of the population of active enterprises with at least one employee
- 3) Extrapolation of the share of employer enterprise births by using new business registrations (from administrative sources)

The firm growth activity is composed of the following indicators:

- 1) The number of gazelles as a percentage of the population of enterprises with ten or more employees. Young high-growth enterprises (gazelles) are enterprises with average annualised growth in employees greater than 20 % a year over a three-year period, and with ten or more employees at the beginning of the observation period. Young, high-growth enterprises are born five years or less before the end of the three-year observation period.
- 2) The number of high-growth enterprises as a percentage of the population of enterprises with ten or more employees. High-growth enterprises are enterprises with average annualised growth in employees greater than 20 % a year over a three-year period, and with ten or more employees at the beginning of the observation period.
- 3) The number of high-growth enterprises is also taken as a percentage of the population of **surviving enterprises** with ten or more employees over the three-year period.

For more information on composite indicators: OECD (2008), *Handbook on Constructing Composite Indicators, Methodology and User Guide*.

When measuring entrepreneurship performance as firm entry (start-up rates), the Nordic region performs well compared to the USA. When measuring entrepreneurship performance as the ability to foster firm growth, the Nordic region performs very modestly compared to the USA (cf. Figure 1).

High entry rates in the Nordic region

In the Nordic region, the percentage of new firms across the Nordic countries is on par with or slightly higher than in the USA.

During the latest decade, there has been an increased political focus on enhancing entrepreneurship throughout the Nordic region. In particular, there has been a political focus on stimulating people to create new businesses. New initiatives to promote entrepreneurship are believed to be reflected in the high entry rates in the Nordic region today.

Moreover, compared to the USA, there is little financial risk associated with starting a new business in the Nordic countries due to a strong Nordic welfare system. In practice, all Nordic citizens could start their own business and still be entitled to social security benefits. The low financial risk associated with becoming an entrepreneur could partly explain the strong Nordic entry rates compared to USA. On the contrary, there are fewer economic incentives to starting a business in the Nordic region than in the USA. The potential for financial gains from being an entrepreneur in the USA are high. This can support a more growth-oriented entrepreneurial culture in the USA compared to the Nordic region.

Modest firm growth in the Nordic region

Firm growth is higher in the USA than in the Nordic region. The overall index value on growth shows a significant gap between growth in Nordic and in American firms (cf. Figure 1).

There could be various reasons for the low Nordic performance on firm growth. The discussion on Nordic entrepreneurship infrastructure and ecosystem will shed light on possible explanations. However, one reason could be the lack of entrepreneurial culture, competencies and mind-set among Nordic entrepreneurs – preventing them from growing. In addition, the entrepreneurship infrastructure and ecosystem in the Nordic countries might not be sufficiently oriented towards fostering high-growth firms and high-growth start-ups.

Varying entrepreneurship performance across the Nordic countries

A measure for Nordic entrepreneurship performance is constituted by a Nordic average, which is useful when comparing the Nordic region with other regions. However, there are marked differences between individual Nordic country's entrepreneurship performances (cf. Figure 2).

For the first time, it is possible to make a detailed comparative analysis of all the Nordic countries' entrepreneurship performance using completely new internationally-comparable data. Moreover, it has also been possible to include

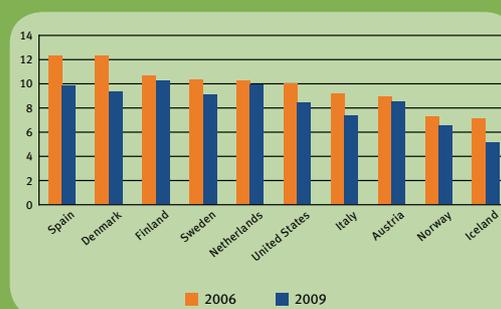
more recent firm entry rates in the composite analysis for the Nordic countries in order to illustrate the implications of the financial crisis on start-up rates. It is clear that the financial crisis has had an effect on start-up rates, although some countries such as Denmark have been hit harder than others (cf. Box 3).

Box 3: The impact of the financial crisis on entrepreneurial activity

Obviously, the global economic crisis has had a significant impact on entrepreneurial activity throughout the whole world. Nevertheless, the impact of entrepreneurship behaviour on start-up and growth could be the driving force in overcoming the challenges posed by the financial and economic turmoil since autumn 2008.

The impact of the crisis is also apparent when comparing employer enterprise birth rates in 2006 and 2009. As such, among 10 OECD countries all have experienced a decline in this period. This is particularly true for countries like Denmark, Iceland, Spain and the USA, cf. Figure 2. However, employer enterprise birth rates will always be sensitive towards changing economic cycles, and it must be expected that countries will catch-up as soon as economic conditions improve.

Figure 2: Employer enterprise birth rates, 2006 and 2009

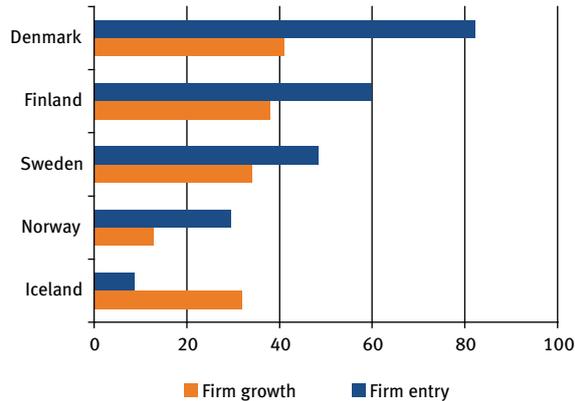


Source: FORA, 2010

Note: Employer enterprise birth rates are measured as a percentage of the population of active enterprises with at least one employee. The 2009 data are extrapolated using 2006 as a base year. OECD timely indicators on entrepreneurship entries (see more at: www.oecd.org/statistics/measuringentrepreneurship) and national sources have been used to extrapolate the birth rates. Therefore, the 2009 birth rates are only a proxy measure and have to be treated as such.

The majority of indicators comprised in the Nordic Entrepreneurship Monitor 2010 cover data up until 2008 and 2009. The influence of the current economic crisis will therefore not be fully reflected in the comparison of entrepreneurship framework conditions and performance across countries.

Figure 3: Entrepreneurial performance in the Nordic countries, composite indices



Source: FORA, 2010.

Note:

For the first time, The Nordic Entrepreneurship Monitor is able to provide data for Iceland on firm entry and growth. The data was calculated and provided by Þorvaldur Finnbiörnsson at Rannis, the Icelandic Centre for Research. The figure shows the composite index values on firm entry and firm growth for the Nordic countries. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Firm entry across Nordic countries

When comparing the ability to create new firms, large variations between the Nordic countries are seen. Denmark and Finland are the two best-performing Nordic countries in terms of firm entry rates, while Sweden ranks in the middle, and the lowest entry rates appear in Norway and Iceland (cf. Figure 2).

The optimal level of firm entry is not necessarily the same across countries. It depends on a number of factors (for instance a country’s industry structure or access to natural resources). On the other hand, the reason for varying start-up rates across countries is also related to how much governments prioritize entrepreneurship and use it strategically to achieve macroeconomic goals.

It has to be acknowledged that measurements of the country ranking are sensitive to how the denominator is defined i.e. as population or as labor force (cf. Box 4).

Firm growth across Nordic countries

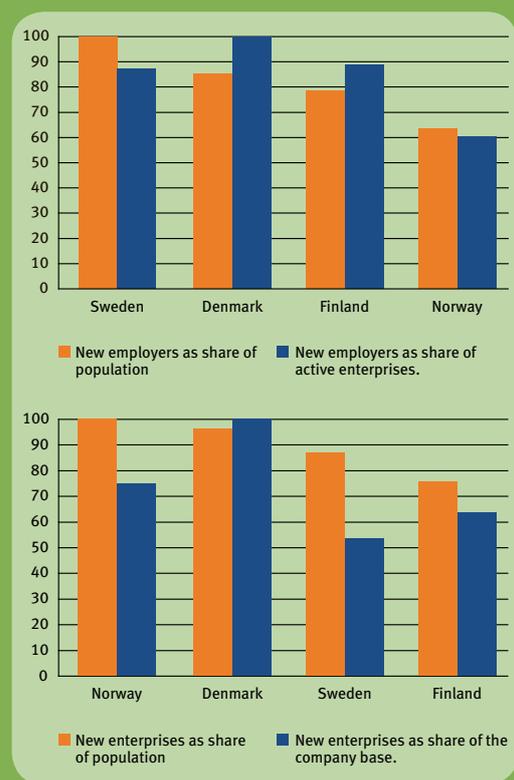
When comparing the ability to foster firm growth across the Nordic countries, the country ranking is almost the same as with firm entry (cf. Figure 3). Denmark and Finland perform best, while Sweden ranks in the middle, followed by Iceland and Norway. However, the variation is slightly lower as all the Nordic countries perform weaker in terms of firm growth compared to the best countries (index value 100). Only Norway and Iceland change ranking as Iceland performs better on firm growth than on firm entry.

Box 4: New enterprises and new employers as a share of the population

When measuring firm entry in the Nordic Entrepreneurship Monitor, new enterprises and new employers are measured as a share of the company base and as a share of active enterprises, respectively. These indicators are developed by OECD-Eurostat. Denmark has the highest share among the Nordic countries with regards to both indicators.

However, when adjusting firm entry numbers for population (or labour force size), the picture changes. For instance, Sweden is best among four Nordic countries when measuring new employers as a share of the population, while Norway performs strongest in terms of new enterprises as a share of the population (cf. Figure 4). Therefore, several aspects must be taken into account when comparing firm entry across countries.

Figure 4: Share of new employers and new enterprises, 2005



Source: FORA, 2010

Note:

The indicators have been indexed by the maximum value. New enterprises Norway, 2006 data. New employers Sweden, 2006 data.

Measuring firm growth internationally

Growth firms and in particular young growth firms are crucial for wealth creation. Young firms are important for growth. Young high-growth firms contribute disproportionately more to economic development compared to other firms. As people realize an interesting business idea and establish a new firm, they contribute to wealth creation, particularly during the early stages of business development. In fact, new jobs tend to be created by younger firms.¹³ In any given year, the top one percent of young firms generates roughly 40 percent of new jobs.¹⁴ Irrespective of size, young firms contributed to approximately 43 percent of all American gross job creation in 2005. Similar empirical findings are found in Denmark.¹⁵

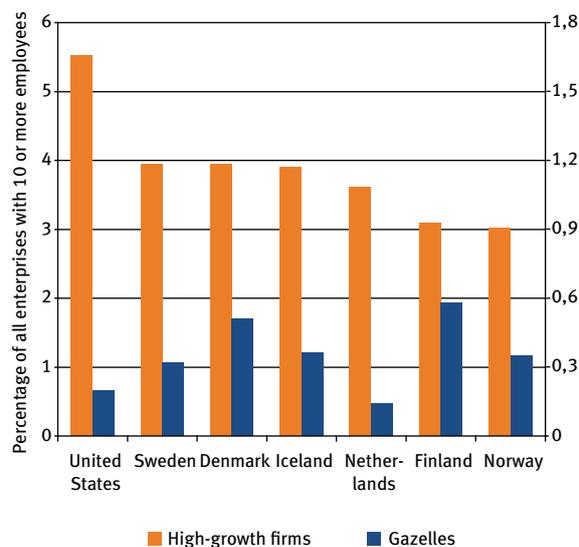
In order to get a better understanding of the Nordic growth challenge and the lacking ability to create Nordic growth firms, the internationally-comparable OECD data on growth can be analysed further. Internationally-comparable growth data is limited, but data does exist for the Nordic countries¹⁶ and the USA, among others. In Box 4 below, the single gazelle growth indicator used in the composite analysis is discussed in more detail.

The USA is much better at creating high-growth firms than all of the Nordic countries (cf. Figure 5).

Comparing the shares of high-growth firms, the Nordic growth challenge appears most strongly. The Nordic region has fewer high-growth firms than the USA. Whereas the USA has a share of 5.5 percent high-growth firms, there is only between 3–4 percent of high-growth firms throughout the Nordic region. Sweden, Denmark and Iceland have most high-growth firms (nearly 4 percent), while Finland and Norway rank lowest with about 3 percent of high-growth firms.

According to the data, the Nordic region is better at fostering gazelles (young high-growth firms) than the USA. Although the share of gazelles varies across the Nordic countries, it is higher than that of the USA. Finland ranks highest (0.58 percent) followed by Denmark (0.51 percent), Iceland (0.36 percent), Norway (0.35 percent) and Sweden (0.32 percent). The USA has a lower level of gazelles than the Nordic region (by 0.2 percent).

Figure 5: High-growth firms and gazelles (two growth indicators), 2006



Source: OECD, 2009 and RANNIS, 2010.

Surprisingly, current data on young growth firms suggests that the Nordic region should perform better than the USA. However, this is perplexing and not realistic. It is a complicated matter to measure firm growth using comparable and available data today, especially when making meaningful country comparisons. In fact, when using and comparing data for gazelles, it is crucial to take into account the severe uncertainties related to the use of existing gazelle data (cf. Box 5).

14) Stangler, 2010

15) The Danish Enterprise and Construction Authority, 2009

16) Data for Icelandic gazelles and high-growth firms has been calculated by RANNIS for the purpose to be used in the Nordic Entrepreneurship Monitor.

Box 5: Difficulties with international comparable data on gazelles

Gazelles are firms that over a three-year period have experienced an average growth of 20 percent annually. The firms have a minimum of 10 employees and should not be older than 3 years at the beginning of the growth period.

There are some severe uncertainties related to the comparability of the international gazelle data when comparing countries of different sizes. The reasons for this include a number of methodological issues. It has been argued that the low US performance on gazelles is related to the definition (i.e. denominator) when measuring gazelles.

Large economies with fewer micro-firms (firms with fewer than ten employees) and hence relatively more firms 10+ will perform worse according to the existing statistical definition. The low level of American gazelles compared to the Nordic countries might therefore be due to the different sizes of the enterprise population.

Different hypotheses exist about the reasons for the lower American performance. For instance, varying industry, size and age composition across countries are used to explain the puzzling data. International organisations (such as the OECD) working with the collection of gazelle data are aware of this definition problem.

In order to control for this, other definitions could be applied. However, preliminary results show no significant change in share of gazelles when measuring gazelles, for example, as shares of work force or population. Other hypotheses about gazelles in the USA and elsewhere are being tested in order to improve data. Hopefully, ongoing international collaboration in this field will result in a better definition of gazelles in the coming years.

Pursuing a better Understanding of the Nordic Firm Growth Challenge

Highlights

- There are more young, high-impact firms in the USA compared with the Nordic countries.
- Whereas 10 percent of US firms with more than 1000 employees are younger than 9 years old, this percentage is much lower in the Nordic countries. For Denmark and Finland, less than 1 percent of firms with more than 1000 employees are younger than 10 years old.
- Firms with significant growth rates seem to be located in regional pockets of growth.

Introduction

The Nordic firms' growth challenge was established in the previous chapter. The Nordic region has a relatively high level of new firms compared with the USA, but high start-up rates are not turned into equally high firm growth rates in the Nordic region. However, one indicator does not seem to be in accordance with the other indicators for growth. In particular, data for gazelles (young growth firms) indicates that the Nordic region performs better than the USA. This is perplexing. Some possible reasons for this difference have been discussed (cf. Box 4).

It is a difficult task to understand the reasons behind the differences between gazelles in the USA compared with those in the Nordic region. With a lack of other accurate, internationally-comparable data on gazelles, other analytical approaches were considered in order to better grasp the Nordic growth challenge. The analysis (presented be-

low) is considered normative in our firm growth discussion and used to indicate possible directions in our pursuit for a better understanding of the Nordic firm growth challenge.

In the following discussion, two sets of arguments are highlighted in order to discuss the Nordic growth challenge and thereby also reflect on the current way of measuring gazelle data. While the first argument points at the ability to upscale firms i.e. grow firms from small to large in a limited period of time, the second argument raises regional differences in entrepreneurship infrastructure and ecosystems as a factor that could explain growth variations. Both arguments are tested and compared across the Nordic region and the USA, using completely new and pioneering data.

High-impact firms and the ability to upscale firms

The first argument is related to the time period in which firm growth is measured. It is argued that it is the ability to upscale firms from small, new firms to large, global leaders that matters. To turn a new firm into a very successful growth firm realising its global potential, firms need to reach certain important milestones. For instance, it is necessary to have a competent management group, an experienced sales manager, and the first big customer in order to grow into a large firm with more than 250 employees. These important activities take time to realise successfully.

In current OECD measures (cf. Box 4), gazelles are measured over a three year period and include all firms with a minimum of 10 employees. According to this definition, the majority of gazelle firms have relatively low growth rates and remain small (less than 50 employees) firms – even though understood as gazelles.¹⁷ Provided that global

17) This is based on Danish calculations. Analysis shows that 70 % of Danish gazelles have between 10-20 employees at the beginning of the growth period. 69 % of Danish gazelles have less than 50 employees at the end of the growth period. Only 10 % of Danish gazelles have reached more than 100 employees at the end of the growth period (FORA, 2010).

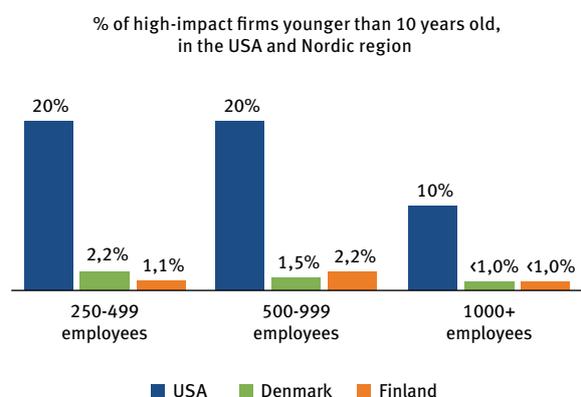
leaders are firms with a minimum of 250 employees, the gazelle data does not necessarily reflect a country's ability to make firms grow significantly i.e. up-scaling firms into global leaders. One possible way to capture and measure firms that really upscale from small entities to large businesses is to increase the time period of measurement and thereby take into account that it takes more than three years to realise the important milestones and reach a certain firm size. Moreover, the ambition as regards firm size at the end of the growth period could be increased.

In order to test if the ability to upscale young firms is as good as or even better in the Nordic region compared with the USA (as indicated according to current international gazelle data), it is necessary to compare data for new growing firms. But to really capture firms with significant growth rates that realise their global potential, it is necessary to have data for new firms that have reached a minimum of 250, 500 or 1000 employees over a certain period of time. To do so, the time period should be long enough to allow the firms to reach the important milestones, and data should exclude mergers and acquisitions.

With these preconditions for data, it has been possible to identify and compare new pioneering data for the proportion of new firms that have grown from zero to a minimum of 250, 500 or 1000 employees in the USA, Denmark and Finland.¹⁸ According to this data, the ability to upscale new firms successfully – by reaching a minimum of 250 employees – is significantly higher in the USA than in the Nordic countries (cf. Figure 6).

Compared with the USA, there are almost none of the Nordic start-ups that turn into large successful companies

Figure 6: The proportion of young firms that have grown from zero to 250, 500 or 1000 employees (1996-2006)*



Source: FORA, U.S. Census, Statistics Denmark and Statistics Finland.

Note:

The Finnish data – and the American – are fully adjusted for mergers and acquisitions. This has not been possible for the Danish data. To obtain an estimate for Denmark, the enterprises that were born with more than 50 employees have been left out of the analysis. Thus, the Danish data is based on the number of enterprises which have managed to grow from small (less than 50 employees) to the given size class within 10 years. As such – and due to a data break in 1999 – the Danish data is only a best estimate.

* The U.S. Census has provided data on the age distribution of firms (in percentiles, i.e. 10 %, 20 % and so forth). Hence, U.S. data shows that 20 % of firms with 250-499 employees are younger than 9 years old and 20 % of firms with 500-999 employees are younger than 12 years old. The national statistical bureau in Finland have provided data based on the proportion of firms younger than 10 years old in each of the size classes. The Danish data is also based on firms younger than 10 years old (see note for method).

18) All the Nordic countries have been invited to provide the national data for this specific analysis. However, it has not been possible to collect data from all the Nordic countries within this project's timeframe.

with 250, 500 or 1000 employees. Of the total population of firms with 250–499 employees in the USA, 20 percent of them are younger than 9 years, while only 1–3 percent are younger than 10 years in Denmark and Finland. Furthermore, the data shows that 10 percent of American firms with 1000+ employees are younger than 10 years old. In Denmark and Finland, the same size firm is close to zero percent of all firms.¹⁹

The proportion of young, large firms is much higher in the USA than in Denmark and Finland. Although the data does not cover all the Nordic countries, it indicates that the Nordic region has a specific challenge related to making firms grow from small to large over a relatively short period of time i.e. up-scaling firms. The data therefore indicates a major policy challenge related to fostering high-impact firms in the Nordic region.

Finally, with regards to the gazelle discussion and the way young growth firms are measured today, this new data clearly seems to reject the hypothesis that the USA should have fewer young high-growth firms, especially when measuring more significant growth and over a slightly longer period of time. In fact, if the gazelle data could be based on 10-year growth periods and only include firms with much higher growth rates, this data would reflect the ability to upscale firms, and the USA would expectedly perform better than many other countries.

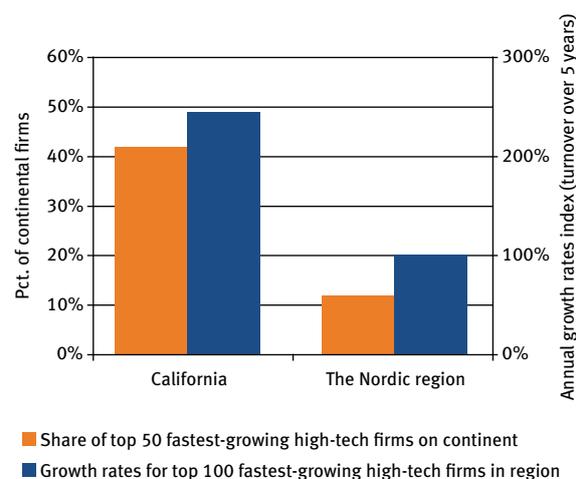
Regional pockets of firm growth

The second line of argument is related to regional differences. It is argued that the ability to create firms with significant growth rates is dependent on regional entrepreneurship infrastructures and ecosystems. Entrepreneurship infrastructures, and in particular ecosystems, refer to certain locations with a hub for business development where the start-up companies exist in the right culture, have access to the right networks and interact with the right people to successfully scale up new companies.

Some regions simply offer a much stronger regional set-up for high-impact firms including: venture capital, collaboration between firms, strong universities and research centres with spin-offs and world-class tech-transfer activity, close ties between universities and surrounding firms and investors, dedicated entrepreneurial mindsets and attitude.

In other regions, ecosystems are weaker or non-existent and therefore not particularly conducive for fostering growth. In line with this argument, the firm growth ability varies across regions. This could also explain the relatively lower American performance on gazelles, as the current gazelle figures include a national average for the USA – with a high number of low-performing regions and possibly only a few regions with many gazelles. If this is the case, it is necessary to specify firm growth data by regions.

Figure 7: Regional ability to create fastest-growing firms (2008)



Source: Deloitte Touche Fast-growing firms list for USA and Europe and authors' calculations.

Note: Technology Fast 500™ award eligibility requirements also include base-year operating revenues of at least \$50,000 USD or CD, and current-year operating revenues of at least \$5 million USD or CD. For European firms the requirements are slightly lower including base-year operating revenues of at least €50,000 EUR, and current-year operating revenues of at least €800,000 EUR.

However, internationally-comparable data on firm growth on a regional level does not exist. Therefore, it has been necessary to use data that has not yet been aligned with international definitions of growth. The use of the data is therefore also associated with some uncertainties and should be viewed as indicative.

In order to control for regional differences, the share of fastest-growing companies in a region is compared across regions. The Deloitte Touche Technology Fast 500 List shows the 500 most successful public and private technology, media and telecom companies in Europe and USA. The listed firms have achieved the highest rates of revenue growth rates during the past five years.

According to Deloitte Touche Technology Fast 500, high-growth firms are located in regional pockets that are characterized with extremely high growth rates. The ability to foster the fastest-growing firms is concentrated in certain regions, and the ability varies significantly between California and the Nordic region (cf. Figure 7).

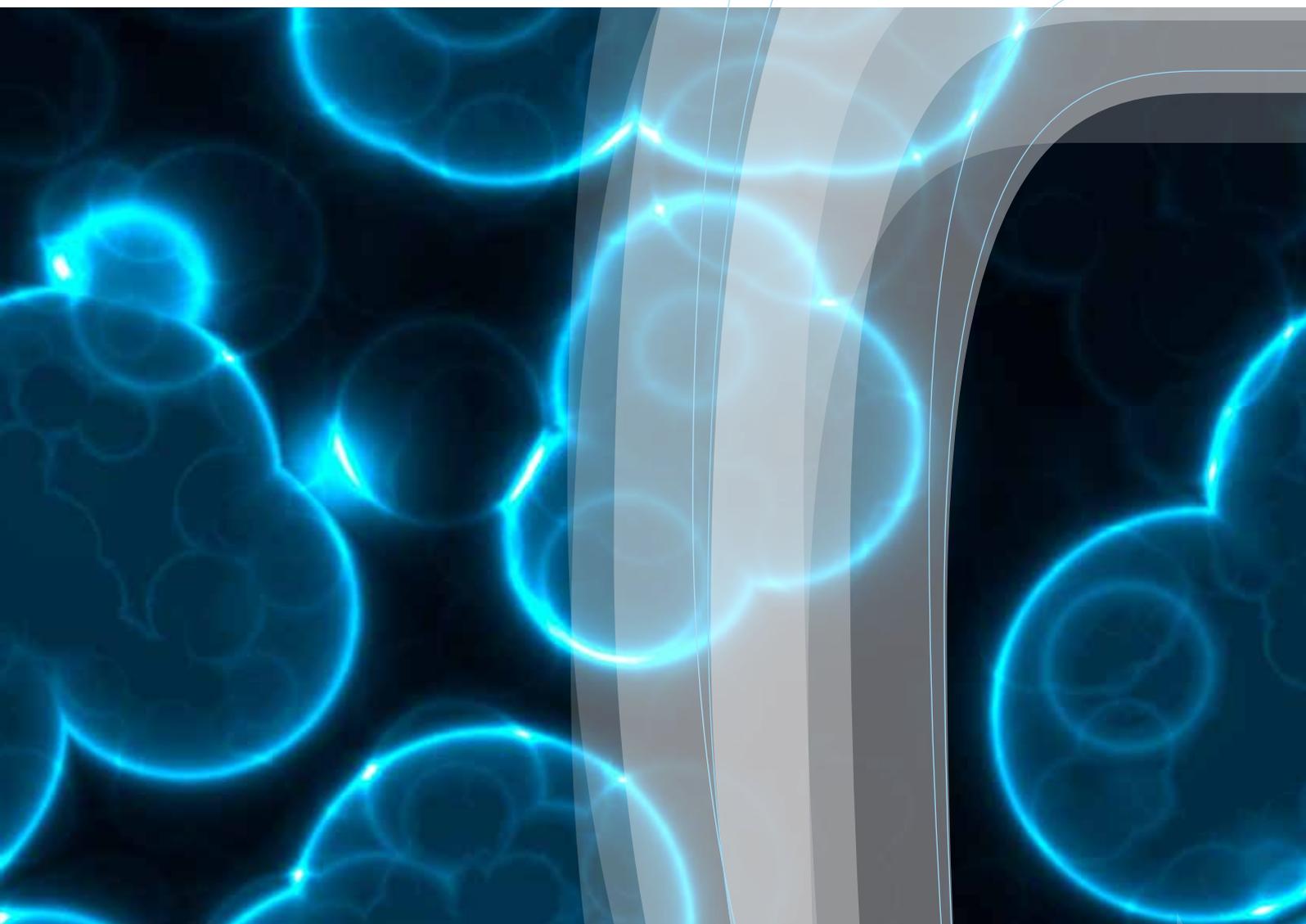
A large portion of the USA's fastest-growing firms are located in California. In particular, more than 40 percent of the top 50 fastest-growing firms in the USA are located in

19) The share is not completely zero as there are a few companies with a high number of employees (such as employment agencies). However, these are hardly representing global high-impact firms as they include many part-time employees. For instance, the rate is zero when adjusting for temporary employment, i.e. using full-time equivalents.

California – most around the San Francisco Bay area. Other American regions such as New Jersey and New York and seem to have a large share of the USA's fastest-growing firms. In comparison, only around ten percent of Europe's top 50 fastest-growing firms are located within the Nordic region.

Also, the fastest-growing firms in California perform much better than the fastest-growing firms in the Nordic region. The average growth rates in revenue for the 10 fastest-growing firms in California are 2.5 higher compared to the Nordic firms. So, not only does California have a large share of the USA's fastest-growing firms, but the growth rates are also significantly higher compared with the fastest growing Nordic companies.

Although there might some uncertainties related to the use of this data, it indicates that the ability to foster growth firms varies across regions and depends on specific regional environments. Although this data is not measuring young firms, the data shows that growth firms and high growth rates seem to be concentrated in regional growth pockets in the USA, and using regional data when discussing firm growth (gazelles or firms of all ages) becomes crucial for any valid attempts to draw conclusions on the matter.



Regional Benchmark of Entrepreneurship Framework Conditions

Highlights

- The Nordic region has competitive overall framework conditions and is only lagging the English-speaking regions.
- The main Nordic strengths lie in market conditions, access to finance and in creation and diffusion of knowledge.
- Some of the Nordic countries perform well in the majority of entrepreneurship policy areas, while others tend to have a more specialised approach.

It is important to understand the mechanisms that could help increase the supply of entrepreneurial activity, both start-up and growth activities. There is a solid base of evidence showing that entrepreneurship can be strengthened through a number of underlying external factors. In particular, business environments providing sound framework conditions for new and growing enterprises have proved to positively influence entrepreneurial activity.

The overall framework conditions for entrepreneurship are comprised of six policy areas; Regulation, Market conditions, Access to finance, Creation and diffusion of knowledge, Entrepreneurial capabilities and Entrepreneurial culture. It is acknowledged that it is the interaction between the six policy areas that plays a significant role in obtaining high levels of firm formation and growth. See Figure 3 in Appendix 1 for further detail. Obviously, there is a time lag between the actual effect of entrepreneurship

policies on entrepreneurship performance, which should be considered when analysing the data.

Regional framework conditions for entrepreneurship²⁰

When comparing the overall framework conditions for entrepreneurship, the Nordic region is competitive although still trails the English-speaking regions. Comparative analysis of the overall entrepreneurship framework conditions in OECD regions shows that the Nordic region ranks in the middle and is surpassed by the region comprised of the USA, UK and Canada and the region of Australia, Ireland and New Zealand, while continental Europe is lagging the other regions significantly (cf. Figure 8).

Although the English-speaking regions surely have superior framework conditions for entrepreneurship, the gap to the other regions has narrowed over time. As such, since 2004 the Nordic region, Continental Europe and Japan/Korea have succeeded in increasing their overall framework conditions for entrepreneurship and are thereby catching up with the best-performing regions, while – on the contrary – the best performing regions have lost ground. Since the economic crisis in 2008/09, the USA, UK and Canada have worsened their framework conditions in areas particularly related to venture capital and entrepreneurial culture when comparing opinion-based indicators on venture capital availability and entrepreneurship among managers.

The Nordic region has improved its framework conditions for entrepreneurship likely (in part) by learning good policy practices from the best-performing countries that provide a strong business environment for entrepreneurial activity

20) In this section regions are referred to as a collection of countries.

(such as the USA, UK and Canada). The Nordic region could still continue to improve its entrepreneurship framework conditions through policy learning from other regions.

Breaking down the overall entrepreneurship framework condition index value into an analysis of the six policy areas provides a deeper understanding of similarities and differences between entrepreneurship-related policy priorities in OECD regions. However, the analysis of the six policy areas is also connected to a degree of uncertainty, as the interrelationship between the six policy areas is lost.

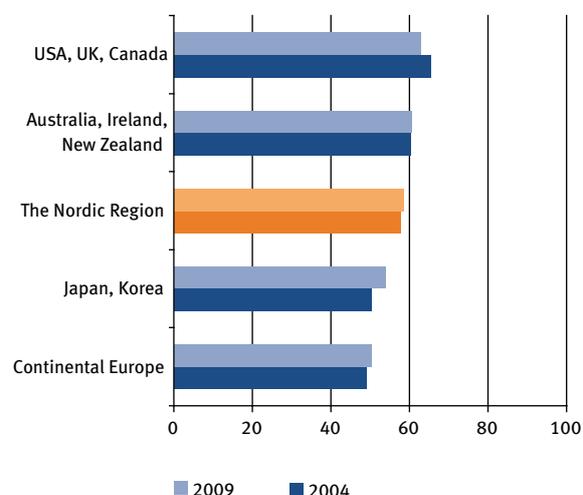
When comparing the regional frameworks for entrepreneurship in each of the six policy areas, it is found that the Nordic region provides sound framework conditions in the areas of regulatory framework, market conditions and access to finance, compared to the other regions. On the other hand, the Nordic region lags behind on entrepreneurial capabilities and entrepreneurial culture, where the English-speaking regions are leading in performance. A more detailed analysis of each of the six policy areas is made below.

Regulatory Framework

Regulatory framework refers to the policy areas which governments can influence directly through regulation. Public regulation (such as labour market regulation and institutional conditions) has an effect on entrepreneurship performance. For instance, a strict labour market regulation might hinder the possibility to hire and fire employees and thus firm growth (see Appendix I for a description of all indicators).

The Nordic region has some significant strengths as regards the regulatory framework although the overall regional ranking is below that of the other leading regions (discussed later), cf. Figure 9.

Figure 8: Overall framework conditions for entrepreneurship, 2004 and 2009

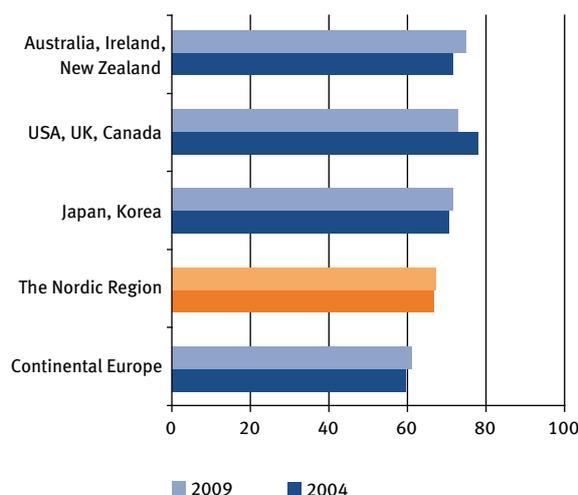


Source: FORA, 2010

Note:

The figure shows the composite index values on overall framework conditions for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 9: Regional regulatory framework conditions, 2004 and 2009

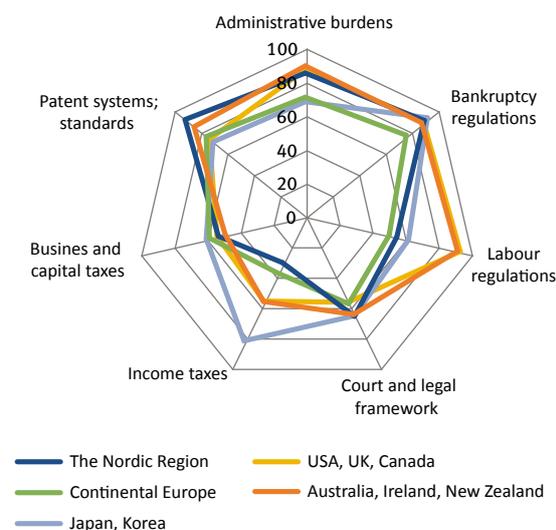


Source: FORA, 2010

Note:

The figure shows the composite index values on regulatory framework conditions for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 10: Regulatory framework sub-policy areas, 2009



Source: FORA, 2010

Note:

The figure shows the composite index values for the seven policy areas comprising regulatory framework. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

The USA, UK and Canada is the only region which has experienced a worsening of the regulatory framework index over the past five years. However, Denmark is the only Nordic country that has improved its conditions significantly in this area from 2004 to 2009 – which is primarily due to a strong improvement in bankruptcy regulation. As with the overall framework conditions, the English-speaking regions have the best framework conditions for regulatory framework in both years.

The Nordic region's strengths within regulatory framework are – compared to the other regions – related to bankruptcy regulation, court and legal frameworks and patents systems. For instance, the Nordic region is only surpassed by Japan and Korea in the areas of bankruptcy regulation, and court and legal framework. Improvement in bankruptcy regulation has been highly prioritized in a number of Nordic countries, which explain the good Nordic position.

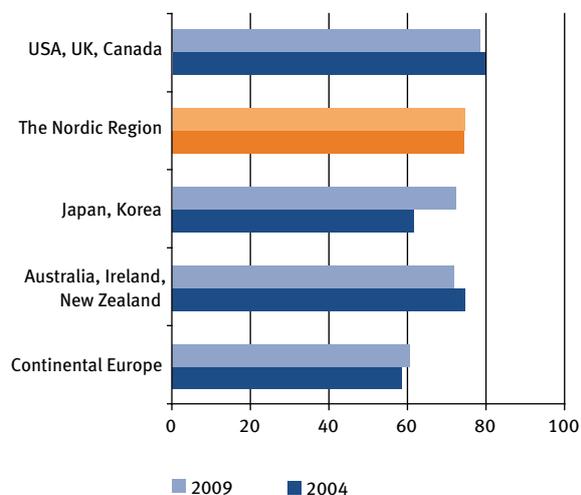
On the other hand, the Nordic region lags behind the best performing regions in two sub-policy areas, in particular. The first is labour regulation, and could be explained by a rather rigid labour market in some of the Nordic countries – thereby hampering the flexibility of hiring and firing. The second sub-policy area where the Nordic region lags

behind is taxes. The modest Nordic ranking is mainly due to a low performance on the areas which have to do with the region's tax structure, i.e. income, business and capital taxes. Apart from Iceland, all the Nordic countries have a high tax burden which has its background in the Nordic welfare model. In that respect one could argue that the Nordic model hampers entrepreneurial activity by offering a lower after-tax reward from engaging in starting up a company and profiting from it.

However, the literature on entrepreneurship and taxes offers no strong relationship between a low tax burden and high entrepreneurial performance. On the contrary, while high tax rates may have a negative impact on economic activity (lowering earnings), they may also have a positive impact on risk-taking which is highly-associated with entrepreneurship. The argument is that the government bears more risk from entrepreneurial endeavours in high tax structures, thus reducing the entrepreneur's own risk by being self-employed.²¹ So, although the Nordic region has higher income taxes, it might not necessarily hamper the region's entrepreneurship performance.

21) Domar and Musgrave, 1944. See also *Ewing Marion Kauffman Foundation*, 2007, for a discussion on the relation between tax policy and entrepreneurship.

Figure 11: Regional market conditions framework, 2004 and 2009

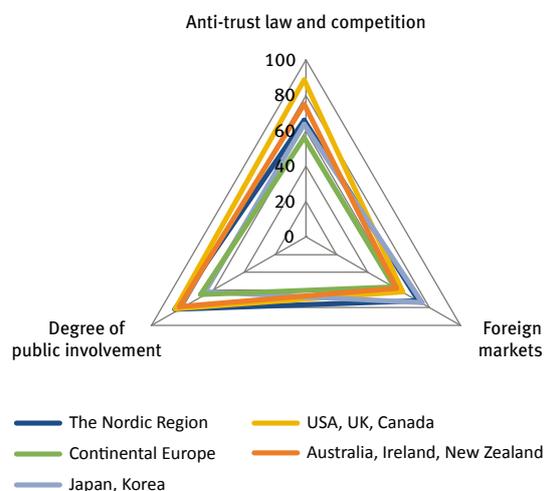


Source: FORA, 2010

Note:

The figure shows the composite index values on market conditions framework for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 12: Market conditions sub-policy areas, 2009



Source: FORA, 2010

Note:

The figure shows the composite index values for the three policy areas comprising market conditions framework. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

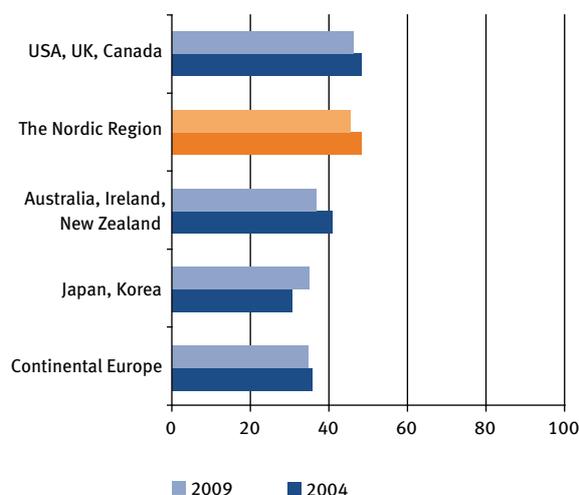
Market Conditions

Market conditions are an important underlying requirement for effective business growth and firm entry. Different firms have varied degrees of dependence on their national market. Some depend a lot; others are less dependent. But a well-organized national market is a good starting point for business growth.

When it comes to providing strong market conditions, the USA, UK and Canada and the Nordic region are the best performing regions. However, the two regions are strong for different reasons. The Nordic region is very open towards foreign markets, while the USA, UK and Canada region is second to none regarding anti-trust law and competition (cf. Figure 12).

The Nordic regional framework for market conditions has been stagnating over the last five years, but the English-speaking region of Australia, Ireland and New Zealand has lost ground – resulting in a higher ranking of the Nordic region in 2009. One reason for the Nordic stagnation could be that the Nordic region already performs well in terms of market conditions, particularly in sub-policy areas such as degree of public involvement and access to foreign markets. Japan and Korea is the only region which has progressed significantly on market conditions, which primarily is due to a solid improvement in openness towards foreign markets.

Figure 13: Regional access to finance framework, 2004 and 2009

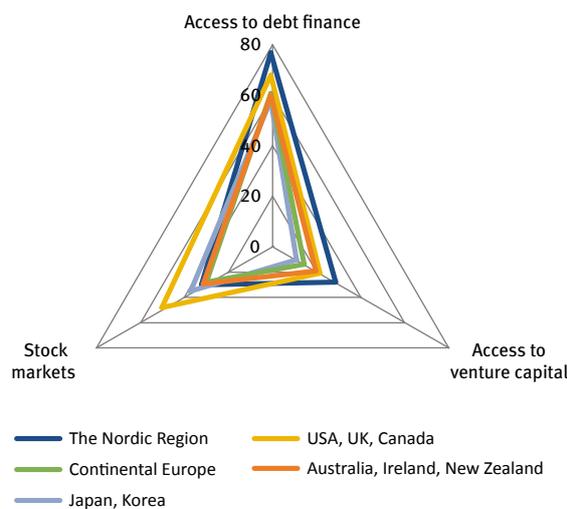


Source: FORA, 2010

Note:

The figure shows the composite index values on market conditions framework for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 14: Access to finance sub-policy areas, 2009



Source: FORA, 2010

Note:

The figure shows the composite index values for the three policy areas comprising access to finance framework. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

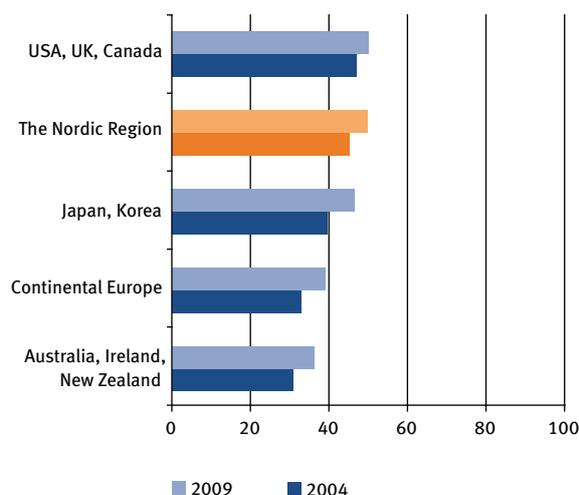
Access to Finance

Access to finance has an impact on the resources of entrepreneurs. For instance, well functioning venture capital markets have a positive impact on entrepreneurship performance.

When ensuring access to finance for new and existing companies, the Nordic countries are almost on par with the USA, UK and Canada. More specifically, in access to both debt finance and to venture capital, the Nordic region performs best. However, the stock markets are weak compared to the USA, UK and Canada – thus leaving the Nordic region trailing (but only marginally). Like most of the other policy areas, the Nordic region is well ahead of Continental Europe (cf. Figure 14).

When comparing the development over time, the Nordic region is – again – stagnating, but still maintains a strong position among the OECD regions. Japan and Korea is the only region which has improved its conditions for access to finance over the period 2004–2009. This is mainly due to easier access to debt finance. However, the region is still trailing the Nordic region and the USA, UK and Canada significantly.

Figure 15: Regional creation and diffusion framework, 2004 and 2009

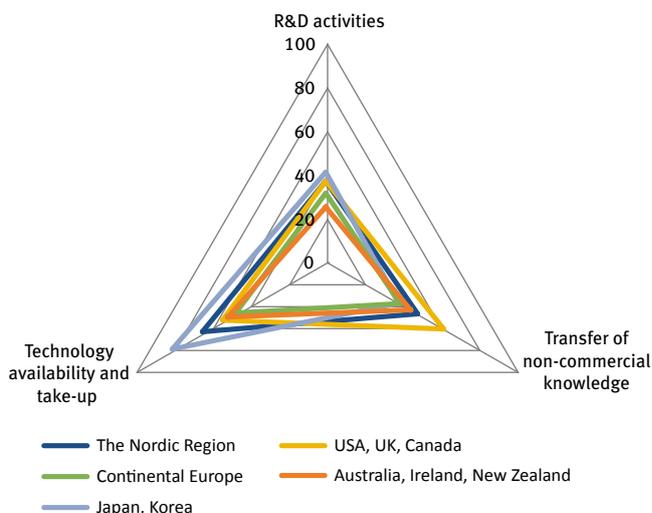


Source: FORA, 2010

Note:

The figure shows the composite index values on creation and diffusion of knowledge framework for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 16: Creation and diffusion of knowledge sub-policy areas, 2009



Source: FORA, 2010

Note:

The figure shows the composite index values for the three policy areas comprising creation and diffusion of knowledge framework. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

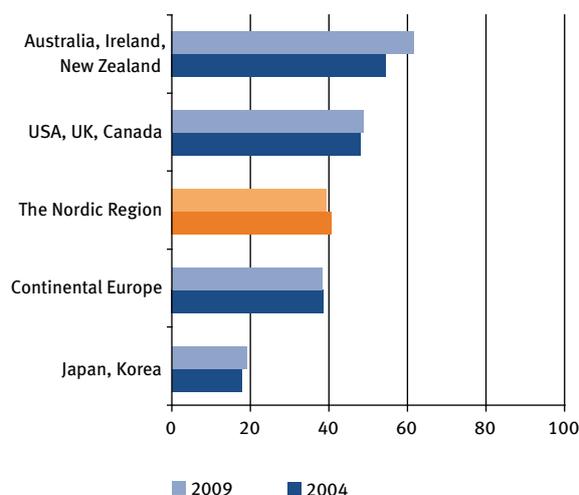
Creation and Diffusion of Knowledge

Creation and diffusion of knowledge is related to the ability to spread new knowledge created through research and development activities, as well as the availability of new technology on the market. Regarding the ability to create and diffuse knowledge, three regions stand out as top-performing regions. The Nordic region and the USA, UK and Canada provide the best conditions; while the region of Japan and Korea is close to the other two (cf. Figure 15).

While the Nordic region and Japan/Korea have their main strengths in technology availability and take-up, the USA, UK and Canada is second to none in terms of getting the knowledge to the market, i.e. research collaboration between universities and industries.

Contrary to the other policy areas, all regions have progressed in creation and diffusion of knowledge over the last five years. One of the reasons is the increasing use of new technologies such as ICT, but also heightened focus on knowledge transfer is characterizing all regions. The USA, UK and Canada and the Nordic region have progressed to a lesser degree than the other regions.

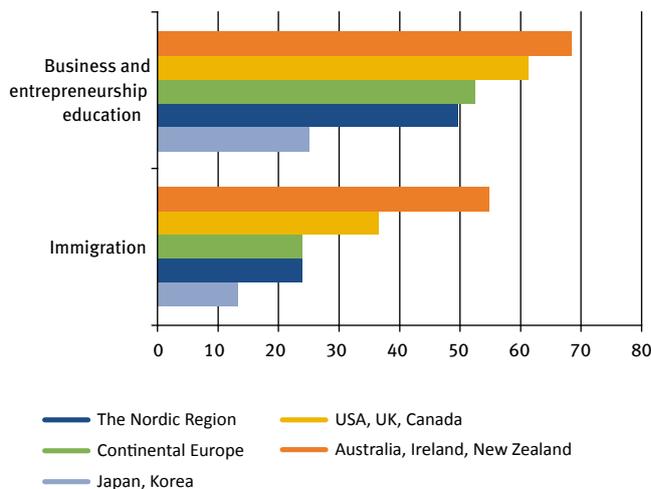
Figure 17: Regional entrepreneurial capabilities framework, 2004 and 2009



Source: FORA, 2010

Note: The figure shows the composite index values on entrepreneurial capabilities framework for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 18: Entrepreneurial capabilities sub-policy areas, 2009



Source: FORA, 2010

Note: The figure shows the composite index values for the two policy areas comprising entrepreneurial capabilities framework. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Entrepreneurial Capabilities

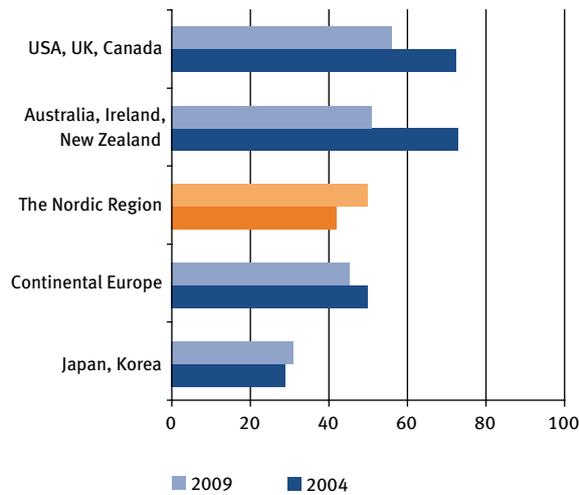
Entrepreneurial capabilities refer to the entrepreneur's ability to create value through new innovative products. This can be influenced through, for instance, accurate education in business development and entrepreneurship.

Together with Continental Europe, the Nordic region faces a major challenge in the area of entrepreneurial capabilities. The Nordic region only performed better than Japan and Korea in 2009 and is – along with Continental Europe – clearly lagging the English-speaking regions (cf. Figure 17).

The Nordic region has more or less stagnated in the area from 2004 to 2009, and the same is the case for Continental Europe. Australia, Ireland and New Zealand is the only region which has progressed significantly over the last five years. However, results have to be interpreted with care due to lack of internationally-comparable indicators for entrepreneurial capabilities over time.

Like other benchmark models, the Nordic Entrepreneurship Monitor is based on internationally-comparable statistics, and thereby also limited by availability of data in certain areas. As such, there is no internationally-comparable data on entrepreneurship ecosystem or entrepreneurship infrastructure – both of which are essential for a region and a country in terms of entrepreneurial capabilities.

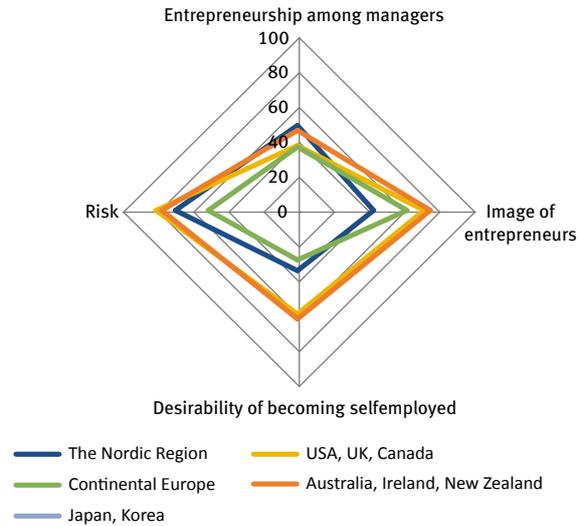
Figure 19: Regional entrepreneurial culture framework, 2004 and 2009



Source: FORA, 2010

Note: The figure shows the composite index values on entrepreneurial culture framework for the five regions. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Figure 20: Entrepreneurial culture sub-policy areas, 2009



Source: FORA, 2010

Note: The figure shows the composite index values for the four policy areas comprising entrepreneurial culture framework. Each sub-indicator used to construct the composite index is standardised on a scale from 1 to 100. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Entrepreneurial Culture

Entrepreneurial culture refers to how the society and individuals understand entrepreneurship, as well as the possibility for starting their own firms.

The Nordic region is behind the English-speaking regions regarding the overall entrepreneurial culture (cf. Figure 18). However, in some of the sub-policy areas under entrepreneurial culture, the Nordic region performs on par with the English-speaking countries, i.e. in entrepreneurship among managers. However, the difficulty of measuring cultural phenomena and lack of internationally-comparable indicators means that the ranking of regions within this policy area has to be interpreted with care.

The indicators suggest that the Nordic region has progressed from 2004 to 2009 in entrepreneurial culture, while the English-speaking regions have lost ground. The latter might be explained by a lack of entrepreneurial risk-taking in light of the financial crisis. Although improving over time, the desirability of becoming self-employed in the Nordic region is still lagging significantly compared to the English-speaking regions.

Nordic ranking on entrepreneurship framework conditions

When comparing the index value for each of the six entrepreneurship policy areas for individual Nordic countries, it is clear that some Nordic countries are prioritising their entrepreneurship policies broadly (performing well in the majority of the six policy areas), while others tend to prioritise fewer of the policy areas. There seems to be some relation between the broadness in the policy thinking and the ranking of entrepreneurship performance.

What seems obvious is that those countries that perform well in terms of entrepreneurship performance also tend to have prioritised entrepreneurship framework conditions. This holds true for Denmark and Finland in particular, while Iceland seems to be the only exception (where good entrepreneurship frameworks not have resulted in high entrepreneurship performance) (cf. Table 1).

Finland has centred broadly in terms of entrepreneurship policy focus and is the only Nordic country with five top-3 rankings within the region (in five out of six policy areas) (cf. Table 2). Denmark has succeeded in the regulatory framework, market conditions and access to finance, and Iceland stands out in terms of capabilities and culture – among others. Sweden also has its strengths, in particular in the area of creation and diffusion of knowledge, while Norway has a very strong position in access to finance.

Similarities and differences in Nordic entrepreneurship policy priorities

When comparing the ranking of the individual Nordic countries' entrepreneurship framework conditions, it is clear that the Nordic countries have similar but also different patterns when it comes to policy focus.

Apart from Iceland all the Nordic countries provide very strong market conditions. Moreover, the Nordic countries prioritise access to finance and are among the top-10 countries in the OECD.²² Thus, the difference between the Nordic countries is fairly modest in this area. With the exception of Norway, the Nordic countries are also very well-equipped with regards to creation and diffusion of knowledge and – as a result of this – also rank among the best in the world in this area.

Each of the single Nordic countries has their own unique strengths and weaknesses. Iceland stands out in two policy areas in particular, namely: entrepreneurial capabilities and entrepreneurial culture. And it is therefore clear that Iceland “pulls” up the other Nordic countries when comparing regional performance. On the contrary, Iceland “pulls” down the Nordic regional performance in market conditions.

Table 1: Number of top-3 rankings among the Nordic countries on entrepreneurship framework conditions

Finland	Denmark	Iceland	Sweden	Norway
5	4	4	3	2

Source: FORA, 2010.

Note:

The higher the number of top-3 rankings the better is the coverage of entrepreneurship framework conditions in a given country.

Table 2: Ranking among the Nordic countries in terms of entrepreneurship framework conditions

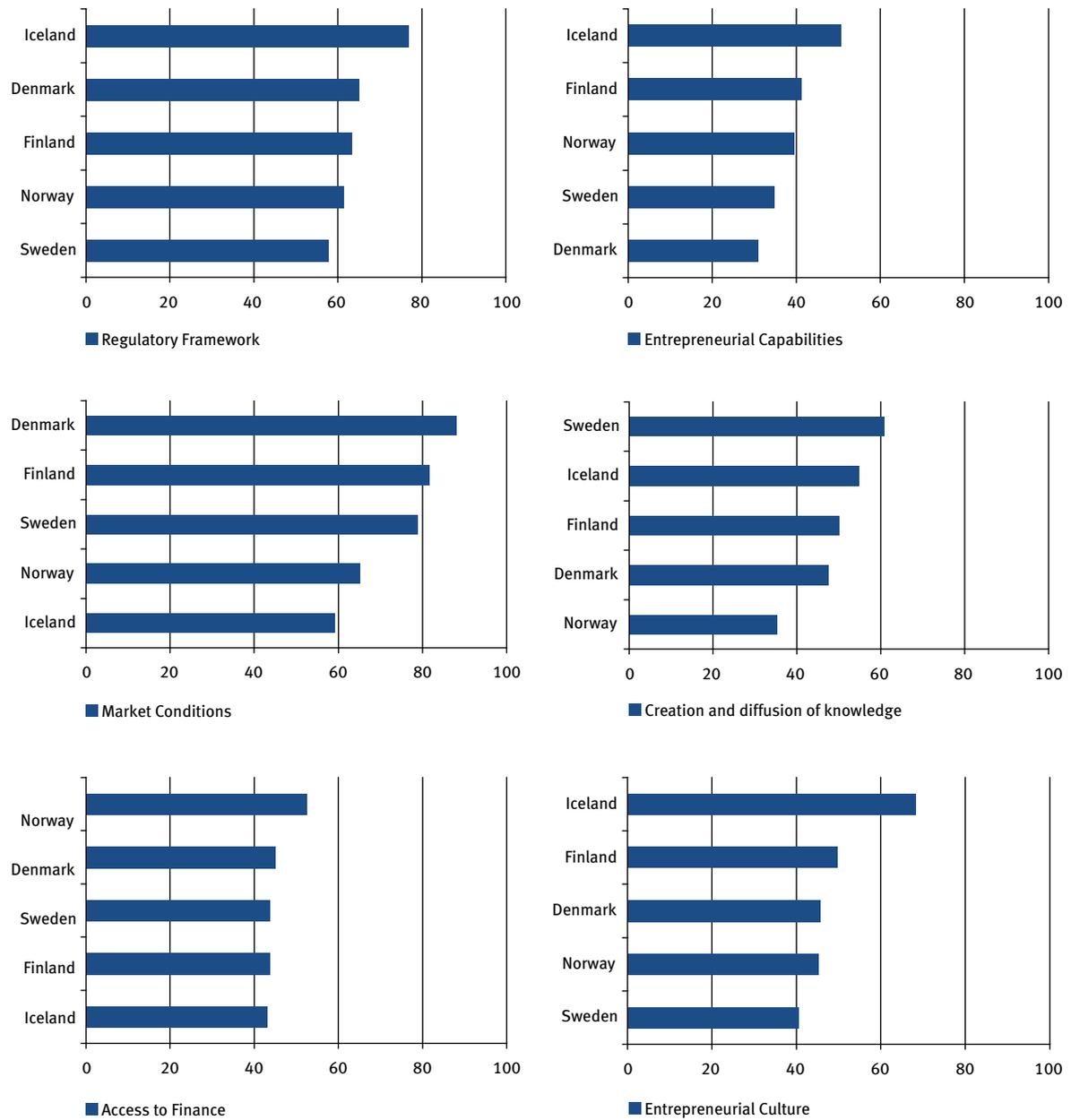
	Ranking in entrepreneurship framework conditions					
	Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneurial capabilities	Entrepreneurial culture
Denmark	2	1	2	4	5	3
Finland	3	2	4	3	2	2
Iceland	1	5	5	2	1	1
Norway	4	4	1	5	3	4
Sweden	5	3	3	1	4	5

Source: FORA, 2010.

Denmark ranks lowest in terms of entrepreneurial capabilities, but does well on regulatory framework and market conditions. Finland seems to be among the strongest of the Nordic countries in most of the policy areas where the Nordic region is leading (regulation, market conditions and access to finance). Sweden has a tendency towards prioritising creation and diffusion of knowledge but performs modestly in entrepreneurial capabilities and entrepreneurial culture. Finally, Norway provides unique conditions for access to finance but is trailing the other Nordic countries in the other policy areas, cf. figure 21.

22) It should be noted that the effect of the financial crisis is still not fully reflected in most of the indicators describing this area.

Figure 21: Entrepreneurship framework conditions in the Nordic countries



Entrepreneurship in Denmark

Highlights

Entrepreneurship Strengths

- Best entrepreneurship performance among the Nordic countries
- Clear and measurable policy targets for entrepreneurship
- Strong position on regulatory framework and market conditions

Entrepreneurship Challenges

- Weak position on entrepreneurial capabilities
- Challenge by attracting foreign high-skilled workers/entrepreneurs
- Lack of sound entrepreneurial culture

Recommendations

- Secure a smooth transition from state to local level in funding and monitoring of regional business development centres
- Focus on becoming more attractive to start and grow a company for people with a foreign background
- Remove cultural barriers with respect to starting a new company after bankruptcy
- Improve the ability to upscale firms

Entrepreneurship Policy

Entrepreneurship policy has been highly prioritised in Denmark in recent years. In 2003, a national action plan for entrepreneurship was introduced, highlighting the economic impact of new firms as well as setting goals for high-growth start-ups. Moreover, the Danish Globalisation Strategy from 2006 introduced reforms in several key areas, i.e. innovation and entrepreneurship.²³ This comprehensive strategy aims at making substantial improvements in the framework conditions for growth and innovation in new and existing enterprises. In this strategy, a new initiative implementing Regional Business Development Centres was introduced. The centres are founded at local level, and their main role is to support the creation and expansion of high-growth start-ups. During a transition period until 2011 the centres are funded by the state (cf. Box 6).

In general, the Danish government is very ambitious about entrepreneurship policy. The government is aiming at becoming among the best in Europe in terms of new firms every year and one of the leading countries in the world by 2015 in terms of high-growth start-ups. Moreover, by 2020 Denmark should be one of the leading countries with respect to growth-firms.

Since 2004, the Danish government has measured and monitored the development in entrepreneurship performance and framework conditions in order to ensure that the country is on track (the Entrepreneurship Index)²⁴. This index is based on data for a number of OECD countries and identifies Denmark's strengths and weaknesses as an entrepreneurial country.

23) The Danish Government, 2006.

24) In 2003, FORA produced the first policy report on Entrepreneurship in Denmark – measuring and comparing entrepreneurship performance in (at that time) new ways. Since, FORA has worked together with the OECD to develop internationally-comparable data for entrepreneurship performance.

Entrepreneurship Performance

Denmark ranks first in the Nordic region on entrepreneurship performance both in terms of start-up activity and enterprise growth. In particular, Denmark is very strong on start-up rates, even though the country has been affected considerably by the financial crisis. Numbers of high-growth start-ups have increased, indicating that early focus combined with policy action has worked.²⁵ However, as highlighted in chapter 2, Denmark is challenged by the lack of ability to upscale firms.

Framework Conditions for Entrepreneurship

Overall, Denmark's entrepreneurship framework conditions lead to a ranking of 9th among all OECD countries. This corresponds to a top-5 performance in Europe, and a number three ranking in the Nordic region – only surpassed by Iceland and Finland. Denmark is particularly strong in framework conditions related to start-up activity, which corresponds well with the performance index.

Strengths

The overall frameworks related to market conditions in Denmark are world-class (ranked 2nd in the OECD). The strong *market conditions* in Denmark are largely a result of openness towards *foreign markets*, incited by low import and export burdens. Along with this, the good market con-

Box 6: Regional Business Development Centres (Vaeksthuse)

In 2007, a local government reform resulted in *Væksthuse* or Regional Business Development Centres. The five centres are key pieces in a new framework of business services, and their main role is to support the creation and expansion of high-growth start-ups. Tasks include providing free and impartial assistance, and referring enterprises to private advisers and relevant government agencies and organisations.

The centres cooperate with the Danish Trade Council to promote internationalisation, and with the Danish Patent and Trademark Office to help companies with IPR-related issues. In order to create synergies among the centres, a common technical infrastructure (webpage, user evaluation system, etc.) has been established.

The Danish municipalities are founders of the five centres and also have the majority of the positions on the boards of directors. During a transition period until 2011, the state funds the centres. The basic funding of the five regional business development centres amounts to DKK 92.8 million annually, including administrative costs. Of these funds, 10 percent is allocated to centres based mainly on the performance of their customers.

Source: The Danish Enterprise and Construction Authority (DECA)

25) The Danish Enterprise and Construction Authority, 2009.

Table 3: Denmark's position in the Nordic Region

	Performance		Framework conditions					
	Start-up	Growth	Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneurial capabilities	Entrepreneurial culture
Position	1	1	2	1	2	4	5	3

Source: FORA, 2010.

ditions are also a result of a low *degree of public involvement*.

Although performing modestly on the overall regulatory framework, Denmark is only behind Australia and New Zealand when adjusting for the OECD countries' different tax structures. Denmark is an absolute top-performer in *labour market regulation* when comparing with the other Nordic countries. The Danish labour market model is built on collaboration and negotiated solutions between employers, employees and the government. Employer flexibility is combined with a high level of economic security and competence-building for employees, i.e. the model relies on "flexicurity".

Denmark is also strong in the area of *administrative burdens*. This suggests that the Danish public sector is not causing great burdens for Danish businesses. For instance, Denmark is the only OECD country where there are no costs associated with starting a business. Moreover, Denmark performs solidly in terms of the number of procedures and in the number of days to start a business.

Another Danish stronghold is in the area of access to finance. This has its background in a solid performance in *access to venture capital* and in *access to debt finance*. The Danish government is aware of the importance of finance for entrepreneurial activity. A government initiative from 2009 supports SMEs and their access to finance. Among others, this initiative injects venture capital into the market through private funds (amounting to 500 Mio. DKK).

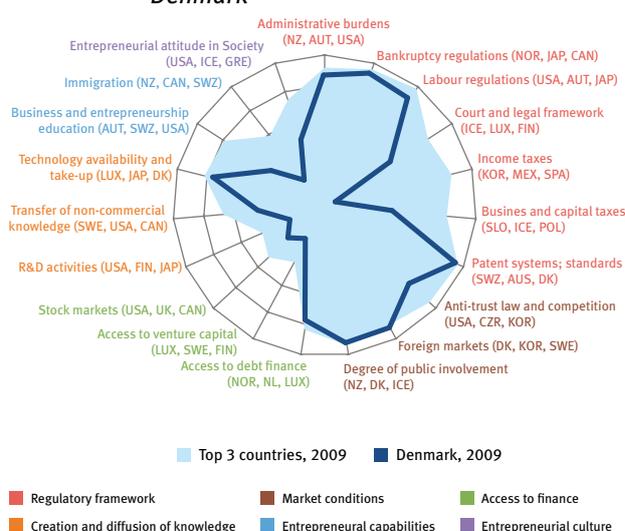
Challenges

The main challenge for Denmark lies in improving the conditions that have a strong connection to high growth rates in enterprises, that is, in entrepreneurial capabilities and entrepreneurial culture.

The most problematic area of the Danish framework conditions is entrepreneurial capabilities. This is mainly due to a low ranking on the *immigration* index (ranked 22nd in the OECD), which shows that Denmark is lacking the ability to attract well-educated foreign labour. While some countries such as the USA and Canada highlight immigration as a source of entrepreneurship²⁶, it is difficult for non EU-citizens to establish a new business in Denmark. In light of this, a centre for ethnical industry development is set to be established in 2010 – with the aim of supporting start-up, survival and growth in new and smaller enterprises with owners of foreign backgrounds. The centre is financed by the government, the regions and the municipalities.

Also related to entrepreneurial capabilities is the Danish *business and entrepreneurship education*, which is modest compared to – for instance – the English-speaking countries. However, it is expected that improvements are already underway, as the Danish government introduced a national strategy for entrepreneurship education at universities (in 2009) after having a special focus on this for some years. In addition, the Regional Business Develop-

Figure 22: Entrepreneurship framework conditions – Denmark



Source: FORA, 2010.

Note: The figure shows the composite index values for Denmark relative to the average of the top three performing countries for each of the 19 policy areas. The top three performing countries for each policy area are shown in brackets and illustrated by the shaded area. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

ment Centres provide entrepreneurial services to start-ups and growth firms with the aim of enhancing the level of entrepreneurial capabilities in firms.

Denmark has a *weak entrepreneurial culture*. Although this is a challenge to most of the Nordic countries, Denmark is scoring below the Nordic average on this index. One of the problems with the Danish entrepreneurial culture is that the Danish people do not find it very desirable to become self-employed.

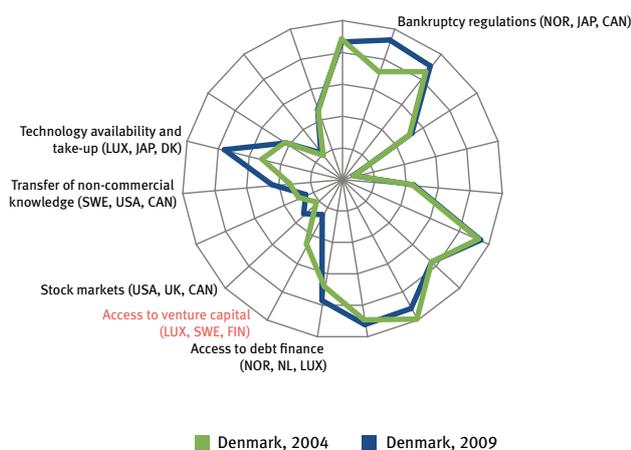
Framework Conditions – Comparison over Time

Over the last five years, Denmark has improved in two policy areas in particular: in *bankruptcy regulations* and in *technology availability and take-up* (cf. Figure 23).

The new bankruptcy legislation has made it easier to gain debt-restructuring (2005) and made the processing of an insolvent estate more efficient (2007). As a result of these changes, Denmark has gone from a ranking of 19th to 6th in the OECD. However, it is questionable whether these improvements have changed the attitude in society towards – for instance – the possibility of starting a company after one or several bankruptcies. Regarding technology availability, Denmark has succeeded in creating strong conditions for ICT over the years, resulting in a strong performance in this area. Most other countries have also improved

26) Stangler, 2010.

Figure 23: Improvements in framework conditions 2004-2009



Source: FORA, 2010

Note: The figure shows the composite index values in 2004 and 2009 for Denmark, highlighting the policy areas with significant progress or decline.

in this area, but nevertheless, Denmark ranked 3rd in 2009 in the OECD (up from 5th in 2004).

Denmark has also improved its conditions for *transfer of non-commercial knowledge*, in particular on collaboration between universities and industry and in the number of patent applications by universities and other government institutions. The Danish Government has focused on this area, i.e. established knowledge transfer centres in the last couple of years. Thus, further improvement in this area might be expected over the coming years.

Regarding the *stock markets*, Denmark has experienced an improvement from being ranked 21st five years ago to its current ranking of 12th.²⁷ In general, the Nordic countries obtain a modest score in some of the indicators in this area, e.g. in market capitalization of newly listed companies. Consequently, even though Denmark's performance is not very high in the overall ranking, it is still the second best of the five Nordic countries.

Denmark has also improved its conditions in *access to debt finance*. This is for instance due to progress in the share of private credit relative to GDP. However, the downturn of the financial system due to the financial crises must be kept in mind, i.e. some of the indicators describing access to debt finance are only available until 2008. The Danish Government has in 2009 undertaken several steps to re-establish confidence in the financial system – including supporting finance for SMEs (as mentioned earlier). Nevertheless, some entrepreneurs might face credit constraints as a result of the recent financial turmoil.

The only area where Denmark has experienced a significant decline is in *access to venture capital*. However, enterpris-

27) It should be noted that the better performance on stock markets in Denmark co-exists with the merger of all national stock markets in the Nordic countries. The improvement should be seen in light of this.

Box 7: Early warning system

Denmark's bankruptcy law has been continuously improved throughout the last couple of years. Debt restructuring was made easier for entrepreneurs in 2005, and in 2007 the law was amended to improve the case-processing time for estates in bankruptcy.

In addition, an Early Warning scheme was established in 2007. Inspired by a similar Dutch initiative, this nationwide scheme gives advice to enterprises in financial difficulties. The scheme aims at helping viable businesses to survive and helps non-viable businesses to close down before they accumulate too much debt. The assistance is free of charge and provided by a network of voluntary counsellors and specialised private service providers.

In 2008, almost 400 enterprises received assistance from the scheme, whereas 625 were assisted in 2009. So far, 2010 is expected to bring a further rise in demand.

The Early Warning initiative is administered by the Regional Business Development Centres and is financed by the Danish Ministry of Economic and Business Affairs by approx. 7.5 million DKK annually.

Source: The Danish Enterprise and Construction Authority (DECA)

Box 8: Institutional setting

Overall entrepreneurship policy in Denmark is mainly divided between The Ministry of Economic and Business Affairs and The Ministry of Science, Technology and Innovation. While the former has the responsibility of general entrepreneurship policies, the latter is centred on commercialisation of knowledge and support to science-based entrepreneurs. The Ministry of Education and the Ministry of Foreign Affairs have responsibility for minor parts of Danish entrepreneurship policies.

The Danish public sector has a decentralised structure where regions and municipalities play a central role in business and entrepreneurship services. The tasks of the regions are mainly to prepare regional development plans and to establish regional growth fora (who have the task of identifying regional and local opportunities of growth). The municipalities have the responsibility for providing business advice at local level and are also involved in the five regional business development centres as founders (cf. Box 5).

Source: OECD, Entrepreneurship Review of Denmark, 2008

es' perception of the availability of venture capital – which is survey-based – is the only indicator available over time. In light of this and the financial crisis, the setback in the index describing this area must not be over-interpreted.

Entrepreneurship in Finland

Highlights

Entrepreneurship Strengths

- Strong entrepreneurship performance
- The best overall framework conditions for entrepreneurship in the Nordic region
- Strong entrepreneurial capabilities

Entrepreneurship Challenges

- Lack of highly-skilled foreign workers/entrepreneurs
- Rigid labour market regulation with a negative impact on hiring and firing possibilities
- Ensuring a strong entrepreneurial culture

Recommendations

- Focus on becoming more attractive to start and grow a company for people with a foreign background
- Make labour market regulation more conducive for firm growth
- Continue focusing on improving entrepreneurial culture
- Improve the ability to upscale firms

the last three governments. The current government's aim is to supply the world's best environment for entrepreneurship and innovation. They have organized entrepreneurship in a new super-ministry – the Ministry of Employment and the Economy – in 2009. Specialised departments together with cross-operating units optimize the possibility of combining entrepreneurship and innovation with, for instance, labour market policy.

Since 2009, the government has addressed entrepreneurship through four target groups: 1) New enterprises and inventors, 2) Enterprises at local/national level, 3) Enterprises seeking growth/internationalisation and 4) Large enterprises.

As with many of the Nordic countries, the Finnish government has not formulated concrete measurable policy targets for entrepreneurship. However, the lack of measurable targets is not necessarily an impediment for developing a sound and forward-looking entrepreneurship policy. In fact, Finland's position compared to the other Nordic countries indicates that the country is doing relatively well.

The Finnish government has built a comprehensive public-private infrastructure for providing entrepreneurship services. However, the infrastructure has mainly been oriented towards providing public infrastructure services for start-ups. Nevertheless, the recent governmental policy strategy for entrepreneurship has put growth firms and their specific requirements high on the policy agenda. The aim is to establish successful growth programmes as well as secure a more coherent and streamlined public structure for entrepreneurs.

Entrepreneurship Policy

In Finland, entrepreneurship policy has been on the political agenda for a minimum of ten years. There has been a focus on entrepreneurship in public sector programmes of

Entrepreneurship Performance

Finland has a solid entrepreneurship performance on both start-up activity and firm growth. In the Nordic region, Finland is only surpassed by Denmark in both areas. This

corresponds well with a high strategic focus on entrepreneurship policy over the last decade. However, as stated earlier Finland lacks the ability to upscale firms.

Framework Conditions for Entrepreneurship

Finland provides the best overall entrepreneurship framework conditions in the Nordic region as measured by the number of top 3-rankings. Moreover, Finland ranks 8th among all OECD countries (which corresponds to number four in Europe).

Strengths

Finnish performance both in terms of *access to venture capital* and *access to debt finance* is very solid (cf. Figure 23). The government has been very proactive in initiating a range of policies to support risk capital on both the supply and demand side (see Box 9 regarding the venture capital market). They have also been very diligent in the evaluation and adjustment of these policies over time. The access to finance for young innovative companies in Finland has improved significantly over the last decade (see Box 9).

Finland is among the best countries for entrepreneurial capabilities. This measure includes access to *entrepreneurship education* – where the Finnish government’s work on ensuring entrepreneurship education at universities,

Box 9: Developing venture capital in Finland

Starting in the 1980’s, when Sitra was created, there was a focus on developing the venture industry. Later there was a focus on public co-investment through the development of various programmes. Most recently, those programmes have been consolidated and an additional focus is being put on tax and regulatory changes and cross-border schemes. It is widely acknowledged that these policies have filled critical gaps at different points in time, however as has been the case in many countries, they have not yet been a catalyst for engaging the private sector (business angels, venture capital firms, pension funds). New policies are being put in place to address this issue.

In 2000, a new law was established which resulted in FII (Finnish Industry Investment) – putting more emphasis on early stage financing, and taking a regional focus. The regional funds were later privatized. In 2004, Finland launched the Seed Finance Programme. In the same year, Avera was founded by Finnvera as direct seed investor and Sitra began to reduce its venture activities.

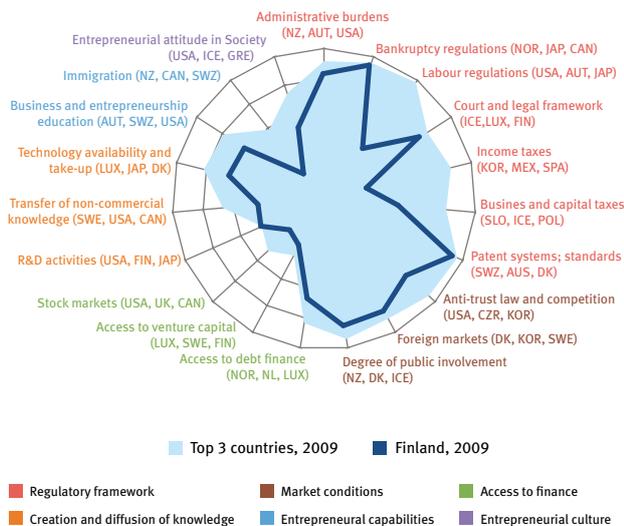
Source: The Ministry of Employment and the Economy

Table 4: Finland’s position in the Nordic region

	Performance		Framework conditions					
	Start-up	Growth	Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneurial capabilities	Entrepreneurial culture
Position	2	2	3	2	4	3	2	2

Source: FORA, 2010.

Figure 24: Entrepreneurship framework conditions – Finland



Source: FORA, 2010

Note:

The figure shows the composite index values for Finland relative to the average of the top three performing countries for each of the 19 policy areas. The top three performing countries for each policy area are shown in brackets and illustrated by the shaded area. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

polytechnics and secondary schools over the last five years is reflected.

In general, Finland has a long history within entrepreneurship education, and the present form is considered to have started in the mid-1990s.²⁸ A new Universities Act in Finland will extend the autonomy of universities by giving them an independent legal personality under private law. Two of several objectives are to make universities more capable of ensuring quality and effectiveness of research and teaching, and to strengthen universities role within the innovation system.²⁹ This is also likely to affect entrepreneurship education in a positive way.

The Finnish government has also worked intensively with developing entrepreneurial capabilities through entrepreneurship infrastructure with both public and private service providers (see Box 11).

Challenges

Although Finland performs well in terms of some of the policy areas related to the regulatory framework, i.e. *court and legal framework* and *bankruptcy regulation*, *labour market regulation* is still quite rigid compared to, for instance, Denmark. Finland ranks among the lowest in terms of a flexible labour market.

Finlands performance is also modest with regards to *immigration-related* policies, which is the main reason for

Box 10: Funding young innovative companies in Finland

In 2007, the Finnish Funding Agency for Technology and Innovation (Tekes) carried out a major revamp of its funding products to better meet enterprises' growing development needs. One of the new products – introduced in early 2008 – is the funding programme for young innovative companies.

The purpose of this programme is to increase the number of enterprises willing to grow fast and get international. Criteria for eligibility of funding are – among others – that the enterprise must have a business idea, be ambitious and have potential for growth in global markets. Moreover, a willingness to search and accept new owners and investors is also a prerequisite.

The maximum possible aid amounts to one million EUR (1.25 million EUR in areas eligible for regional aid). The enterprise must be less than six years old at the time of granting, and must have fewer than 50 employees. In addition, turnover must be less than 10 million EUR, and total assets cannot exceed 10 million EUR. And finally, R&D expenses must represent at least 15 percent of total operating expenses.

Source: Tekes

not being among the very best in the OECD when it comes to entrepreneurial capabilities. In particular, Finland is in the lower half of all countries on immigrants with high education, and the share of foreign labour is not high compared to other OECD countries.

As the other Nordic countries, Finland performs rather modestly in terms of *entrepreneurial culture*. Finland is lagging behind the leading countries regarding the image of entrepreneurs in public. However, policy efforts to boost Finnish entrepreneurial culture (through entrepreneurship education) might have had a positive impact in recent years on some of the indicators related to entrepreneurial culture (see the next section).

Framework conditions – Comparison over Time

Finland has improved its conditions with respect to *entrepreneurial culture*, in particular. Overall, Finland has advanced from 23rd to 11th among OECD countries on entrepreneurial attitude in the society. Entrepreneurship among managers has increased, and the desire to become an entrepreneur in Finland seems to have improved over the last 5 years.

As with most of the other Nordic countries, Finland has improved markedly on *technology availability and take-up* over the years. In particular, Finland has improved on the indicator measuring turnover from e-commerce and on the percentage of enterprises using eGovernment. Regarding

28) Ministry of Education, 2009.

29) For more information see Ministry of Education and Culture, <http://www.minedu.fi/OPM/>.

Box 11: Finnish entrepreneurship infrastructure

Public-private collaboration is the main driver of entrepreneurship policy in Finland. The provision of entrepreneurship services is structured regionally and locally, and involves 16.000 people in total. Most services are targeted towards growth firms.

Nationally, there is a “one-stop-shop”, which, among other things, provides firms with general information and some funding. In addition, an accelerator programme is organised nationally (VIGO). Regionally, a number of centres (Centres for Economic Development, Transport and the Environment) are created to provide firms with more hands-on services provided by both public and private service providers. Locally, the municipalities provide very different kinds of business services, primarily for start-ups. The service is dependent on the historical tradition for public service in the municipalities.

The Finnish infrastructure is quite extensive. A major project to coordinate the enterprise service system as a whole is called EnterpriseFinland (YritysSuomi). EnterpriseFinland is a service brand, under which different certified service providers agree to offer coordinated services regionally and locally in one-stop-shops, which are supported by the national EnterpriseFinland-portal and tele-information service. An evaluation of the services has been initiated by the Government in order to see if the organisation could be improved.

Source: The Ministry of Employment and the Economy

Box 12: Tapping into “golden entrepreneurs”

One-third of the Finnish population is 55 years old or older. In terms of entrepreneurship, Finland is facing a challenge with transferring business from a large and growing elderly generation to younger entrepreneurs through succession programmes introduced by the Finnish government and other actors.

On the other hand, by applying inclusive policy measures, it is also possible to include the older generation and encourage them to become entrepreneurs and thereby strengthen the entrepreneurial culture.

Source: The Ministry of Employment and the Economy

the latter, Finland is second to none in Europe. This is not surprising since Finland is known as having a high readiness for using new ICT technologies and e-services. This is also reflected in Finnish information society policies focusing on providing high-quality services to citizens and enterprises.³⁰

30) However, more recent data shows that Finland is beginning to lose ground compared to other countries. See OECD, 2010.

Box 13: Institutional setting

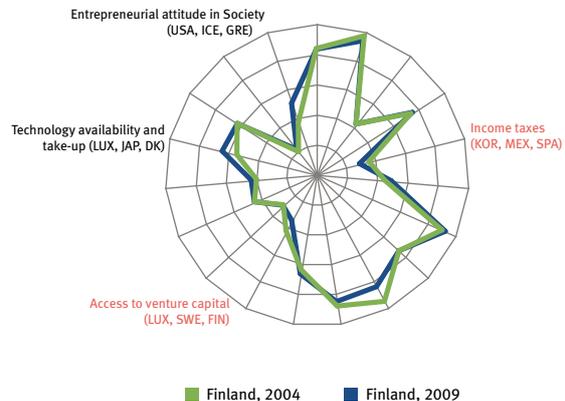
The Finnish entrepreneurship policy is mostly organized by the Ministry of Employment and the Economy, which was re-organised in 2009. The ministry is organized around four specialized departments and ten units operating across the ministry.

The departments are: 1) Employment and Entrepreneurship 2) Labour and Trade 3) Innovation 4) Energy. Entrepreneurship is a general issue and is on the agenda in all departments. The units have various roles, for instance: a Corporate Steering unit is the coordinative steering of the various policy areas in order to achieve strategic objectives set by the Government, while a Regional Development unit is in charge of regional development strategies, structural fund policy etc. The organisational structure of the ministry increases the possibility of combining entrepreneurship policy with other policy areas, i.e. the labour market and or/innovation.

The new ministry sets up the general policy targets for the Finnish entrepreneurial policy and aims at improving the general framework conditions for entrepreneurs, such as providing financing for new start-ups and growth firms.

Source: The Ministry of Employment and the Economy

Figure 25: Improvements in framework conditions 2004-2009



Source: FORA, 2010

Note:

The figure shows the composite index values in 2004 and 2009 for Finland, highlighting the policy areas with significant progress or decline.

The highest marginal income tax (including social contributions) has increased from 2006 to 2007, resulting in a decline with respect to the overall *income taxes* index (cf. Figure 25). Like almost all other OECD countries, the Finnish enterprises' perception of the availability of venture capital has decreased in the wake of the financial crisis, resulting in a lower venture capital index score. Still, Finland is among the front-runners in terms of venture capital.

Entrepreneurship in Iceland

Highlights

Entrepreneurship Strengths

- Highest rank on regulatory framework in the Nordic region
- Strongest entrepreneurial culture among the Nordic Countries
- Good conditions for creation and diffusion of knowledge

Entrepreneurship Challenges

- Low rank on entrepreneurship start-up and growth compared to other Nordic countries
- Lowest Nordic ranking on market conditions and access to finance
- Lack of internationally-comparable entrepreneurship data

Recommendations

- Create a national growth programme
- Make better use of entrepreneurship framework conditions in creating high start-up activity and growth
- Continue to collect internationally harmonised data related to entrepreneurship

Entrepreneurship Policy

Innovation has been a policy focus area for some years in Iceland. Today, entrepreneurship is gaining increasing political focus, especially since the crisis in 2008. Thus, the economic crisis has changed the environment for entrepreneurship. Before the crisis, many of the talented graduates found employment in the banking sector, and most of the risk capital went into the financial system – with excessive returns.

The Innovation, Science and Technology Council has just launched a new strategy in which entrepreneurship has become a separate area to address. Still, no formal, clear measurable policy targets for entrepreneurship performance have been set by the government. Moreover, a comprehensive policy framework is lacking. Thus, in light of the crisis a national growth programme for enterprises could be proposed.

Whereas policies for science and technology are largely in place, there is still a gap in the support system for entrepreneurship. Much of the entrepreneurship policy development has been used in a regional and rural development perspective, resulting in only little policy focus in the Reykjavik area.

Entrepreneurship Performance

For the first time, preliminary data on Icelandic start-up and growth rates has been developed by Rannis, the Icelandic Centre for Research.³¹ Iceland has a considerably lower start-up rate than the rest of the Nordic countries. Iceland is ranked 5th in the Nordic region on start-ups and

31) The data was calculated and provided by Þorvaldur Finnbjörnsson at Rannis for this study.

4th on growth performance. This is in stark contrast to the framework conditions provided for entrepreneurship which are top-class.

Entrepreneurship Framework Conditions

Iceland is ranked 2nd in the overall entrepreneurship index among all OECD countries. Iceland holds the strongest Nordic position in three out of six policy areas including regulatory framework, entrepreneurial capabilities and entrepreneurial culture. However, lack of data in the area entrepreneurial capabilities hampers a true comparison with the other countries.

Strengths

On regulatory framework, Iceland is strong in policy areas related to start-ups; for instance, the country has few *administrative burdens* and a low *business tax*. In 2009, it only took 5 days to start a new business in Iceland, and it was relatively cheap. The possibility for starting a new business after a bankruptcy is also favourable towards entrepreneurs in Iceland. The *bankruptcy* recovery rate is high, and time and cost to close a business is low.

Currently, the policy focus is on continuously improving the framework conditions for starting a new business. For example, eight new incubators have been established by the Innovation Center Iceland in the last year. Moreover, new policy initiatives include tax incentives for investment in start-up companies and the launch of “Seed Forum Iceland”.

The *entrepreneurial culture* in the Icelandic society is strong. The desirability of becoming self-employed is high, and the image of entrepreneurs is the best among the Nordic countries. The attitude towards risk is also positive. All in all, the entrepreneurial culture is promising for future growth, with the other Nordic countries trailing in this area.

Iceland also performs strongly regarding creation and diffusion of knowledge, thus only trailing Sweden and the USA among OECD countries. Iceland has, for some years, been among the world’s best on *R&D investments* as a percentage of GDP (cf. Figure 26). The impact of the present crisis is yet to be reflected in the data, as the available indicators are from 2008. There seems to be awareness among policymakers that R&D funding should continue despite the economic crisis if possible. The coming years will show how much the level of R&D investments will decrease as a consequence of the crisis.

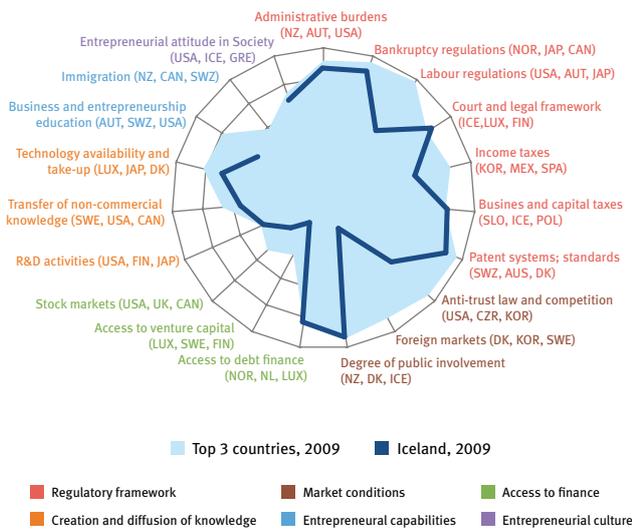
Table 5: Iceland’s position in the Nordic region

	Performance		Framework conditions					
	Start-up	Growth	Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneurial capabilities	Entrepreneurial culture
Position	5	4	1	5	5	2	1*	1

Source: FORA, 2010

*The index value is solely based on business and entrepreneurship indicators since there are no data describing immigration for Iceland. Thus, the ranking must be interpreted with care.

Figure 26: Entrepreneurship framework conditions – Iceland



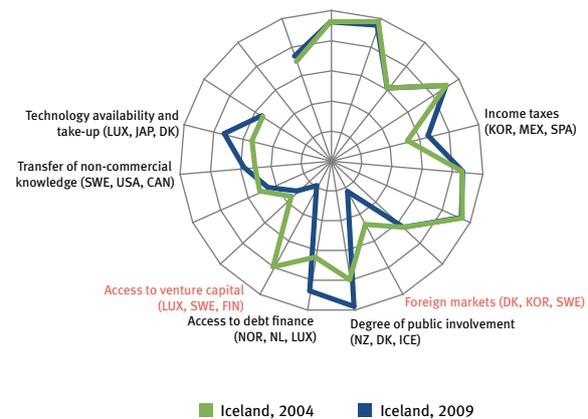
Source: FORA, 2010

Note:

The figure shows the composite index values for Iceland relative to the average of the top three performing countries for each of the 19 policy areas. The top three performing countries for each policy area are shown in brackets and illustrated by the shaded area. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Data is missing for Iceland in the area of Immigration.

Figure 27: Improvements in framework conditions 2004-2009



Source: FORA, 2010

Note:

The figure shows the composite index values in 2004 and 2009 for Iceland, highlighting the policy areas with significant progress or decline.

Challenges

Iceland ranks lowest in the Nordic region when it comes to market conditions and access to finance. And in the area of access to *foreign markets*, Iceland ranks 27th in the OECD. Iceland is not a member of the EU³², thus affecting comparisons with other EU member countries. In *access to finance*, Iceland is ranked modestly both when it comes to *access to venture capital* and *stock markets*. A further worsening of the whole access to finance area might be expected as a consequence of the financial crisis and the subsequent affect on all the included indicators.

For instance, expert's assessment of how easily entrepreneurs with an innovative – but risky project – can find venture capital has decreased somewhat from 2007 to 2009, which is not surprising in light of the financial crisis in Iceland. The same expert assessment also indicates that the ease of obtaining a bank loan with only a business plan and no collateral has also decreased sharply in 2009.

Framework conditions – Comparison over Time

Iceland has improved the level of creation and diffusion of knowledge in recent years, both with respect to *technology availability and take-up* and *transfer of non-commercial*

knowledge. Regarding the former, progress is due to a marked improvement in total internet sales from 2003 to 2006 (which is the latest year available). The proportion of research in the higher education sector that is financed by business sector has increased until 2008, which – along with increased collaboration between universities and the business world – has contributed to an improvement in transfer of non-commercial knowledge. This is in line with the government's early focus on science and technology.

Iceland has lowered the *income taxes* in the period 2003–2008, thus resulting in a progress from 18th to 7th place among OECD countries. Iceland is the only Nordic country experiencing a significant lowering of income taxes in the aforementioned period.

The indicators for the *degree of public involvement* in the economy describes the development from 2002–2007. Iceland has most likely seen a sharp decrease in this area with the nationalisation of major Icelandic banks in 2008. This has to be kept in mind when interpreting the Icelandic progress over the years (cf. Figure 27). Moreover, the recorded progress in the area of *access to debt finance* is more or less a picture of the development up to the financial crisis.

32) Iceland has begun the application process regarding a possible membership to the EU.



Icelandic enterprises' perception of the availability of venture capital has decreased dramatically as a result of the financial crisis (cf. Figure 27). The policy area *openness towards foreign market* describes the development from 2007 up until 2010. Although Iceland has not been very open towards trade compared to its Nordic counterparts, the situation has further deteriorated in 2009–2010, due to higher export and import costs. Furthermore, it now takes 19 days to export goods compared to 15 days just a few years ago.³³

Box 14: Institutional setting

In Iceland, the Ministry of Industry has the overall responsibility for developing entrepreneurship policies. Since 2007, the key governmental body when it comes to implementing entrepreneurship policy is Innovation Center Iceland. This organisation also plays an important role in policy development. In addition, the Science and Technology Council and the Icelandic Research Centre (RANNÍS) are also involved in entrepreneurship policy development at varying levels and to varying extents.

Innovation Center Iceland was created in 2007 and is the result of the merger between the Technological Institute of Iceland (IceTec) and the Icelandic Building Research Institute (IBRI). Innovation Centre Iceland operates under the Ministry of Industry and receives revenue from both the public and private sectors.

The Service Centre for Entrepreneurs and SMEs (IMPRA) at Innovation Centre Iceland assists inventors and entrepreneurs in evaluating business ideas and provides counselling on start-up, growth and management of SMEs. The department offers workshops and courses for SMEs and the general public. Moreover, popular support programmes for women entrepreneurs are also offered.

Source: Innovation Center Iceland

33) World Bank, 2010.

Entrepreneurship in Norway

Highlights

Entrepreneurship Strengths

- Best-performing country on bankruptcy regulation
- Best-performing country on access to finance
- Low export and import burdens

Entrepreneurship Challenges

- Low entrepreneurship performance both on start-up and growth
- A rigid labour market regulation
- Ensuring a strong entrepreneurial culture

Recommendations

- Focus more on entrepreneurship policy
- Make labour market regulation more conducive for firm growth
- Continue focusing on improving entrepreneurial culture

Entrepreneurship Policy

In Norway, entrepreneurship is gaining increasing awareness and political focus. In 2004, the government introduced a cross-ministerial effort to boost a culture of entrepreneurship. At that time, Norway was one of the first countries to present a national strategy for entrepreneurship in education and training. However, entrepreneurship could be developed as a stronger platform and used much more strategically by the Norwegian government in order to enhance innovation, welfare and economic growth.

Historically, Norway has not been a nation of entrepreneurs and self-employed people. The country has relied heavily on access to natural resources and benefitted economically from this. As a result, entrepreneurship has not been a political necessity. Moreover, Norwegian wages are high, and entrepreneurship has only played a minor role as an alternative source of income during the economic strong periods. Norwegians simply prefer to be employed rather than starting up their own businesses. This is also reflected in lower start-up rates compared to the other Nordic countries.

But times are changing. In 2008, the Government introduced a new national innovation strategy. This new innovation strategy highlights entrepreneurship as one key element – among others – that could be used to enhance innovation in Norway.

However, there is a lack of political objectives for entrepreneurship. Whereas there are measurable policy targets for women entrepreneurs and for entrepreneurship education, there are no such measurable policy targets for start-ups let alone growth firms in Norway.

Although there might not be an “optimal” level of entrepreneurship fitting all countries and setting targets alone is not sufficient, the missing policy objective for start-ups and/or growth firms in Norway still indicates that entrepreneurship could be higher on the political agenda.

Entrepreneurship Performance

Norway ranks low in overall start-up activity when comparing with the other Nordic countries. Moreover, Norway faces a challenge in growing enterprises. This follows the framework conditions Norway provides for entrepreneurs and entrepreneurial activity in general.

Entrepreneurship Framework Conditions

In the overall entrepreneurship framework index comparing OECD countries, Norway is ranked 14th. This corresponds to the lowest ranking among the Nordic countries.

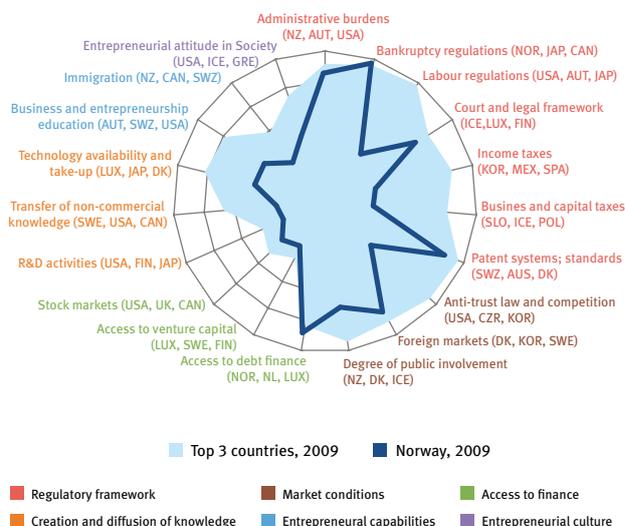
Strengths

Compared to the Nordic countries, Norway provides the best conditions for *access to finance*. Norway has had focus on access to debt finance and access to venture capital. For instance, compared to other countries it is fairly easy to obtain a bank loan in Norway without collateral, and the venture market is well-developed with a good set of players and a functioning ecosystem.

Currently, Norway is building a niche for its expertise in an emerging critical venture capital sector – energy. From 2001–2003, following the dot.com boom, the venture capital market was depressed, but then turned positive. The Norwegian government has been active in fuelling the venture capital market. First in 2001, a public fund was established. Again in 2008, a new large public fund was introduced with a size of 2.2 billion NKR. The new public fund focuses on environment, energy and maritime firms.

Although the overall *regulatory framework* is weak in a Nordic context, Norway is still performing very well in some of the regulatory sub-policy areas. For instance, Norway is the leading country on bankruptcy regulation (cf. Figure 28).

Figure 28: Entrepreneurship framework conditions – Norway



Source: FORA, 2010.

Note:

The figure shows the composite index values for Norway relative to the average of the top three performing countries for each of the 19 policy areas. The top three performing countries for each policy area are shown in brackets and illustrated by the shaded area. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

Table 6: Norway's position in the Nordic region

	Performance		Framework conditions					
	Start-up	Growth	Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneurial capabilities	Entrepreneurial culture
Position	4	5	4	4	1	5	3	4

Source: FORA, 2010.

Norway also performs well on access to foreign markets – an area – which is important for start-up activity.

Challenges

Overall, Norway lags on most of the entrepreneurship framework conditions compared with the other Nordic countries. This is probably a result of only limited policy focus on entrepreneurship in the past.

In particular, Norway faces some challenges concerning labour market regulation. Norway has recently made it more difficult to employ short-term staff, thus negatively affecting the whole policy area of labour market regulation. This could have a negative impact on the realisation of growth in smaller firms, as the use of short-term staff is less flexible.

Moreover, Norway seems to have a relatively weak entrepreneurial attitude in society. For instance, Norway performs rather modestly on the desire to become an entrepreneur, and the image of entrepreneurs is lacking.

Since 2004, the Norwegian government has been concerned about creating an entrepreneurial culture through entrepreneurship education. The government launched a national action plan for entrepreneurship education and training. The objective of the plan was to strengthen the quality and scope of entrepreneurship and training at all levels and areas of the education system. Internationally, Norway shall be a leading force when it comes to education

and training in entrepreneurship. As a response to the low performance on growth entrepreneurship, the Norwegian government has introduced a new training programme for potential growth entrepreneurs (cf. Box 15).

Framework conditions – Comparison over time

Although still facing a challenge in improving conditions conducive to start-up and growth activities, Norway has improved its position in some policy areas. In particular, the business executives in Norway assess that the *patent system* has improved over the last 5 years. Moreover, *access to debt finance* has also improved, resulting in retention of the top-position in this area.³⁴

Norway has also improved its conditions with regards to *creation and diffusion of knowledge*, in particular *transfer of non-commercial knowledge* and *technology availability and take-up* (cf. Figure 29). However, most other countries have also improved, thus not leading to a Norwegian progress in ranking.

As mentioned, Norway performs rather modestly in overall *entrepreneurial culture*. However, entrepreneurship among managers has increased markedly over the last five years – leading to advancement from 26th to 15th in ranking – thereby having a positive effect on the policy area *entrepreneurial attitude in society*.

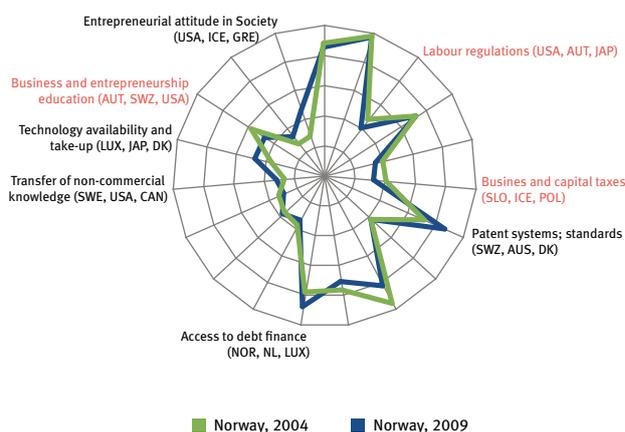
Box 15: Global Entrepreneurship Training Programme (GET)

The lack of growth in enterprises has been met with a recent change in strategy in Innovation Norway's work – Norway's main organisation working with addressing the constraints within entrepreneurship in Norway – thus intensifying its focus on growth firms and in particular growth entrepreneurs.

From 2010, a new programme "Global Entrepreneurship Training" is aimed at entrepreneurs – and executives of Norwegian start-up companies – with international growth potential who want to develop their skills to succeed globally. The core of the programme is a five-day executive course at Babson College in Boston followed by field work of one week or longer, at any Innovation Norway incubator office in the Americas. Babson College is the number one USA teaching institution on the subject of entrepreneurship. The following industries are in particular encouraged to apply: ICT, medical technology, oil & gas, and clean technology.

Source: Innovation Norway

Figure 29: Improvements in framework conditions 2004-2009



Source: FORA, 2010.

Note: The figure shows the composite index values in 2004 and 2009 for Norway, highlighting the policy areas with significant progress or decline.

34) This is due to a marked improvement in the indicator measuring how easy it is to obtain a bank loan without collateral (from 9th to 3rd).

Norway has influenced its population to become more entrepreneurial by influencing the culture. The Norwegian government has worked intensively to strengthen the Norwegian entrepreneurial culture in order to indirectly make it more attractive to become self-employed. The government has also influenced the culture through policies targeting women entrepreneurs. In 2008, the government launched a national action plan for women entrepreneurs. In total, twelve new policy instruments were introduced – among others a scheme offering 100 percent financial coverage of maternity leave for women entrepreneurs.

Therefore, there is a substantial hope that the entrepreneurial culture will continue to improve.

The challenge faced in the area of *labour market regulation* is also apparent when looking at the development from 2004 to 2009, where Norway's position has worsened (cf. Figure 29). Moreover, a positive effect of the government focus in the policy area *business and entrepreneurship* education still remains to be seen. More specifically, Norway's position has deteriorated with regards to attracting foreign students to the country, and the business executives value the quality of the management schools lower in 2009 compared to 2004.

The decrease in the index describing *business and capital taxes* is due to a high taxation of corporate income revenue (as a percentage of GDP) that has increased from 2002 to 2007, which is the latest available year for international comparison.

Box 16: Institutional setting

The Norwegian entrepreneurship policy is centrally organized in three ministries: the Ministry of Trade and Industry, the Ministry of Education and Research and the Ministry of Local Government and Regional development. Three major agencies support entrepreneurship and innovation policies: Innovation Norway, the Industrial Development Corporation (SIVA) and the Research Council of Norway (RCN). Supporting sub-units carry out business development and innovation at regional level.

Innovation Norway's main purpose is to promote business development and increase competitiveness throughout districts and regions. Services include financing, linking to know-how and support in creating networks. SIVA is in charge of improving the national infrastructure in terms of innovative activities through increased networking, promotion of clusters and a broad range of business services. RCN promotes research-related activities and acts as a contact point and administrator of programmes involving industry, R&D institutions and universities.

Source: OECD, *Fostering Entrepreneurship for Innovation*, 2008



Entrepreneurship in Sweden

Highlights

Entrepreneurship Strengths

- Excellent conditions for knowledge creation and diffusion could have positive spill-over effects on entrepreneurs
- Strong focus on starting up new businesses by having low administrative burdens, good market conditions and access to finance
- Access to venture capital is among the best

Entrepreneurship Challenges

- Low ranking on bankruptcy and labour market regulation
- Improved attraction of foreign workers to the country
- Ensuring a strong entrepreneurial culture

Recommendations

- Improve bankruptcy regulations, i.e. in terms of counselling and restart possibilities
- Make labour market regulation more conducive for firm growth
- Consider adopting clear, measurable targets for start-up and growth activity

Entrepreneurship Policy

In Sweden, there is currently a general shift in policy formulation from traditional SME policy towards more entrepreneurship-oriented policymaking. Entrepreneurship policy is developed within the Ministry of Enterprise, Energy and Communication. The ambition is to make it easier and rewarding to run businesses by creating a world-class business environment in Sweden.³⁵

In 2009, a number of new initiatives were taken to strengthen the incentives to start, run and develop a business, by increasing social security for entrepreneurs as one focus area. By 2010, the government had introduced 172 new or ongoing policy initiatives to improve the business climate. Entrepreneurship services are widely provided throughout the country (cf. Box 16).

The ambition to strengthen Sweden's entrepreneurship performance is not translated into a specific target for start-up and growth used to measure if the overall entrepreneurship policy has been successful. The ministry has set out specific programmes; these include initiatives to improve entrepreneurship in the health care sector. Programmes targeting entrepreneurs in the creative industries have also been in focus.

Entrepreneurship Performance

Sweden is ranked 3rd among the Nordic countries when it comes to start-up activity and enterprise growth. Although surpassing Iceland and Norway on entrepreneurship performance, Sweden still lags behind Finland and Denmark both when it comes to start-up and growing of enterprises. The share of start-ups – as measured by new entries – has

35) The Ministry of Enterprise, Energy and Communication, 2010.

been stagnating around a level of 6 to 7 percent over the last 5 years.

Framework Conditions for Entrepreneurship

Sweden is ranked 11th in the overall entrepreneurship framework index (OECD) and 4th in the Nordic region, only surpassing Norway.

Strengths

Sweden's strongest position on the entrepreneurship framework conditions is in three policy areas: creation and diffusion of knowledge, market conditions and access to finance.

As regards *creation and diffusion of knowledge*, Sweden is strong in all the related sub-policy areas including a top-rank in transfer of non-commercial knowledge. Sweden is very competitive when it comes to collaboration among universities and industry, and also in research financed by the business sector. Moreover, Sweden is only surpassed by three countries regarding R&D activity, thereby reflecting a traditionally strong focus in this area. In particular, Sweden is very strong when it comes to the large enterprises' expenditure in R&D. For instance, among 16 OECD countries Sweden ranks 1st – along with Korea – with re-

Box 17: Swedish Entrepreneurship Infrastructure

The overall entrepreneurship infrastructure in Sweden is organized on a regional basis across 21 regions. The regions have a lot of funds available and influence the policy measures taken in each region. A large share of the EU structural funds is made available to improve entrepreneurship and innovation at the regional level.

The regional provision of entrepreneurship services makes it possible to provide locally- adapted services developed closely to the end-user. However, there is a risk that services will differ largely across regions and – perhaps – lack complementarities between regional and national programmes. It has been pointed out by the OECD that there is only little or no regional policy objective in the national Swedish entrepreneurship formulation which results in large differences between national and regional entrepreneurship programmes.

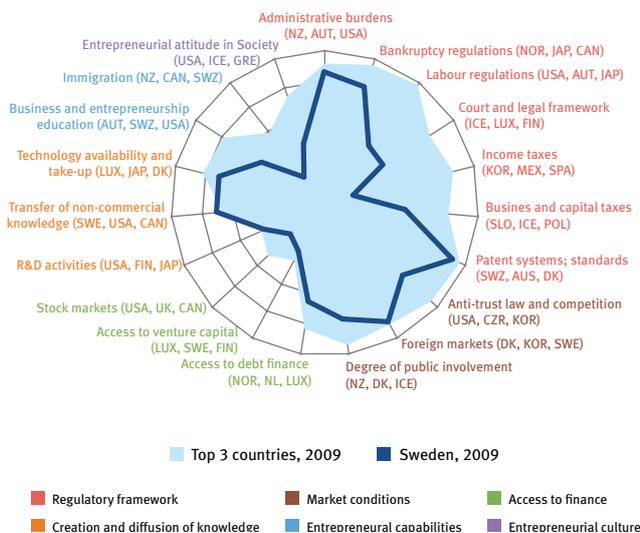
Source: The Ministry of Enterprises, Energy and Communication and OECD, Territorial Reviews Sweden, 2010

Table 7: Sweden's position in the Nordic region

	Performance		Framework conditions					
	Start-up	Growth	Regulatory framework	Market conditions	Access to finance	Knowledge creation and diffusion	Entrepreneurial capabilities	Entrepreneurial culture
Position	3	3	5	3	2	1	4	5

Source: FORA, 2010.

Figure 30: Entrepreneurship framework conditions – Sweden



Source: FORA, 2010.

Note:

The figure shows the composite index values for Sweden relative to the average of the top three performing countries for each of the 19 policy areas. The top three performing countries for each policy area are shown in brackets and illustrated by the shaded area. The closer to the highest possible maximum index value (=100) the better. A score of 100 in the composite index requires an absolute top-performance on each sub-indicator.

gards to large (500+ employees) enterprises' expenditure in R&D as a percentage of GDP. Sweden is also in the top-3 as concerns SME's expenditure in R&D.³⁶

The framework conditions for *market conditions* and *access to finance* is also world-class, with Sweden in the top-5 and top-6 in the OECD (3rd and 2nd in the Nordic region) respectively. Like most of the other Nordic countries, Sweden is open towards foreign markets as measured by export and import burdens, thus contributing to good market conditions. The solid performance in access to finance is primarily based on access to venture capital, where Sweden is among the top-3 countries (cf. Figure 30). In access to early stage venture capital Sweden is second to none. Securing access to venture capital is a high priority for the Swedish government.

Challenges

Sweden performs rather modestly in the overall regulatory framework area (ranked 21st) and ranks lowest among the Nordic countries although it performs well in the areas of *administrative burdens* and *patent system standards*. The policy area of *bankruptcy regulation* (ranked 23rd) and *labour market regulation* (ranked 19th) could benefit from further policy development.

The Swedish government is currently paying attention to this. For instance, concerning the environment for entrepreneurs' opportunities to get a second chance after a bankruptcy, the Swedish government is in the process of preparing legislative changes. As such, a Government bill on enterprise insolvencies provides proposals that aim at improving indebted entrepreneurs possibilities to receive debt restructuring.³⁷ If implemented, this initiative will improve Swedish performance on bankruptcy regulation.

Labour market regulation is more rigid in Sweden compared to other Nordic countries. For instance, a "last in, first out" rule when firing employees hampers flexibility in the labour market.³⁸ Furthermore, a policy initiative in 2007–2008 leading to a decrease in the maximum duration of a fixed-term contract from 36 to 24 months made it more difficult to hire new workers.³⁹ However, the government has recently introduced the possibility for employers to hire staff for up to 24 months without further obligations.

Moreover, compared with the other Nordic countries, Sweden ranks lowest in terms of entrepreneurial culture (ranked 21st in OECD). The challenge seems to be the attitude towards entrepreneurship and that Swedes in general do not have the desire to become entrepreneurs. However, the indicators are from 2007⁴⁰ and – as such – the ranking must be interpreted with care.

There are some indications that Swedish entrepreneurial interest exists and is improving. For instance, according to national surveys, the desire to become self-employed has increased among young people in recent years, thus reflecting a possible change in attitude towards starting one's own business.⁴¹ Moreover, today it is common to combine employment and self-employment. Thus, just over 50 percent of all start-ups are started by persons already engaged in full-time employment.⁴²

In addition, a governmental programme for women entrepreneurs is seen as a long-term activity to strengthen the Swedish entrepreneurial culture (see Box 17). Another example is that it is becoming more common that municipalities or regions are outsourcing health care services to businesses. This opening of the welfare sector in Sweden is seen as a possibility for women entrepreneurs who have experience from the public sector health care system.

The modest performance in entrepreneurial capabilities has its background in business and entrepreneurship education (ranked 15th) and immigration (ranked 19th). Business executives' perception of the quality of management schools is modest and like Denmark and Finland, there is a challenge in attracting foreign workers to the country. Sweden has a specific programme for immigrant entrepreneurs in order to advise businesses run by immigrants to develop and grow in Sweden.

36) Eurostat, Statistics on Research and Development, 2007 data.

37) Statens Offentliga Utredningar, 2008.

38) This is especially the case for firms with 10 or more employees. Micro firms (less than 10 employees) have a greater freedom in choosing which personnel to let go.

39) World Bank, 2010.

40) Flash Eurobarometer, 2007.

41) SBA, Fact Sheet Sweden, 2010, Ministry of Enterprise, Energy and Communications, 2010

42) Ministry of Enterprise, Energy and Communications, 2010

Box 18: Programme for women entrepreneurs

In order to enhance a Swedish entrepreneurial culture, the government has created a programme to promote women entrepreneurs. The target is to have 40 per cent of all new firms established by women.

The Swedish government has financed the programme with 100 million SEK annually in 2007–2010. The Swedish programme for women entrepreneurs consists of the following parts:

- Regional provision of information, advisory services and business development
- Programmes for transfer of ownership, entrepreneurship among young women and mentorship
- Financing for women entrepreneurs

Role modeling

Besides, the government has created an ambassador network with more than 880 women entrepreneurs working to promote entrepreneurship throughout the Swedish society, for instance at schools, universities and networks.

Source: SBA, Fact Sheet Sweden 2010. The Ministry of Enterprise, Energy and Communications.

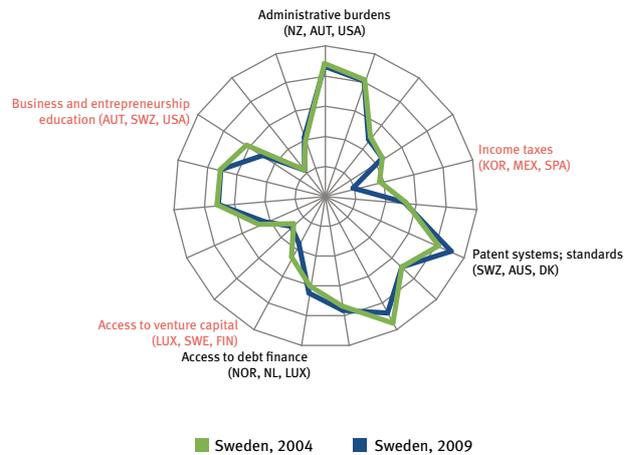
In 2009, the Swedish government introduced a national strategy for entrepreneurship education throughout the educational system.⁴³ The strategy aims at integrating entrepreneurship in all parts of the system and acknowledges the importance of learning from other countries' experience.

Framework conditions – Comparison over Time

Sweden has lost ground with respect to overall framework conditions in the last five years. Nevertheless, some of the conditions which are related to start-up activity have been improved. For instance, *access to debt finance* has increased in Sweden, thus improving the ranking in this area by 2 spots (from 12th to 10th in OECD). The business executives in Sweden also assess that the *patent system* has improved (cf. Figure 31).

Moreover, Sweden is maintaining a solid position on *administrative burdens* which is a high priority area for the Swedish government. The ambition is to cut red tape and improve the services provided to the business community and thereby also entrepreneurs. For instance, a lot of web-based services have been implemented over recent years.

Figure 31: Improvements in framework conditions 2004-2009



Source: FORA, 2010.

Note:

The figure shows the composite index values in 2004 and 2009 for Sweden highlighting the policy areas with significant progress or decline.

In light of this, the Swedish stronghold in this area is likely to be kept or even further improved over the coming years.

Moreover, the government has in recent years focused on the tax base with the purpose of making it more attractive to start a company, i.e. the income tax and social contributions have been lowered significantly in the period 2007–2010.⁴⁴ However, other countries have followed the same pattern, leaving Sweden in the lower third among OECD countries on average *income tax* in 2008, which is the latest available year for international comparison of income taxes.

Like the other Nordic countries, the Swedish enterprises' perception of the availability of *venture capital* has decreased as a result of the financial crisis. Furthermore, Sweden's position on *business and entrepreneurship education* has worsened, which is due to a decline in attracting foreign students to the country. At the same time, business executives value the quality of the management schools lower in 2009 compared to 2004. However, this might change over the coming years as a result of the increasing focus on entrepreneurship education in Sweden.

43) Utbildningsdepartementet and Näringsdepartementet, 2009.

44) Näringsdepartementet, 2010.

Box 19: Institutional setting

The Swedish entrepreneurship policy is centrally organized by the Ministry of Enterprise, Energy and Communications. The Ministry works to improve the general framework for entrepreneurs in areas such as labor market regulation and insolvency law, together with other Swedish ministries. In addition, the Ministry manages a number of national programmes and funds and gives guidelines to a number of agencies that carry out programmes directed at the entrepreneurs.

The most important agencies in this respect are Vinnova, which is responsible for innovation policy; Tillväxtverket, which carries out more policies targeted at start-ups and development of firms; and Tillväxtanalys, which carry out analysis and evaluations of the policy programmes. National programmes are seen as important, especially in promoting entrepreneurship and growth in new industries. Moreover, the national level works closely together with regional authorities in national programmes and – among others – offers guidance to regional partners.

Source: The Ministry of Enterprises, Energy and Communication



The Nordic Entrepreneurship Infrastructure

Highlights

- All Nordic countries provide basic services for start-up companies.
- Some Nordic countries also provide more specialized services for innovative start-ups with growth ambitions. Such growth programmes are often understood as acceleration programmes.
- There is not a Nordic entrepreneurship ecosystem in place supporting the up-scaling of Nordic firms.
- There is a need for more knowledge about how the Nordic governments could help trigger the development of an entrepreneurship infrastructure and ecosystem for scaling up new companies.
- The role of the public sector is primarily to trigger the development of Nordic entrepreneurship infrastructure and ecosystem, in collaboration with the private sector. The private sector should ideally run the infrastructure it self.

Introduction

In order to understand the Nordic growth challenge, the environment for scaling up new companies in the Nordic countries has been discussed with experts in the area. This part of the Nordic Entrepreneurship Monitor analysis builds on interviews with policymakers, experts and key stakeholders in the Nordic countries, and international experts in some leading entrepreneurship hotspots. It does not include any quantitative data, as there is no international comparable data or indicators available for quantifying entrepreneurship infrastructures.

One of the most famous hotspots for scaling up new companies is Silicon Valley which originates in the 1970s. Israel is a more recent example of a region that has managed to create a well-functioning environment for scaling up new companies. These successful regions might give some inspiration on how the Nordic countries could help trigger the development of a similar environment for scaling up new companies.

Lessons from Silicon Valley

Silicon Valley is one of the world's leading entrepreneurial regions. The region has a high number of world-class serial entrepreneurs, professionals with experience in scaling up new companies, and a top-performing venture capital industry. The area also forms an entrepreneurship hub for business development where the start-up companies exist in the right culture, have access to the right networks, and interact with the right people to successfully scale up new companies. This environment surrounding the new companies is often referred to as the *entrepreneurship ecosystem* or also as *entrepreneurship infrastructure*.

The universities in the region (Berkeley, Stanford and the University of California) originally played an important role in developing the ecosystem. The universities have a high number of students trained in entrepreneurship; numerous alumni associations where students, professors, venture capitalists and potential entrepreneurs meet; a high number of awareness raising activities; and even student-run venture capital companies.

The universities have dedicated centers for research in entrepreneurship that act as flagships in developing and coordinating entrepreneurship activities. Often the centers help spark new industries by connecting stakeholders and attracting people with knowhow from other regions, and they act as a facilitator of regional networks between researchers, the business community and policymakers. The

centers are responsible for entrepreneurship education and research, and they also play a key role in facilitating knowledge sharing, supporting new initiatives, and developing the entrepreneurial culture.

Over time, the understanding of the growth process in new companies has developed into a shared thinking about scaling up new companies among the various actors in Silicon Valley. There is an open culture for sharing new ideas and business opportunities, and the formal and informal networks between universities, entrepreneurs, venture capitalists, established companies and service providers are strong. The networks are used intensively to connect the right people for the benefit of new companies, and spread knowledge about the process of scaling up new companies.

There is a well-developed infrastructure of service-providers specialized in working with start-ups, who often graduated from universities in the region. Lawyers, accountants and other professionals often work for free in order to get future clients, and the use of warrants, stock options and other forms of performance pay is widely used. It is considered prestigious to work in a start-up company, and some CEO's have specialized in developing start-up companies. There are also a number of world class private incubators specializing in developing start-ups. Recruiting of the right managerial team is a fixed service offered by many incubators.

Being located in an environment with the right thinking about how to scale up new companies is crucial for start-ups in the region. Successful companies in Silicon Valley such as Google, Sales Force and Best Buy have often

managed to commercialize their technology according to the needs of the customers, to attract an experienced sales officer from a large company with the same industry at an early stage, and recruit an experienced CFO at a later stage (who can manage the process of scaling up). Furthermore, the founders often continue to play an important role for maintaining the right culture when the companies grow.⁴⁵

In Silicon Valley there seems to be a clear awareness that the public sector can't run a successful ecosystem. However, the universities and the public sector can help trigger the development of an ecosystem. Israel is an example of how a government has successfully managed to trigger it.

The Israeli success story

Israel is a recent example of a region which has managed to develop an entrepreneurship ecosystem by tapping into the US venture capital market and attracting experienced professionals to help scale up Israeli start-ups.

The result has been that Israel within the last 15 years has managed transform itself into one of the leading entrepreneurial regions outside the USA. Israel has the third largest venture capital market globally, with over 60 active VC funds. Israel also has more than 100 companies listed in NASDAQ, and there are more than 40 strategic R&D centers of major international corporations located in Israel.

The Israeli government has played a key role in establishing the ecosystem. The inflow of talent from the former Soviet Union and high quality research in Israeli universities were other important drivers.

45) FORA, 2008.

The Yozma venture programme sparked the transformation by managing to launch 10 early-stage technology funds with initial funding by the Israeli government. The public money was used to trigger the funds, not to generate profit. Therefore, all commercial investors had an option to buy out the government. The key success factor for the Yozma programme was the ability to attract major commercial players from the USA to participate in the programme. This was achieved by offering considerable profit opportunities, tax benefits and other incentives to some of the American venture capitalists.

After the success of the Yozma programme, the Israelis supported the VC industry with business development activities. The publicly-funded incubator programme was changed in 2003. Up to that point, the programme had been managed by public sector officials who lacked global business experience. The incubator programme was revised, and direct public funding was cut off. Instead the VC industry took over the incubators. Today 23 out of 24 of the incubators are owned and managed by experienced professionals with experience from being a serial (and successful) entrepreneur or a VC. The key persons have direct benefits from the incubator, and in most cases from the companies within the incubator. With the Yozma programme and the change of the public funded incubators, Israel has managed to develop a strong private ecosystem for scaling up new companies.⁴⁶

Entrepreneurship infrastructure in the Nordic region

This section discusses entrepreneurship services available in the Nordic countries today. The discussion does not seek to provide a thorough review of the national and regional institutions, operators and service providers within each of the national entrepreneurship infrastructures. Instead, the objective is to clarify to what extent growth firms' needs are met by service providers within the existing entrepreneurship infrastructures.

In the analysis, the entrepreneurship services provided are grouped into three categories depending on what type of firm they serve. First, basic services for start-ups are discussed, followed by services for firms with initial growth ambitions, and finally global firms with more significant growth potentials.

Basic services

Some new firms have a business model which is mainly aimed at local markets, and the companies mainly serve local customers. These types of firms sometimes need support in relation to certain activities such as firm registration, developing business plans, and marketing activities, and market analysis. Municipalities and regional or national public programmes offer basic entrepreneurship services aimed at helping new firms.

Box 20: Entrepreneurship infrastructure in place for start-ups in the Nordic countries

Denmark

The main institutions for the support and creation of start-ups are the five Regional Business Development Centres (Vaeksthuse). These centres are key actors in a new Danish framework of business services throughout the country.

Finland

In Finland, 15 Centres for Economic Development, Transport and the Environment foster regional development by implementing and developing government entrepreneurship activities in the regions. The Centres operate in close collaboration with the Regional Councils.

Iceland

The Service Centre for Entrepreneurs and SMEs (IMPRA) at Innovation Centre Iceland assists entrepreneurs in evaluating business ideas and provides counselling on start-up, growth and management.

Norway

In Norway, the state has (through the Industrial Development Corporation, SIVA) improved the national infrastructure including the establishment of a large number of business development centres, business gardens and incubators throughout the country. Innovation Norway also provides services for start-ups.

Sweden

The business services infrastructure in Sweden is organized across 21 regions in the country, making it possible to provide locally-adapted services. Thus, the regions have a key role in public-funded business support for start-ups. Almi Företagspartner AB provides businesses with counselling in all regions. There is also Jobs & Society / Nyföretagarcentrum, which is found in most municipalities. Nyföretagarcentrum is a private organisation.

Sources: Interviews with national entrepreneurship policymakers

All of the Nordic countries have developed basic entrepreneurship services aimed at the start-ups (cf. Box 20).

The basic entrepreneurship services are designed and organized according to the culture and institutional setting in each country.

In Sweden for instance, this part of the infrastructure is managed on a regional level, while the Danish Growth houses are established by the national government but are becoming part of municipality services in 2011. In

46) Ruohonen and Oy, 2007.

Iceland, a semi-independent organization – Innovation Center Iceland – is responsible for basic entrepreneurship counseling.

The high start-up rates in the Nordic countries today indicate that the basic entrepreneurship infrastructure for new companies has been sufficiently developed in the Nordic countries. Basic entrepreneurship services are sufficient for start-ups. However, firms with growth ambitions sometimes need additional services.

Firms with initial growth ambitions

The most innovative of the start-ups with a larger growth potential also need more specialized services – for instance on internationalization or access to foreign venture capital. Only a few of the Nordic countries offer more specialized services in publicly-funded growth programmes aimed at new firms with initial growth ambitions (cf. Box 21).

Denmark and Finland offer elite programmes aimed at high-growth entrepreneurs. The programmes are aimed at companies with around 5–10 employees, and the programmes help companies develop a business plan and get their first global customers by providing counseling from experienced experts in enterprise development. Norway has also designed a new growth programme for Norwegian firms (see country chapter for Norway).

Also, a number of different initiatives for supporting internationalization of new companies have been established in the Nordic countries in recent years. Policy initiatives include various “Born Global” programmes and Innovation Centers in global hubs such as Silicon Valley.

This kind of specialized counseling seems to be well-functioning in accelerating the initial growth of the participating start-ups, and could help develop the basic infrastructure in the Nordic countries where they exist.

High-impact firms realizing their global potential

Some new firms have a business model aimed at global markets. In order to be successful, these companies need to be born global and serve international customers from the start. This is a marked difference from serving local markets and customers, and the impact of these firms is immense.

Whereas all the Nordic countries provide services for start-ups, only some countries have established national growth programmes helping firms to get off the ground, and no country is strategically working to serve and up-scale the high impact firms.

The Nordic growth challenge today indicates room for improvement in the infrastructure for high-impact firms. The lack of high-impact companies in the Nordic region underlines the particular need for a better environment for scaling up new companies. In the following, entrepreneurship infrastructure and ecosystems for high-impact firms are discussed.

Box 21: Acceleration programmes in Denmark and Finland

Accelerace in Denmark is a fast action, internationally-focused business development programme for potential high-growth entrepreneurs and start-ups looking to increase their commercialization success. The programme is an elite programme for the best Danish companies with up to 30 employees, and is helping to develop the Danish entrepreneurship infrastructure.

The programme provides action-learning and concrete tools to entrepreneurs in order to gather insight into customers, market and competitors and help them develop a concrete and realistic go-to-market strategy – enabling them to meet with investors, sign up partners or sell.

The programme consists of different elements, including five 2-day thematic camps delivered by international experts, a CEO-in-residence who works with the company one day a week, and access to an international network of industry and technology experts that can provide insight in to markets, customers and competitors.

The Vigo Startup Accelerator Programme in Finland is also launched to boost the development of fast-growing start-ups. The aim is attract international experts in enterprise development and venture capitalists to Finland, to help transform Finnish start-ups into growth enterprises and boost the Finnish venture capital market.

To attract international VC’s and the best international experts, a number of accelerators have been established as part of the programme. Here, experienced professionals coach the start-ups in business development and increased investment-readiness, and public co-investments are offered to the best start-ups. The accelerators offer different services including technology commercialization, industry expertise and networks, coaching from serial entrepreneurs working with the founding team, and risk capital.

So far six different accelerators have been established within growth sectors such as cleantech, life science and ICT. It is expected that about 20 companies will have been accepted into the programme by the end of 2010.

Source: Peter Torstensen, Director at Symbion in Denmark, and Dr. Jari Romanainen, Executive Director of Strategy at Tekes in Finland. For further information see www.accelerace.dk and www.vigo.fi.

Entrepreneurship services for high-impact firms in the Nordic region

The successful development of high-impact companies very much depends on personal skills and competencies. The founders of the company and the management team are crucial for building a successful company. Moreover, the ability to complement internal skills with external knowledge and skills (by absorbing highly-experienced human resources to fill key positions) is imperative for the success of the firm. The learning process for these people by working with customers and developing the product and business idea is also crucial. Equally or more important is the environment surrounding the new companies which helps develop the right mindset and network around global start-ups.

However, adequate access to highly skilled, experienced professionals with an entrepreneurial mindset is not always easy in the Nordic countries. For instance, there is less of a tradition in the Nordic countries for experienced professionals in large companies to join a small start-up company. It is not considered prestige enough to work in start-ups. Therefore the flow of professional human skills to entrepreneurial firms becomes less dynamic. If there are only a few people in the Nordic countries with the right mindset, competencies and practical experiences with transforming a start-up company into a high-impact company, it will be difficult for the start-up companies in the region to access the competencies required.

The Nordic countries have less of a tradition for building high-growth companies compared to USA. Today, there is often more of a “trade-sale” mindset for building new companies in the region. The goal is to sell the new company to a large player in the market when they reach a certain size, and the new companies therefore often build their business with a single niche product. It is not a problem in itself that potential Nordic high-impact companies are sold to foreign investors before they realize their global potential, as long as Nordic investors also buy new companies outside the Nordic region and upscale them in the Nordic region. However, this does not seem to be the case today.

Developing an entrepreneurship ecosystem in the Nordic region

The Nordic countries have very few new companies that are scaled up to be large global companies (cf. Chapter 2). The discussions with experts highlighted a weak entrepreneurship ecosystem as a key obstacle for growing successful start-ups in the region. Today, the Nordic region does not have a private ecosystem for scaling up new companies that can be compared to Silicon Valley or Israel.

In order to succeed, the global start-ups need an environment similar to Silicon Valley or Israel with access to the right network, the right culture and people with the right thinking and competencies to scale up new companies. Interviews with experts indicate that the Nordic countries do not seem to be working enough with improving the infrastructure for global start-ups or with gathering knowledge about how to trigger the development of a private ecosystem. When the start-ups leave the acceleration programmes and are ready to begin scaling up, it will be very difficult for them to succeed without being located in such an ecosystem.

The development of an entrepreneurship ecosystem in the Nordic region will not happen overnight. It takes years and lots of patience and expertise. At the heart of a well-functioning ecosystem lies a shared mindset about the successful process of scaling up new companies, together with the right network among the various actors in a certain industry.

Based on the lessons from Israel and Silicon Valley, the most important role for the public sector is to trigger the creation of entrepreneurship infrastructure and ecosystem. Public programmes can be good for accelerating the growth of local start-ups, and can help develop the basic infrastructure. The lessons from Silicon Valley and Israel also underline that universities have a key role in triggering the development of the ecosystem. However, it is important to involve and rely on private forces as much as possible once the system has been triggered. The private sector is closer to the market and more competent in actually running large parts of the entrepreneurship infrastructure and ecosystem. In Israel, a public incubator programme was privatized – having private VC’s and successful serial entrepreneurs running the incubators. This development helped spark the development of a well-functioning private ecosystem in Israel.

A prerequisite for developing an ecosystem is to begin working in a structured way with gathering knowledge about the ecosystem and especially about how the government could help trigger the development of an ecosystem. In the USA for instance, the Kauffman Foundation has been important for facilitating knowledge about the development of high-impact companies. The Kauffman Foundation also facilitates knowledge and networks with researchers and policymakers about what policy initiatives are needed to enhance the ecosystem and the public infrastructure.



Nordic Policy Recommendations

The Nordic countries and governments are well-positioned to fully benefit from entrepreneurship. Nordic policymakers generally recognize the important role of entrepreneurs, and entrepreneurship is high on the political agenda in all Nordic countries. The start-up activity is high overall, and the basic framework conditions have been improved in recent years.

However, some entrepreneurship challenges remain unsolved. While, some of these challenges have been identified in the national country analysis and call for national actions (see individual country chapters for national policy recommendations), others could be addressed through policies at a Nordic level.

Nordic policy actions are related to the policy areas where the Nordic region shares similar challenges and where the countries could benefit from a coordinated Nordic collaboration. These policy actions require a fair amount of facilitation between the Nordic countries in order to have all countries to agree on concrete actions. The Nordic Council of Ministers could play a key role in this facilitation process.

As Nordic and national policy actions complement each other, Nordic entrepreneurship policies ideally have a spill-over effect on national entrepreneurship performance and framework conditions.

In the following section, some Nordic policy recommendations are discussed.

Nordic policy recommendations

Building a common Nordic growth programme

The Nordic countries are challenged with turning high start-up rates into equally high firm growth rates. In order to enhance the ability to grow and upscale new firms to a global level, the Nordic region could benefit from building a strong Nordic entrepreneurship infrastructure and ecosystem.

Currently, the Nordic countries all provide basic services related to starting new firms. Some Nordic countries provide tailor-made programmes for supporting firms during their initial growth. However, no countries have entrepreneurship infrastructures that could help new firms upscale their businesses.

The reason for this is two-fold. First, some Nordic countries simply do not have sufficient policy focus on making firms grow, and they do not provide national growth programmes (see also national policy recommendations). Second, the current national infrastructure has not been developed sufficiently to be able to successfully upscale firms. There is a lack of both competencies and entrepreneurial culture.

It is imperative to strengthen the Nordic entrepreneurship infrastructure and ecosystem in order to address the Nordic growth challenge.

It is therefore recommended to:

- 1) Create solid new knowledge about the nature of growth firms and what they require in terms of framework conditions for growth

- 2) Collect best practice and knowledge from current firm growth programmes and initiatives in the Nordic countries (if they exist) and internationally
- 3) Design and introduce a new common growth programme across the Nordic countries. A common Nordic growth programme could help the best performing growth firms from each Nordic country to realise their global potential through up-scaling activities. If designed appropriately, a Nordic growth programme would also provide a spill-over effect on the national entrepreneurship infrastructures for growth.

Establishing a Nordic Entrepreneurship education programme

The Nordic region faces a particular challenge related to the framework conditions supporting entrepreneurial capabilities and culture. These could be strengthened through entrepreneurship education.

The majority of the Nordic countries have formulated national strategies for entrepreneurship education in recent years. However, formulating national strategies is far from solving the difficulties with creating sound entrepreneurship education in practice.

In order to strengthen Nordic capabilities within entrepreneurship education, it is suggested to work more strategically with enhancing the abilities to *teach* entrepreneurship. Teachers of entrepreneurship include teachers at all educational levels (university, business school, high-school, secondary and primary schools), as well as other relevant stakeholders working with entrepreneurship (such as service providers).

It is necessary to develop a broad understanding and knowledge of entrepreneurship, allowing students to turn ideas into actions. This entails not only the start-

up aspect of entrepreneurship, but also the growth and scale-up aspects. The main barrier for this is often the lack of sufficient entrepreneurship training capabilities in the educational system.

It is therefore recommended to:

- 1) Create a Nordic Entrepreneurship Education Forum where Nordic policymakers, practitioners, service providers and academia who work with entrepreneurship education could exchange best practice related to the implementation of national entrepreneurship education strategies and design of entrepreneurship training programmes. This forum could build on previous work carried out by the European Commission in the field and could include the Nordic group of entrepreneurship education policymakers involved at that time. This group no longer exists.
- 2) Establish a Nordic train-the-trainer programme for Nordic entrepreneurship education trainers, including a short-term scholarship to the leading entrepreneurship education institutions in the USA. A Nordic train-the-trainer programme could draw on and/or link up with Harvard Business School and the Kauffman Entrepreneurship Education programme, which are US train-the-trainer programmes – also provided in Europe.
- 3) Exchange leading Nordic entrepreneurship education trainers that have completed the train-the-trainer programme. Universities and schools in the Nordic countries could engage in an exchange-programme entailing short or long-term exchanges of entrepreneurship teachers. This could enhance the access to entrepreneurship training capabilities in countries or regions where training capabilities are insufficient or where complementary resources are required.

Creating a Nordic Entrepreneurship Policy Forum

The Nordic countries need to improve their entrepreneurship performance and framework conditions for entrepreneurship. To enhance entrepreneurship performance and framework conditions, further work with designing entrepreneurship policies is needed. Entrepreneurship policy development could benefit from a strong Nordic debate about the role of entrepreneurship, and policy learning among the Nordic countries could enhance this development further. This policy learning could be facilitated by the Nordic Council of Ministers.

It is necessary to sharpen the Nordic Entrepreneurship policy debate and facilitate policy learning and exchange of policy practices across the Nordic countries.

It is therefore recommended to:

- 1) Create a Nordic entrepreneurship policy forum for both policymakers and practitioners (public and private service providers, counselors, financiers etc.) working with entrepreneurship in the Nordic countries. The Nordic policy forum could meet several times a year, and a Nordic entrepreneurship policy conference could be organized by the Nordic Council of Ministers.
- 2) Organize workshops for Nordic entrepreneurship practitioners to enhance policy learning about the opportunities and challenges related to *operating* within the existing framework conditions for entrepreneurship in the Nordic countries.

Improving Nordic entrepreneurship financing opportunities

Although the Nordic region is – overall – providing good framework conditions for financing, there is still a need to enhance financing opportunities for growth firms across the Nordic region.

It is therefore recommended to:

- 1) Create a strong Nordic business angel network with a specific sector-focus. This business angel network should build on previous experience with developing Nordic networks for business angels.
- 2) Create a public-private venture capital fund across the Nordic countries. This initiative has been discussed previously at the Nordic level, but discussions stalled due to national investment mandates in public funds. A re-newed discussion could be considered.

Strengthening Nordic entrepreneurship data, policy analysis and international benchmarks

Entrepreneurship is still a relatively new policy area. Currently, there is a knowledge gap when it comes to entrepreneurship performance, entrepreneurs' contribution to wealth creation, the importance of growth entrepreneurs, and framework conditions for entrepreneurship performance in the Nordic region.

Policymakers in the Nordic countries still need better knowledge, data and analysis in order to improve entrepreneurship policy formulation. International organisations such as the OECD work with improving internationally-comparable data and indicators for entrepreneurship performance. But not all Nordic countries participate in this work (see also national policy recommendations).

The Nordic Entrepreneurship Monitor has succeeded with making a first systematic analysis of Nordic entrepreneurship. While preparing the Nordic Entrepreneurship Monitor, entrepreneurship performance data from some Nordic countries was collected and made internationally-comparable for the first time. This effort has resulted in new insights for policymakers, which are expected to have spill-over effects on national entrepreneurship policy formulation. The data work and policy analysis should be continued.

It is therefore recommended to:

- 1) Improve entrepreneurship data and knowledge about the disproportionate contribution by growth-entrepreneurs across the Nordic countries.
- 2) Identify existing and upcoming entrepreneurship regions across the world and carry out policy analysis of these regions in order to learn best practices from them.
- 3) Continue the international benchmarking of entrepreneurship performance and framework conditions by building on and repeating the Nordic Entrepreneurship Monitor. In the future, a Nordic Entrepreneurship Monitor could address different entrepreneurship themes for each edition.





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Analytic Design of the Nordic Entrepreneurship Monitor 2010

Introduction

The Nordic Entrepreneurship Monitor is based on an international entrepreneurship framework model, which rates the entrepreneurial capacity of OECD countries relative to each other.¹

According to this model, entrepreneurship is viewed as a driver of wealth creation, and working strategically with targets for entrepreneurship enables governments to meet a number of macroeconomic targets.² The framework identifies three separate, but inter-connected flows – all of which are important for policy measures. Thus, entrepreneurship framework conditions reflect the key areas affecting entrepreneurship performance, which again has an impact on the economy, cf. Figure 1.

The core purpose of the entrepreneurship model is to identify the policy-affected areas in the framework conditions that will help improve entrepreneurship performance. In addition to this, the model has the strength of being based on a broad understanding of entrepreneurship – and therefore includes a wide variety of external factors that influence entrepreneurship performance.

The external factors that influence entrepreneurship performance can be strengthened or weakened through public policymaking, and governments can work strategically with entrepreneurship through six policy areas (see also below). Together, these policy areas make up the entrepreneurial framework conditions. The policy areas cover a wide variety of external factors since they include a combination of the

Figure 1: The entrepreneurship performance and framework model



Source: Entrepreneurship Index, 2009. For further elaboration, see also the OECD/Eurostat Entrepreneurship Indicators Program <http://www.entrepreneurship-indicators.net/>.

entrepreneurs' opportunities, competencies and available resources.¹ The framework conditions are essential in order to improve entrepreneurship performance. In the following, entrepreneurship performance and framework conditions are explained in more detail.

1) The model is based on the work carried out by the OECD/Eurostat Entrepreneurship Indicators Program (EIP) and the measurement framework described in Ahmad and Hoffman, 2008.
2) The effect of new firm entry on productivity is shown in the OECD growth accounting framework. Moreover, new firms contribute significantly to multifactor productivity, and a Danish study confirms the impact of high-growth firms on productivity (Hoffmann, 2007).

Entrepreneurship performance

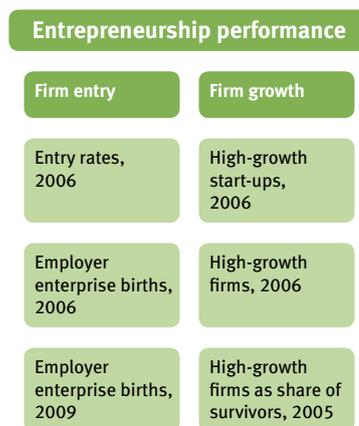
Entrepreneurship performance is measured through two main indicators, the entry of new firms and the creation of high-growth firms, cf. Figure 2. See also appendix II for further details on the entrepreneurship performance indicators included in Nordic Entrepreneurship Monitor.

This understanding differs from more holistic views of entrepreneurship offered in other studies. Most policy attempts to describe entrepreneurship refers to entrepreneurship as an attitude and willingness to change or a pursuit of opportunities.³ In these studies, entrepreneurship performance measures an attempt or interest in starting a new firm, i.e. want-to-be-entrepreneurs.⁴ This type of entrepreneurship activity is not included in the Nordic Entrepreneurship Monitor.⁵

Entrepreneurship framework conditions

The entrepreneurship framework model in the Nordic Entrepreneurship Monitor is based on six overall policy areas – or determinants – which can be divided into 19 sub-policy areas (cf. Figure 3). For each of the sub-policy areas, a set of indicators measures performance across countries. In total, the model is based on 71 indicators covering the different aspects of entrepreneurship framework conditions. Thus, the description of entrepreneurial framework is based on a large number of indicators providing a broad understanding of what can affect entrepreneurship performance.

Figure 2: Indicators for entrepreneurship performance



Source: FORA, 2010.

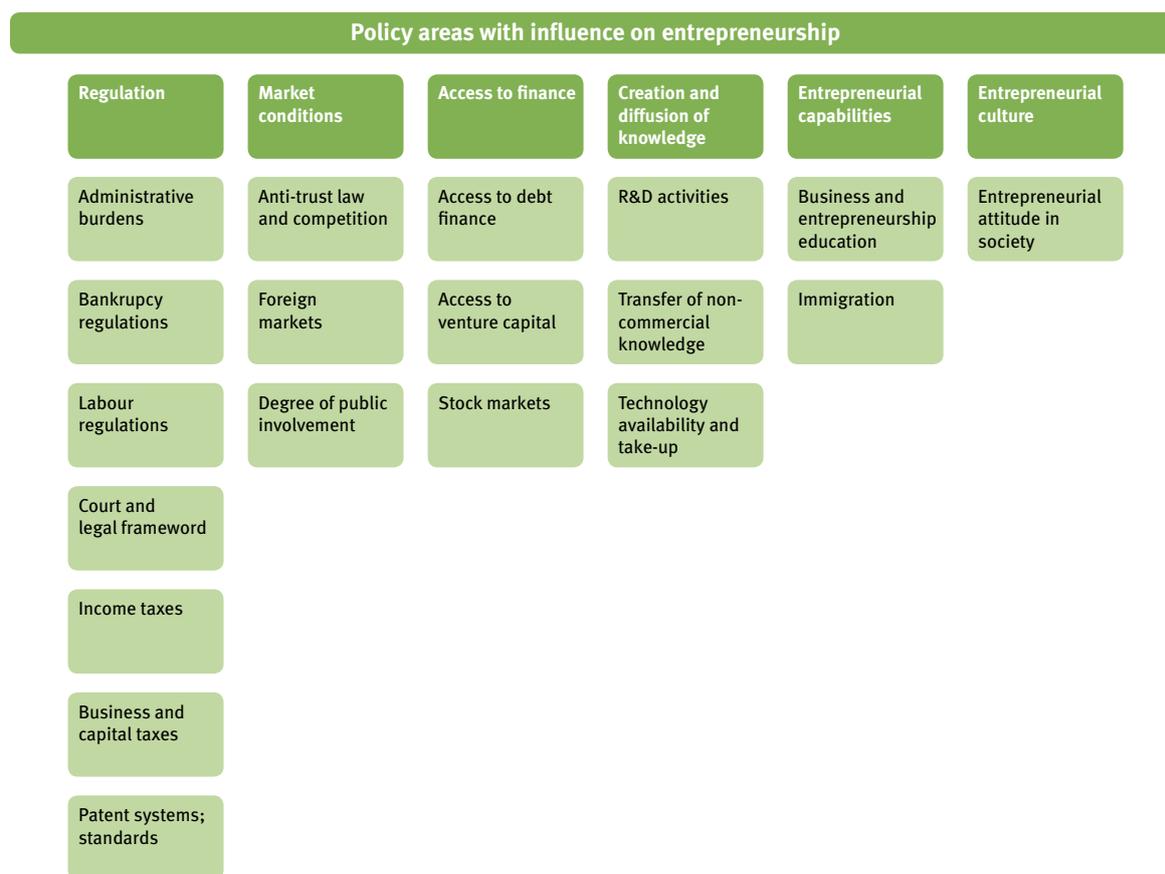
Note:
See appendix III for definitions of the performance indicators.

3) Stevenson and Lundström, 2001.

4) Bosma and Levie, 2009.

5) Alternative benchmarking systems of entrepreneurship include Global Entrepreneurship Monitor (GEM) which is an annual assessment of the national level of entrepreneurship activities and Global Entrepreneurship Index that focuses on the contextual feature of entrepreneurship across countries.

Figure 3: Indicators for entrepreneurship framework conditions



Source: FORA, 2010.

In the following, the policy areas are explained in more detail.

- **Regulatory framework** refers to the policy areas which governments can influence directly through regulation. Public regulations such as administrative procedures, bankruptcy and labour market regulation have an effect on entrepreneurship performance. For instance, a strict labour market regulation might hamper the flexibility of hiring and firing employees and thus also firm growth. Moreover, the costs and days it takes to start a business are important issues that have direct influence on the ability and flexibility of starting a business. Finally, the tax structure influences the attractiveness of starting and growing a business, thereby also constituting an important area of regulatory frameworks.
- **Market conditions** have an impact on the entrepreneur's possibility for starting a new business. For instance, access to foreign markets determines the general market access for new firms. Market conditions are an important underlying requirement for effective business growth and firm entry. Firms depend to some extent on their national market; a well-organized national market is a good starting point for business growth. Globalization has opened up for increased international opportunities

for entrepreneurs, making import and export burdens a very important aspect of market conditions.

- **Access to finance** has an impact on the resources available to entrepreneurs. This area is an important precondition for entrepreneurial activity, and is vital for both firm entry and firm growth. Without finance and venture capital, newly-established firms and entrepreneurs would be restricted in their efforts toward higher growth. Different ways of financing are important for different stages in firm development. For instance, firm entry relies on venture capital, both in the early stage and in the expansion stage. Firm growth relies on access to loans and a well-functioning stock market.
- **Creation and diffusion of knowledge** is related to the ability of diffusing new knowledge created through research and development activities, as well as the availability of new technology on the market. R&D and entrepreneurship often go hand in hand, and R&D is an important factor when discussing entrepreneurial activity. Funding of R&D activity is essential in order to attain additional market share and grow business opportunities, thereby enabling firm growth. Patenting might be a tool to minimize knowledge diffusion; nonetheless, it is a central indicator on the level of R&D activity. In addi-

tion to this, the education system is a contributing factor to transfer of non-commercial knowledge, especially when it comes to collaboration between industry and universities.

- **Entrepreneurial capabilities** refer to the entrepreneur's capability to create value through new innovative products. One of the main factors for creating entrepreneurial capabilities is high-quality business schools and universities, and their emphasis on education in entrepreneurship. Immigration and inflow of foreign labor is also an important source of start-up and growth of companies in many countries; in particular, immigrants with a high education are valuable and important in creating companies with high-growth potential. Entrepreneurship capabilities can also be strengthened through appropriate access to business services and entrepreneurship infrastructure. However, international comparison in this area is not yet possible.
- **Entrepreneurial culture** refers to how society and individuals understand entrepreneurship, as well as the possibility for individuals to start their own firms. The culture of entrepreneurship is very different in the individual countries; often this culture goes back many years and is not easily changed. Indicators such as "Image of entrepreneurship" and "Desirability of becoming self-employed" are related to the culture of entrepreneurship and the desirability of starting a new business. The willingness to take risks is also a very important factor in the cultural understanding of entrepreneurship, since risk tolerance is often correlated with the image of entrepreneurs. Still, it should be noted, a strong business culture is not enough to ensure entrepreneurship performance, since this willingness to start new businesses does not guarantee that these businesses will generate high growth.

Comparing countries with respect to the six overall policy areas poses some challenges which are discussed below.

Comparing entrepreneurship internationally

Measuring and internationally comparing entrepreneurship is difficult. This is due to the varying definitions and the low accessibility of data across countries in some areas.⁶ The problem of data quality concerns the indicators measuring entrepreneurship performance as well as entrepreneurship framework conditions.

International organisations such as the OECD and the International Consortium for Entrepreneurship (ICE) and various countries have joined forces in order to address the weaknesses in the quality of entrepreneurship indicators. One outcome of this work is the Entrepreneurship Quality Manual.⁷

The Entrepreneurship Quality Manual is an annual publication evaluating the quality of all the internationally-com-

parable indicators for entrepreneurship performance and framework conditions used in the entrepreneurship model. The quality of the indicators is evaluated on the basis of their relevance, accuracy, and availability in describing the framework condition or performance the indicator is supposed to measure.

According to the Entrepreneurship Quality Manual 2009, it is possible to divide the internationally-comparable entrepreneurship indicators into three categories according to the quality of the indicators, cf. Figure 4.

Firstly, indicators belonging to the policy areas for regulatory framework, market regulation and access to finance are of high quality, as illustrated by the green colour. Most of these indicators have a high relevance for the policy area measured, measure the policy area accurately, and are available across countries and over time.

Secondly, the quality of data related to creation and diffusion of knowledge is yellow, which indicates an acceptable overall quality of indicators. This is – among other things – due to the relatively low policy relevance of certain indicators, and also the low availability and accuracy of other indicators.

Thirdly, the quality of the indicators for two policy areas including entrepreneurship capabilities and culture are marked red, reflecting a questionable quality of indicators. This is due to a combination of low policy relevance and lack of fact-based indicators, i.e. the indicators describing culture are survey based.

In addition to this, the indicators describing entrepreneurship performance are yellow. The acceptable quality is mainly due to a relatively low availability of the data across OECD countries. Moreover, policy initiatives taken to improve conditions for start-up and growth will only have an indirect impact on performance.

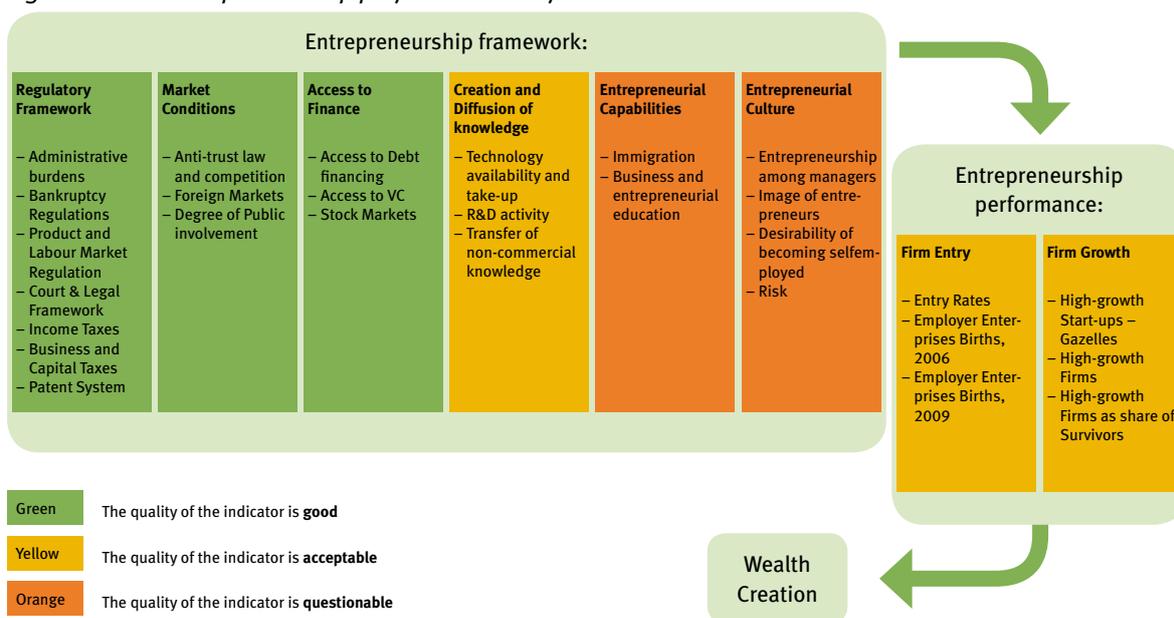
The varying quality of the entrepreneurship indicators should be kept in mind when analysing countries' entrepreneurship policy areas. OECD and Eurostat collaborate to further improve the quality of entrepreneurship indicators. In 2008, Eurostat, OECD and FORA organised a workshop addressing the policy area of "creation and diffusion of knowledge" (earlier referred to as R&D and Technology). In late 2010, Eurostat is organising the second round of workshops aiming at further strengthening the indicator system. This time, the focus will be on improving the data within the two weakest policy areas, namely entrepreneurship capabilities and entrepreneurship culture.

Meanwhile, this means that one has to be careful when comparing data in the areas of entrepreneurial capabilities and entrepreneurial culture. Nevertheless, the two areas are important indicators in the analysis of entrepreneurial activity in the different countries. The lack of thorough information in the two policy areas is also likely to influence

6) A number of international organisations such as OECD, GEM, World Bank, etc. continuously develop and improve international data on entrepreneurship.

7) FORA, 2010.

Figure 4: The entrepreneurship performance and framework model



Source: Entrepreneurship Index, 2009. For further elaboration, see also Entrepreneurship Quality Manual, 2010. The quality manual contains a more extensive explanation of the different indicators and their evaluation.

the correlation between framework conditions and the performance measure.

Methods

Standardisation of Data

Indicators are often expressed in different units (e.g. in absolute value or as a share) and therefore have to be standardised in order to make them comparable. Several techniques can be used to standardize indicators. The method chosen by FORA is: Distance from best and worst performer, where positioning is in relation to the global maximum and minimum. The index takes a value between 0 (worst performer) and 100 (best performer).

The formula:

$$\text{Indicator value (country } x) = \frac{\text{Value (country } x) - \text{minimum}}{\text{maximum} - \text{minimum}} * 100$$

This is also the technique the OECD uses in their benchmark approaches. In the Nordic Entrepreneurship Monitor 2010, the standardisation has been carried out over two years (2004 and 2009) to trace development over time. Below is an example of how data can be normalised.

For instance, the standardised value for Denmark in 2004 is calculated as:

$$\text{Indicator value (Denmark)} = \frac{5,1-2,9}{5,2-2,9} * 100 = 95,65$$

Indicator: Venture capital Availability

Country	The availability to venture capital ranking from 1–7		Standardised value	
	2004	2009	2004	2009
Denmark	5,1	3,8	95,65	39,13
Finland	5,2	4,3	100,00	60,87
Iceland	4,8	2,9	82,61	0,00
Norway	4,7	4,4	78,26	65,22
Sweden	4,8	4,3	82,61	60,87

Countries are ranked in order to determine the best-performing countries. In the example above, Finland is ranked first among the Nordic countries in 2004, while Norway is ranked first in 2009. The overall picture shows a reduction in available venture capital from 2004 to 2009, which is likely a result of the international financial crisis.

Each of the 19 sub-policy areas in the model are expressed by up to several indicators. The policy areas are assigned a value calculated by taking the average of each indicator's standardised value. This average value is then used to determine how a given country performs between 0 (worst performer) and 100 (best performer). The spider web diagrams are created on the basis of these numbers, where the Nordic countries are compared to the best-performing countries. A score of 100 in a sub-policy area requires an absolute top-performance on each sub-indicator. No country obtains such a high score in the composite indices.

Robustness Analyses

A robustness analysis is used to compare country rankings using different weights for each of the indicators. Robustness analysis should be conducted to analyse the impact of changing weights. The robustness analysis also helps to identify the top-performing countries.

Figure 5 illustrates how many times a given country will perform in top-3, top-5 and top-10 on overall performance, when the weights of the two entrepreneurship drivers (start-up and growth) are allowed to randomly vary between 0 and 1. In the figure below, countries are sorted based on their proportion of top-3 rankings when changing the weights. As the figure shows, New Zealand and Spain are the top-performing countries followed by Canada, United States and Denmark.

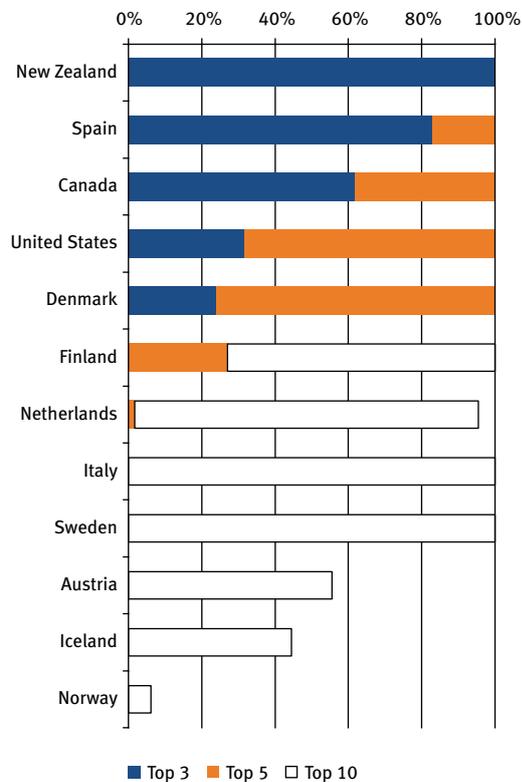
In terms of entrepreneurship framework conditions, the United States and Iceland are the top-performing countries, followed by New Zealand, United Kingdom and Ireland, cf. Figure 6.

Correlation between Framework Conditions and Performance

An investigation of the correlation between framework conditions and entrepreneurship performance can show an inter-relation between the two. Furthermore, correlation analysis can contribute to determining which framework conditions are most essential in order to improve entrepreneurial performance.

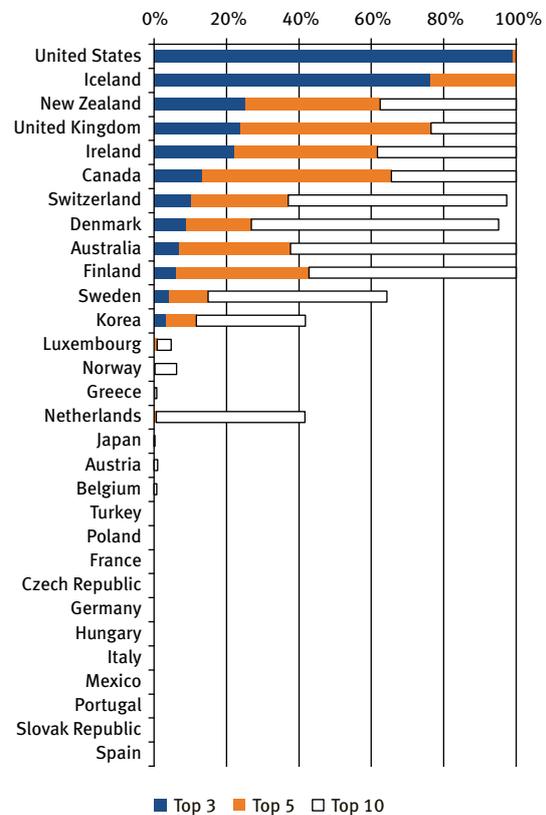
When comparing countries' entrepreneurship framework conditions and performance, analysis shows that there is a positive – but weak – correlation. However, most of the countries providing solid framework conditions for entrepreneurship in 2004 tend to perform well in terms of entrepreneurship performance in 2009, cf. Figure 7.

Figure 5: Robustness Analysis – Performance



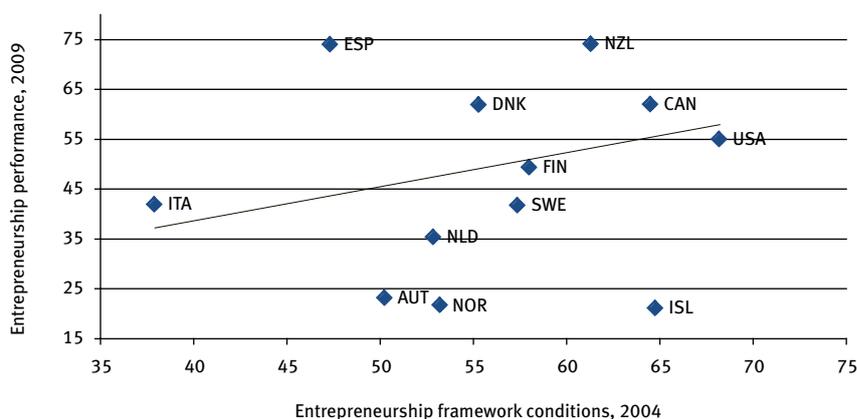
Source: FORA, 2010

Figure 6: Robustness Analysis – Framework



Source: FORA, 2010

Figure 7: Entrepreneurship performance and framework conditions



Source: FORA, 2010

Note:

The chart shows the correlation between the countries' overall entrepreneurship framework conditions and performance. R^2 – the expression of how large a share of performance that can be explained by framework conditions – is 0,10. The time lag between performance (2009) and framework (2004) is applied as the effect of policies takes time.

The Analyses in the Nordic Entrepreneurship Monitor

Four steps are used when analysing the Nordic countries in the Nordic Entrepreneurship Monitor:

1. Ranking and Regional Analyses

Based on the selected indicators, a complete ranking of countries is carried out in terms of both performance and framework conditions. For regional analyses, the countries are grouped into five regions in accordance to cultural and geographical considerations. The Nordic region (Denmark, Finland, Iceland, Norway and Sweden) is benchmarked against the leading English-speaking countries (US, UK and Canada), Japan and Korea, other English-speaking countries (Australia, Ireland and New Zealand) and Continental Europe (Austria, Belgium, France, Germany, Italy, Netherlands, Portugal, Spain and Switzerland).

2. Best Practice

The best-performing countries are identified for each of the 6 overall policy areas and the 19 sub-policy areas describing entrepreneurship framework conditions. Best practice is drawn from each policy area by comparing the top-performing countries to other countries.

3. Peer Review

Analyses are carried out for each of the Nordic countries – Denmark, Finland, Iceland, Norway and Sweden. Individual country's framework conditions and performance are compared to each of the other Nordic countries and the top-performing country. Developments are analysed over time. The results are qualified and elaborated upon by policy experts. The analysis also covers individual country analyses in terms of the coverage and quality of policies supporting entrepreneurship efforts.

4. Policy Recommendations

The framework conditions and performance is evaluated and analysed, providing a solid ground for policy recommendations. The recommendations for each of the Nordic countries are presented in the Nordic Entrepreneurship Monitor.



Appendix II:

Choice of Entrepreneurship Performance Indicators

Entrepreneurship performance is measured by firm entry (start-up activity) and firm growth. Basically, the following indicators are applied in the model:

Start-up activity:

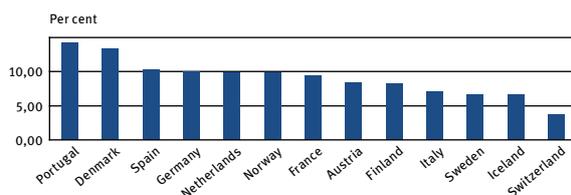
- Entry Rates
- Employer Enterprise Births, 2006
- Employer Enterprise Births, 2009

Firm growth:

- High-growth Start-ups (or Gazelles)
- High-growth Firms
- High-growth Firms as share of Survivors

Indicators for Start-up Activity

Figure 1: Entry Rates, 2006

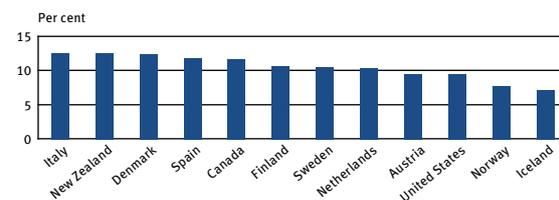


Source: Eurostat, 2010

Note:

Entry rates are measured as a percentage of the company base. Germany and Switzerland 2004, Finland and the Netherlands 2005 and Spain 2007.

Figure 2: Employer Enterprises Births, 2006

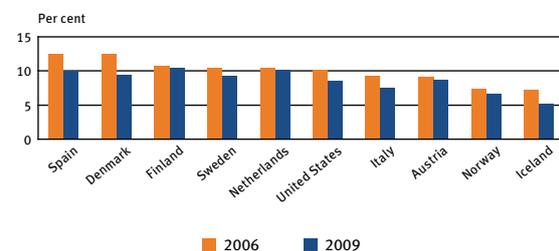


Source: OECD, 2010

Note:

Employer enterprise birth rates are measured as a percentage of the population of active enterprises with at least one employee.

Figure 3: Employer Enterprise Births, 2009



Source: FORA, 2010

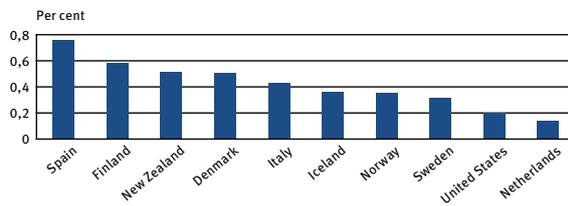
Note:

Employer enterprise birth rates are measured as a percentage of the population of active enterprises with at least one employee.

The 2009 data are extrapolated using 2006 as a base year. OECD timely indicators on entrepreneurship entries (see more at: www.oecd.org/statistics/measuring-entrepreneurship) and national sources have been used to extrapolate the birth rates. Therefore, the 2009 birth rates are only a proxy measure and have to be treated as such.

Indicators for Firm Growth

Figure 4: High-growth Start-ups – Gazelles (employment definition), 2006

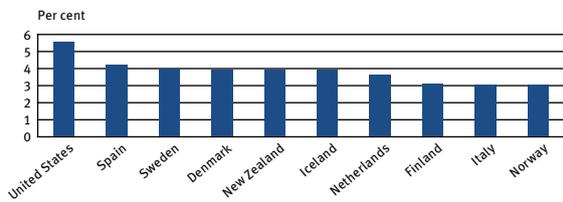


Source: OECD, 2010

Note:

Young high-growth enterprises (gazelles) are measured as a percentage of the population of enterprises with ten or more employees. The Netherlands 2005.

Figure 5: High-growth Firms (employment definition), 2006

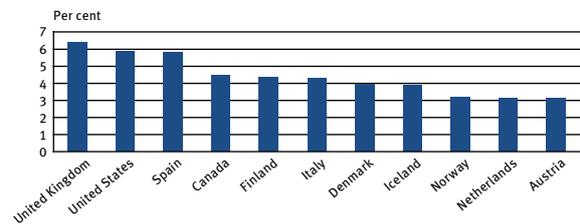


Source: OECD, 2010

Note:

High-growth enterprises are measured as a percentage of the population of enterprises with ten or more employees. Italy and the Netherlands 2005.

Figure 6: High-growth Firms as share of Survivors (employment definition), 2005



Source: ICE/FORA/NESTA growth project, 2010

Note:

High-growth enterprises are measured as a percentage of the surviving enterprises – in the 3-year growth period – with ten or more employees.

Appendix III:

Performance and Framework Indicators

Performance

Start-up Activity

Indicator	Entry Rates			
	The indicator measures the number of new enterprises as a share of the company base			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	8,3	2005	8,4	2006
Belgium				
Canada				
Czech Republic	12,5	2001	9,3	2006
Denmark	13,1	2005	13,5	2006
Finland	7,1	2000	8,3	2005
France	8,4	2003	9,4	2006
Germany	10,0	2004	10,0	2004
Greece				
Hungary	12,7	2001	8,7	2006
Iceland	6,7	2006	6,7	2006
Ireland				
Italy	7,7	2001	7,1	2006
Japan				
Korea				
Luxembourg	12,2	2001	12,3	2006
Mexico				
Netherlands	9,5	2000	9,8	2005
New Zealand				
Norway	9,8	2006	9,8	2006
Poland				
Portugal	8,0	1999	14,2	2006
Slovak Republic	15,0	2002	13,3	2007
Spain	9,3	2002	9,6	2007
Sweden	6,6	2001	6,7	2006
Switzerland	3,5	2003	3,6	2004
Turkey				
United Kingdom				
United States				

Source: Eurostat and national sources.

Indicator	Employer enterprise birth rates			
	The indicator refers to the number of employer enterprise births, as a percentage of the population of active enterprises with at least one employee			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	8,9	2005	9,5	2006
Belgium				
Canada	10,0	2005	11,6	2006
Czech Republic	11,7	2005	11,7	2005
Denmark	10,8	2004	12,3	2006
Finland	10,6	2005	10,6	2005
France				
Germany				
Greece				
Hungary	11,4	2005	12,0	2006
Iceland	7,1	2006	7,1	2006
Ireland				
Italy	9,2	2005	12,5	2006
Japan				
Korea				
Luxembourg	11,6	2005	12,9	2006
Mexico				
Netherlands	10,3	2005	10,3	2005
New Zealand	12,1	2002	12,5	2006
Norway	7,2	2005	7,8	2006
Poland				
Portugal				
Slovak Republic	14,2	2005	14,2	2005
Spain	12,3	2005	11,8	2006
Sweden	10,4	2006	10,4	2006
Switzerland				
Turkey				
United Kingdom				
United States	9,1	2001	9,5	2006

Source: OECD-Eurostat, The Entrepreneurship Indicators Programme (EIP).

Indicator	Extrapolated employer enterprise births The indicator refers to the number of employer enterprise births, as a percentage of the population of active enterprises with at least one employee			
	Actual Values	Year	Actual Values	Year
Australia				
Austria	8,9	2005	8,5	2008
Belgium				
Canada				
Czech Republic				
Denmark	12,3	2006	9,3	2009
Finland	10,6	2005	10,3	2009
France				
Germany				
Greece				
Hungary				
Iceland	7,1	2007	5,1	2009
Ireland				
Italy	9,2	2005	7,4	2009
Japan				
Korea				
Luxembourg				
Mexico				
Netherlands	10,3	2005	9,9	2008
New Zealand				
Norway	7,2	2005	6,5	2009
Poland				
Portugal				
Slovak Republic				
Spain	12,3	2005	9,9	2008
Sweden	10,3	2005	9,1	2009
Switzerland				
Turkey				
United Kingdom				
United States	10,0	2005	8,4	2009

Source: Own calculations based on OECD (EIP) and national sources.

Firm Growth

Indicator	Growth in companies – employee			
	High-growth enterprises, as measured by employment, are enterprises with average annualised growth in employees greater than 20% a year, over a three-year period, and with ten or more employees at the beginning of the observation period (measured as a percentage of all enterprises with 10 or more employees)			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria				
Belgium				
Canada				
Czech Republic	5,1	2005	5,1	2005
Denmark	2,9	2005	3,9	2006
Finland	2,9	2005	3,1	2006
France				
Germany				
Greece				
Hungary	4,5	2005	5,0	2006
Iceland	3,9	2006	3,9	2006
Ireland				
Italy	3,0	2005	3,0	2005
Japan				
Korea				
Luxembourg	4,1	2005	4,0	2006
Mexico				
Netherlands	3,6	2005	3,6	2005
New Zealand	3,9	2006	3,9	2006
Norway	3,0	2006	3,0	2006
Poland				
Portugal				
Slovak Republic				
Spain	4,2	2005	4,3	2006
Sweden	4,0	2006	4,0	2006
Switzerland				
Turkey				
United Kingdom				
United States	5,0	2005	5,5	2006

Source: OECD-Eurostat Entrepreneurship Indicators Programme (EIP) and national sources.

Indicator	Growth in new companies, employee			
	Young high-growth enterprises (gazelles), as measured by employment, are enterprises with annualized growth in employees greater than 20 per cent per year, over a three year period and with 10 or more employees at the beginning of observation period. Young high-growth enterprises are born five years or less before the end of the observation period			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria				
Belgium				
Canada				
Czech Republic	0,2	2005	0,2	2005
Denmark	0,6	2005	0,5	2006
Finland	0,7	2005	0,6	2006
France				
Germany				
Greece				
Hungary	0,8	2005	0,8	2006
Iceland	0,4	2006	0,4	2006
Ireland				
Italy	0,5	2005	0,4	2006
Japan				
Korea				
Luxembourg	1,0	2005	0,9	2006
Mexico				
Netherlands	0,1	2005	0,1	2005
New Zealand	0,5	2006	0,5	2006
Norway	0,4	2006	0,4	2006
Poland				
Portugal				
Slovak Republic				
Spain	0,8	2005	0,8	2006
Sweden	0,3	2006	0,3	2006
Switzerland				
Turkey				
United Kingdom				
United States	0,4	2005	0,2	2006

Source: OECD-Eurostat Entrepreneurship Indicators Programme (EIP) and national sources.

Indicator	Growth in new companies, employee – growth project			
	The indicator measures the the number of high-growth enterprises as a share of the population of surviving enterprises with ten or more employees, where high growth enterprises are enterprises with average annualised growth in employees greater than 20% a year, over a three-year period, and with ten or more employees at the beginning of the observation period.			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	3,1	2005	3,1	2005
Belgium				
Canada	4,5	2005	4,5	2005
Czech Republic				
Denmark	4,0	2005	4,0	2005
Finland	4,4	2005	4,4	2005
France				
Germany				
Greece				
Hungary				
Iceland	3,9	2005	3,9	2005
Ireland				
Italy	4,3	2005	4,3	2005
Japan				
Korea				
Luxembourg				
Mexico				
Netherlands				
New Zealand				
Norway	3,2	2005	3,2	2005
Poland				
Portugal				
Slovak Republic				
Spain	5,8	2005	5,8	2005
Sweden				
Switzerland				
Turkey				
United Kingdom	6,4	2005	6,4	2005
United States	5,9	2005	5,9	2005

Source: ICE, FORA and NESTA.

Framework Conditions

Regulatory Framework

Indicator	Starting a business – number of procedures			
	The indicator records all generic procedures that are officially required for an entrepreneur to start an industrial or commercial business. These include obtaining all necessary licenses and permits, and completing any required notifications, verifications or inscriptions with relevant authorities for a new company.			
Country	Actual Values	Year	Actual Values	Year
Australia	2	2005	2	2010
Austria	9	2005	8	2010
Belgium	4	2005	3	2010
Canada	2	2005	1	2010
Czech Republic	10	2005	8	2010
Denmark	3	2005	4	2010
Finland	3	2005	3	2010
France	7	2005	5	2010
Germany	9	2005	9	2010
Greece	15	2005	15	2010
Hungary	6	2005	4	2010
Iceland	5	2005	5	2010
Ireland	4	2005	4	2010
Italy	9	2005	6	2010
Japan	11	2005	8	2010
Korea	12	2005	8	2010
Luxembourg	6	2009	6	2010
Mexico	9	2005	8	2010
Netherlands	7	2005	6	2010
New Zealand	2	2005	1	2010
Norway	4	2005	5	2010
Poland	10	2005	6	2010
Portugal	11	2005	6	2010
Slovak Republic	9	2005	6	2010
Spain	10	2005	10	2010
Sweden	3	2005	3	2010
Switzerland	6	2005	6	2010
Turkey	8	2005	6	2010
United Kingdom	6	2005	6	2010
United States	5	2005	6	2010

Source: World Bank, Doing Business.

Indicator	Number of days to start a business			
	This indicator measures the average time spent during each enterprise start-up procedure. Time is recorded in calendar days based on standard assumptions about time; the company and procedure.			
Country	Actual Values	Year	Actual Values	Year
Australia	2	2005	2	2010
Austria	29	2005	28	2010
Belgium	34	2005	4	2010
Canada	3	2005	5	2010
Czech Republic	40	2005	15	2010
Denmark	5	2005	6	2010
Finland	14	2005	14	2010
France	8	2005	7	2010
Germany	24	2005	18	2010
Greece	38	2005	19	2010
Hungary	38	2005	4	2010
Iceland	5	2005	5	2010
Ireland	24	2005	13	2010
Italy	13	2005	10	2010
Japan	31	2005	23	2010
Korea	22	2005	14	2010
Luxembourg	26	2009	24	2010
Mexico	58	2005	13	2010
Netherlands	11	2005	10	2010
New Zealand	12	2005	1	2010
Norway	13	2005	7	2010
Poland	31	2005	32	2010
Portugal	54	2005	6	2010
Slovak Republic	25	2005	16	2010
Spain	47	2005	47	2010
Sweden	16	2005	15	2010
Switzerland	20	2005	20	2010
Turkey	9	2005	6	2010
United Kingdom	18	2005	13	2010
United States	5	2005	6	2010

Source: World Bank, Doing Business.

The cost of starting a business				
The indicator measures the official cost of each procedure in percentage of GNI per capita based on formal legislation and standard assumptions about business and procedure. The indicator measures only the politically influenced costs of starting a business.				
Indicator	Actual Values	Year	Actual Values	Year
Country				
Australia	1,9	2005	0,8	2010
Austria	5,7	2005	5,1	2010
Belgium	11,1	2005	5,3	2010
Canada	0,9	2005	0,4	2010
Czech Republic	9,5	2005	9,2	2010
Denmark	0,0	2005	0,0	2010
Finland	1,2	2005	0,9	2010
France	1,2	2005	0,9	2010
Germany	4,7	2005	4,7	2010
Greece	24,6	2005	10,9	2010
Hungary	22,4	2005	8,0	2010
Iceland	2,9	2005	3,0	2010
Ireland	5,3	2005	0,3	2010
Italy	15,7	2005	17,9	2010
Japan	10,7	2005	7,5	2010
Korea	15,2	2005	14,7	2010
Luxembourg	2,3	2008	1,8	2010
Mexico	15,6	2005	11,7	2010
Netherlands	13,0	2005	5,6	2010
New Zealand	0,2	2005	0,4	2010
Norway	2,7	2005	1,9	2010
Poland	22,2	2005	17,9	2010
Portugal	13,4	2005	6,4	2010
Slovak Republic	5,1	2005	2,0	2010
Spain	16,5	2005	15,0	2010
Sweden	0,7	2005	0,6	2010
Switzerland	8,7	2005	2,0	2010
Turkey	27,7	2005	14,2	2010
United Kingdom	0,7	2005	0,7	2010
United States	0,5	2005	0,7	2010

Source: World Bank, Doing Business.

Minimum capital required to start a business				
The paid-in minimum capital requirement reflects the amount that the entrepreneur needs to deposit in a bank before registration starts and is recorded as a percentage of the country's income per capita. Many countries have a minimum capital requirement but allow businesses to pay only a part of it before registration, with the rest to be paid after the first year of operation.				
Indicator	Actual Values	Year	Actual Values	Year
Country				
Australia	0,0	2005	0,0	2010
Austria	64,1	2005	52,0	2010
Belgium	23,5	2005	19,4	2010
Canada	0,0	2005	0,0	2010
Czech Republic	44,5	2005	30,5	2010
Denmark	48,8	2005	38,6	2010
Finland	29,3	2005	7,2	2010
France	0,0	2005	0,0	2010
Germany	48,8	2005	0,0	2010
Greece	125,7	2005	21,4	2010
Hungary	86,4	2005	10,2	2010
Iceland	0,0	2005	15,8	2010
Ireland	0,0	2005	0,0	2010
Italy	21,4	2005	9,7	2010
Japan	74,9	2005	0,0	2010
Korea	66,4	2005	0,0	2010
Luxembourg	20,5	2008	19,9	2010
Mexico	15,5	2005	8,9	2010
Netherlands	66,2	2005	49,4	2010
New Zealand	0,0	2005	0,0	2010
Norway	28,9	2005	18,7	2010
Poland	237,9	2005	15,3	2010
Portugal	39,5	2005	33,5	2010
Slovak Republic	46,1	2005	23,8	2010
Spain	16,9	2005	12,8	2010
Sweden	36,9	2005	28,5	2010
Switzerland	16,6	2005	26,4	2010
Turkey	25,0	2005	9,5	2010
United Kingdom	0,0	2005	0,0	2010
United States	0,0	2005	0,0	2010

Source: World Bank, Doing Business.

Indicator	Time it takes to prepare, file and pay the corporate income tax, the value added tax and social security contributions			
	Actual Values	Year	Actual Values	Year
Australia	107	2006	107	2010
Austria	170	2006	171	2010
Belgium	60	2006	156	2010
Canada	119	2006	119	2010
Czech Republic	930	2006	613	2010
Denmark	135	2006	135	2010
Finland	269	2006	243	2010
France	132	2006	132	2010
Germany	196	2006	196	2010
Greece	264	2006	224	2010
Hungary	340	2006	330	2010
Iceland	140	2006	140	2010
Ireland	76	2006	76	2010
Italy	360	2006	334	2010
Japan	315	2006	355	2010
Korea	290	2006	250	2010
Luxembourg	58	2007	59	2010
Mexico				
Netherlands	250	2006	164	2010
New Zealand	70	2006	70	2010
Norway	87	2006	87	2010
Poland				
Portugal	328	2006	328	2010
Slovak Republic	325	2006	257	2010
Spain	298	2006	213	2010
Sweden	122	2006	122	2010
Switzerland	63	2006	63	2010
Turkey				
United Kingdom	105	2006	110	2010
United States	325	2006	187	2010

Source: World Bank, Doing Business.

Indicator	Procedures, time and costs to build a warehouse			
	Actual Values	Year	Actual Values	Year
The indicator consists of three indicators (average): 1) Average time spent during each procedure, 2) Official cost of each procedure, 3) Number of procedures to build a warehouse.				
Australia	20,0	2005	34,4	2010
Austria	32,9	2005	38,2	2010
Belgium	31,3	2005	33,9	2010
Canada	24,8	2005	28,4	2010
Czech Republic	55,6	2005	48,5	2010
Denmark	7,2	2005	12,1	2010
Finland	19,3	2005	31,3	2010
France	26,0	2005	22,4	2010
Germany	25,3	2005	22,7	2010
Greece	33,7	2005	32,9	2010
Hungary	68,3	2005	48,5	2010
Iceland	26,1	2005	20,3	2010
Ireland	20,4	2005	29,5	2010
Italy	54,0	2005	56,3	2010
Japan	9,8	2005	30,1	2010
Korea	30,4	2005	27,8	2010
Luxembourg	29,4	2007	31,7	2010
Mexico	40,8	2005	35,8	2010
Netherlands	42,6	2005	52,7	2010
New Zealand	2,7	2005	9,3	2010
Norway	16,9	2005	40,4	2010
Poland	63,3	2005	78,2	2010
Portugal	54,9	2005	52,1	2010
Slovak Republic	35,1	2005	39,2	2010
Spain	39,9	2005	37,9	2010
Sweden	18,7	2005	27,1	2010
Switzerland	26,9	2005	29,9	2010
Turkey	88,3	2005	73,2	2010
United Kingdom	28,7	2005	22,4	2010
United States	18,2	2005	15,6	2010

Source: World Bank, Doing Business.

Indicator	The indicator consists of three indicators (average): 1) Number of procedures legally required to register property, 2) Time spent in completing the procedures, 3) Registering property costs.			
	Actual Values	Year	Actual Values	Year
Australia	24,8	2005	27,1	2010
Austria	22,7	2005	28,7	2010
Belgium	74,4	2005	80,1	2010
Canada	23,9	2005	26,4	2010
Czech Republic	39,1	2005	44,1	2010
Denmark	25,1	2005	31,9	2010
Finland	18,2	2005	21,4	2010
France	73,8	2005	72,5	2010
Germany	27,3	2005	36,7	2010
Greece	70,5	2005	50,6	2010
Hungary	50,2	2005	44,0	2010
Iceland	12,7	2006	13,4	2010
Ireland	44,5	2005	43,3	2010
Italy	29,5	2005	43,9	2010
Japan	29,2	2005	33,8	2010
Korea	36,1	2005	36,4	2010
Luxembourg	55,2	2007	59,7	2010
Mexico				
Netherlands	25,8	2005	20,5	2010
New Zealand	3,5	2005	3,3	2010
Norway	5,6	2005	6,7	2010
Poland				
Portugal	45,7	2005	36,1	2010
Slovak Republic	24,2	2005	11,9	2010
Spain	31,1	2005	34,3	2010
Sweden	12,7	2005	15,5	2010
Switzerland	15,6	2005	15,7	2010
Turkey				
United Kingdom	16,4	2005	16,0	2010
United States	12,7	2005	14,5	2010

Source: World Bank

Indicator	The indicator measures the actual cost to close a business. The cost is measured in percent of estate, based on a standard business closure.			
	Actual Values	Year	Actual Values	Year
Australia	8,0	2005	8,0	2010
Austria	18,0	2005	18,0	2010
Belgium	4,0	2005	4,0	2010
Canada	4,0	2005	4,0	2010
Czech Republic	18,0	2005	15,0	2010
Denmark	4,0	2005	4,0	2010
Finland	4,0	2005	4,0	2010
France	9,0	2005	9,0	2010
Germany	1,0	2005	8,0	2010
Greece	9,0	2005	9,0	2010
Hungary	15,0	2005	15,0	2010
Iceland	4,0	2005	4,0	2010
Ireland	9,0	2005	9,0	2010
Italy	18,0	2005	22,0	2010
Japan	4,0	2005	4,0	2010
Korea	4,0	2005	4,0	2010
Luxembourg	15,0	2007	15,0	2010
Mexico				
Netherlands	4,0	2005	4,0	2010
New Zealand	4,0	2005	4,0	2010
Norway	1,0	2005	1,0	2010
Poland				
Portugal	9,0	2005	9,0	2010
Slovak Republic	18,0	2005	18,0	2010
Spain	15,0	2005	15,0	2010
Sweden	9,0	2005	9,0	2010
Switzerland	4,0	2005	4,0	2010
Turkey				
United Kingdom	6,0	2005	6,0	2010
United States	7,0	2005	7,0	2010

Source: World Bank, Doing Business.

Indicator	Time it takes to close a business			
	Time is recorded in calendar years. The indicator is based on a standard business closure.			
Country	Actual Values	Year	Actual Values	Year
Australia	1,0	2005	1,0	2010
Austria	1,1	2005	1,1	2010
Belgium	0,9	2005	0,9	2010
Canada	0,8	2005	0,8	2010
Czech Republic	9,2	2005	6,5	2010
Denmark	3,3	2005	1,1	2010
Finland	0,9	2005	0,9	2010
France	1,9	2005	1,9	2010
Germany	1,2	2005	1,2	2010
Greece	2,0	2005	2,0	2010
Hungary	2,0	2005	2,0	2010
Iceland	1,0	2005	1,0	2010
Ireland	0,4	2005	0,4	2010
Italy	1,2	2005	1,8	2010
Japan	0,6	2005	0,6	2010
Korea	1,5	2005	1,5	2010
Luxembourg	2,0	2008	2,0	2010
Mexico	1,8	2005	1,8	2010
Netherlands	1,7	2005	1,1	2010
New Zealand	2,0	2005	1,3	2010
Norway	0,9	2005	0,9	2010
Poland	1,4	2005	3,0	2010
Portugal	2,0	2005	2,0	2010
Slovak Republic	4,8	2005	4,0	2010
Spain	1,0	2005	1,0	2010
Sweden	2,0	2005	2,0	2010
Switzerland	3,0	2005	3,0	2010
Turkey	5,9	2005	3,3	2010
United Kingdom	1,0	2005	1,0	2010
United States	2,0	2005	1,5	2010

Source: World Bank, Doing Business.

Indicator	Recovery Rate			
	The recovery rate is recorded as cents on a dollar recouped by creditors through the bankruptcy, insolvency or debt enforcement procedures.			
Country	Actual Values	Year	Actual Values	Year
Australia	80,3	2005	78,8	2010
Austria	72,5	2005	71,5	2010
Belgium	86,5	2005	86,3	2010
Canada	89,6	2005	88,7	2010
Czech Republic	16,8	2005	20,9	2010
Denmark	63,1	2005	86,5	2010
Finland	88,0	2005	87,3	2010
France	45,7	2005	44,7	2010
Germany	56,4	2005	52,2	2010
Greece	44,7	2005	44,2	2010
Hungary	37,9	2005	38,4	2010
Iceland	81,7	2005	76,6	2010
Ireland	87,9	2005	86,6	2010
Italy	71,7	2005	56,6	2010
Japan	92,6	2005	92,5	2010
Korea	81,3	2005	80,5	2010
Luxembourg	41,6	2007	41,7	2010
Mexico				
Netherlands	87,9	2005	82,7	2010
New Zealand	79,4	2005	76,2	2010
Norway	87,6	2005	89,0	2010
Poland				
Portugal	73,2	2005	69,4	2010
Slovak Republic	39,6	2005	45,9	2010
Spain	77,2	2005	73,2	2010
Sweden	72,3	2005	75,1	2010
Switzerland	46,8	2005	46,8	2010
Turkey				
United Kingdom	0,1	2005	84,2	2010
United States	0,1	2005	76,7	2010

Source: World Bank, Doing Business.

Indicator	Difficulty of hiring			
	The index measures whether laws or other regulations have implications for the difficulties of hiring a standard worker in a standard company. Based on fact-based (yes/no) questions but remodelled into a 0–100 index.			
Country	Actual Values	Year	Actual Values	Year
Australia	11	2005	0	2010
Austria	11	2005	0	2010
Belgium	11	2005	11	2010
Canada	11	2005	11	2010
Czech Republic	11	2005	33	2010
Denmark	11	2005	0	2010
Finland	44	2005	44	2010
France	67	2005	67	2010
Germany	44	2005	33	2010
Greece	44	2005	44	2010
Hungary	11	2005	0	2010
Iceland	44	2005	44	2010
Ireland	11	2005	11	2010
Italy	56	2005	33	2010
Japan	11	2005	11	2010
Korea	11	2005	44	2010
Luxembourg	67	2007	67	2010
Mexico	33	2005	33	2010
Netherlands	28	2005	17	2010
New Zealand	11	2005	11	2010
Norway	44	2005	61	2010
Poland	11	2005	11	2010
Portugal	44	2005	33	2010
Slovak Republic	28	2005	17	2010
Spain	78	2005	78	2010
Sweden	28	2005	33	2010
Switzerland	0	2005	0	2010
Turkey	44	2005	44	2010
United Kingdom	11	2005	11	2010
United States	0	2005	0	2010

Source: World Bank, Doing Business.

Difficulty of firing				
The index measures whether laws or other regulations have implications for the difficulties of firing a standard worker in a standard company. Based on fact based (yes/no) questions but remodelled to 0–100 index.				
Indicator	Actual Values	Year	Actual Values	Year
Country				
Australia	0	2005	0	2010
Austria	40	2005	40	2010
Belgium	0	2005	0	2010
Canada	0	2005	0	2010
Czech Republic	10	2005	0	2010
Denmark	0	2005	0	2010
Finland	40	2005	40	2010
France	30	2005	30	2010
Germany	40	2005	40	2010
Greece	40	2005	40	2010
Hungary	0	2005	0	2010
Iceland				
Ireland	20	2005	20	2010
Italy	40	2005	40	2010
Japan	30	2005	30	2010
Korea	30	2005	30	2010
Luxembourg	40	2007	40	2010
Mexico	70	2005	70	2010
Netherlands	70	2005	70	2010
New Zealand	10	2005	10	2010
Norway	30	2005	30	2010
Poland	30	2005	30	2010
Portugal	50	2005	50	2010
Slovak Republic	30	2005	30	2010
Spain	30	2005	30	2010
Sweden	40	2005	40	2010
Switzerland	0	2005	0	2010
Turkey	20	2005	20	2010
United Kingdom	0	2005	0	2010
United States	0	2005	0	2010

Source: World Bank, Doing Business.

Rigidity of Hours				
The indicator measures the rigidity of working overtime. The indicator is an index with five components: (i) whether night work is restricted; (ii) whether weekend work is allowed; (iii) whether the work week consists of five and a half days or more; (iv) whether the workday can extend to 12 hours or more (including overtime); and (v) whether the annual paid vacation days are 21 days or less.				
Indicator	Actual Values	Year	Actual Values	Year
Country				
Australia	40	2005	0	2010
Austria	33	2005	33	2010
Belgium	40	2005	40	2010
Canada	0	2005	0	2010
Czech Republic				
Denmark	20	2005	20	2010
Finland	40	2005	40	2010
France	60	2005	60	2010
Germany	53	2005	53	2010
Greece	67	2005	67	2010
Hungary	67	2005	67	2010
Iceland	20	2005	20	2010
Ireland	0	2005	0	2010
Italy	40	2005	40	2010
Japan	7	2005	7	2010
Korea	40	2005	40	2010
Luxembourg	60	2007	60	2010
Mexico	20	2005	20	2010
Netherlands	40	2005	40	2010
New Zealand	0	2005	0	2010
Norway	40	2005	40	2010
Poland	33	2005	33	2010
Portugal	47	2005	47	2010
Slovak Republic	20	2005	20	2010
Spain	40	2005	40	2010
Sweden	40	2005	40	2010
Switzerland	40	2005	20	2010
Turkey	40	2005	40	2010
United Kingdom	0	2005	20	2010
United States	0	2005	0	2010

Source: World Bank, Doing Business.

Indicator	Enforcing contracts			
	Measured in time, numbers of days			
Country	Actual Values	Year	Actual Values	Year
Australia	395	2005	395	2010
Austria	397	2005	397	2010
Belgium	505	2005	505	2010
Canada	570	2005	570	2010
Czech Republic	830	2005	820	2010
Denmark	380	2005	380	2010
Finland	247	2005	235	2010
France	331	2005	331	2010
Germany	403	2005	394	2010
Greece	819	2005	819	2010
Hungary	335	2005	335	2010
Iceland	393	2006	393	2010
Ireland	515	2005	515	2010
Italy	1390	2005	1210	2010
Japan	316	2005	316	2010
Korea	230	2005	230	2010
Luxembourg	321	2008	321	2010
Mexico	415	2005	415	2010
Netherlands	514	2005	514	2010
New Zealand	216	2005	216	2010
Norway	310	2005	310	2010
Poland	1000	2005	830	2010
Portugal	577	2005	577	2010
Slovak Republic	565	2005	565	2010
Spain	515	2005	515	2010
Sweden	508	2005	508	2010
Switzerland	417	2005	417	2010
Turkey	420	2005	420	2010
United Kingdom	404	2005	404	2010
United States	300	2005	300	2010

Source: World Bank, Doing Business.

Indicator	Enforcing contracts			
	Measured in cost as percentage of claim			
Country	Actual Values	Year	Actual Values	Year
Australia	20,7	2005	20,7	2010
Austria	12,7	2005	18,0	2010
Belgium	16,6	2005	16,6	2010
Canada	22,3	2005	22,3	2010
Czech Republic	33,5	2005	33,0	2010
Denmark	24,6	2005	23,3	2010
Finland	11,1	2005	10,4	2010
France	17,4	2005	17,4	2010
Germany	14,4	2005	14,4	2010
Greece	14,4	2005	14,4	2010
Hungary	13,0	2005	13,0	2010
Iceland	6,1	2006	6,2	2010
Ireland	26,9	2005	26,9	2010
Italy	29,9	2005	29,9	2010
Japan	22,7	2005	22,7	2010
Korea	10,3	2005	10,3	2010
Luxembourg	8,8	2008	9,7	2010
Mexico	32,0	2005	32,0	2010
Netherlands	24,4	2005	24,4	2010
New Zealand	22,0	2005	22,4	2010
Norway	9,9	2005	9,9	2010
Poland	12,0	2005	12,0	2010
Portugal	14,2	2005	13,0	2010
Slovak Republic	25,7	2005	30,0	2010
Spain	17,2	2005	17,2	2010
Sweden	31,3	2005	31,2	2010
Switzerland	21,2	2005	24,0	2010
Turkey	18,8	2005	18,8	2010
United Kingdom	21,9	2005	23,4	2010
United States	9,4	2005	14,4	2010

Source: World Bank, Doing Business.

Indicator	Enforcing contracts Measured in number of procedures			
	Actual Values	Year	Actual Values	Year
Australia	29	2005	28	2010
Austria	27	2005	25	2010
Belgium	28	2005	25	2010
Canada	36	2005	36	2010
Czech Republic	29	2005	27	2010
Denmark	34	2005	34	2010
Finland	32	2005	32	2010
France	30	2005	29	2010
Germany	30	2005	30	2010
Greece	39	2005	39	2010
Hungary	33	2005	33	2010
Iceland	26	2006	26	2010
Ireland	22	2005	20	2010
Italy	41	2005	40	2010
Japan	30	2005	30	2010
Korea	35	2005	35	2010
Luxembourg	26	2008	26	2010
Mexico	38	2005	38	2010
Netherlands	25	2005	25	2010
New Zealand	30	2005	30	2010
Norway	33	2005	33	2010
Poland	38	2005	38	2010
Portugal	36	2005	31	2010
Slovak Republic	31	2005	30	2010
Spain	40	2005	39	2010
Sweden	30	2005	30	2010
Switzerland	32	2005	31	2010
Turkey	37	2005	35	2010
United Kingdom	30	2005	30	2010
United States	33	2005	32	2010

Source: World Bank, Doing Business.

Indicator	Highest marginal income tax plus social contributions The indicator measures the highest rate of taxation in percentage of the gross wage. The indicator is based on a standard case: single (without children) with high income			
	Actual Values	Year	Actual Values	Year
Australia	48,5	2003	44,8	2008
Austria	49,8	2003	41,9	2008
Belgium	59,3	2003	69,6	2008
Canada	39,4	2003	36,0	2008
Czech Republic	34,4	2003	50,2	2008
Denmark	62,3	2003	63,0	2008
Finland	50,7	2003	58,0	2008
France	35,6	2003	59,7	2008
Germany	63,2	2003	44,3	2008
Greece	41,1	2003	58,7	2008
Hungary	68,4	2003	64,8	2008
Iceland	42,0	2003	37,6	2008
Ireland	44,5	2003	48,9	2008
Italy	55,6	2003	61,5	2008
Japan	32,0	2003	34,0	2008
Korea	23,4	2003	24,3	2008
Luxembourg	47,8	2003	53,1	2008
Mexico	27,0	2003	27,1	2008
Netherlands	52,0	2003	52,0	2008
New Zealand	39,0	2003	39,0	2008
Norway	49,3	2003	53,7	2008
Poland	34,2	2003	49,9	2008
Portugal	35,0	2003	55,6	2008
Slovak Republic	30,2	2003	42,8	2008
Spain	33,0	2003	37,0	2008
Sweden	51,2	2003	67,1	2008
Switzerland	35,5	2003	42,6	2008
Turkey	36,8	2003	48,9	2008
United Kingdom	23,0	2003	47,7	2008
United States	39,1	2003	43,7	2008

Source: OECD, Taxation of Wage Income.

Indicator	Average income tax plus social contributions			
	The indicator measures the average rate of taxation in percentage of the gross wage. The indicator is based on a standard case: single (without children) with high income.			
Country	Actual Values	Year	Actual Values	Year
Australia	33,00	2003	28,68	2008
Austria	35,70	2003	38,15	2008
Belgium	47,60	2003	49,30	2008
Canada	27,60	2003	26,99	2008
Czech Republic	26,40	2003	27,26	2008
Denmark	50,10	2003	49,58	2008
Finland	38,30	2003	37,18	2008
France	30,50	2003	33,28	2008
Germany	48,80	2003	45,62	2008
Greece	23,40	2003	32,73	2008
Hungary	39,70	2003	45,14	2008
Iceland	35,00	2003	28,41	2008
Ireland	27,60	2003	26,86	2008
Italy	33,90	2003	36,02	2008
Japan	20,50	2003	24,27	2008
Korea	14,50	2003	15,96	2008
Luxembourg	31,40	2003	35,11	2008
Mexico	11,40	2003	12,49	2008
Netherlands	35,30	2003	41,13	2008
New Zealand	26,10	2003	26,93	2008
Norway	36,00	2003	36,00	2008
Poland	32,50	2003	30,52	2008
Portugal	23,40	2003	30,05	2008
Slovak Republic	23,50	2003	25,40	2008
Spain	23,70	2003	24,32	2008
Sweden	36,50	2003	37,21	2008
Switzerland	25,70	2003	26,54	2008
Turkey	32,20	2003	31,09	2008
United Kingdom	27,00	2003	30,30	2008
United States	29,60	2003	30,46	2008

Source: OECD, Taxation of Wage Income.

Indicator	Taxation of dividends			
	The indicator measures the top marginal tax rate of dividend income.			
Country	Actual Values	Year	Actual Values	Year
Australia	48,5	2004	46,5	2009
Austria	25,0	2004	25,0	2009
Belgium	15,0	2004	15,0	2009
Canada	46,4	2004	46,4	2009
Czech Republic	15,0	2004	15,0	2009
Denmark	43,0	2004	45,0	2009
Finland	29,0	2004	28,0	2009
France	55,9	2004	48,7	2009
Germany	47,5	2004	26,4	2009
Greece				
Hungary	35,0	2004	35,0	2009
Iceland	10,0	2004	10,0	2009
Ireland	42,0	2004	41,0	2009
Italy	46,1	2004	44,9	2009
Japan	50,0	2004	10,0	2009
Korea	39,6	2004	38,5	2009
Luxembourg	39,0	2004	39,0	2009
Mexico	33,0	2004	28,0	2009
Netherlands	30,0	2004	25,0	2009
New Zealand	39,0	2004	39,0	2009
Norway	28,0	2004	28,0	2009
Poland	19,0	2004	19,0	2009
Portugal	40,0	2004	20,0	2009
Slovak Republic	15,0	2001	15,0	2003
Spain	45,0	2004	18,0	2009
Sweden	30,0	2004	30,0	2009
Switzerland	40,4	2004	25,7	2009
Turkey	45,0	2004	35,0	2009
United Kingdom	32,5	2004	32,5	2009
United States	18,7	2004	17,3	2009

Source: Taxation of Corporate and Capital Income.

Indicator	Taxation of stock options			
	The indicator measures the effective tax rate of stock options for a hypothetical taxpayer with certain assumptions regarding income, family situation and portfolio development.			
Country	Actual Values	Year	Actual Values	Year
Australia	0,42	2005	0,42	2005
Austria	0,65	2005	0,65	2005
Belgium	0,50	2005	0,50	2005
Canada	0,46	2005	0,46	2005
Czech Republic	0,55	2005	0,55	2005
Denmark	0,49	2005	0,49	2005
Finland	0,60	2005	0,60	2005
France	0,48	2005	0,48	2005
Germany	0,32	2005	0,32	2005
Greece	0,40	2005	0,40	2005
Hungary	0,49	2005	0,49	2005
Iceland	0,39	2005	0,39	2005
Ireland	0,27	2005	0,27	2005
Italy	0,25	2005	0,25	2005
Japan	0,34	2005	0,34	2005
Korea	0,23	2005	0,23	2005
Luxembourg	0,43	2005	0,43	2005
Mexico	0,38	2005	0,38	2005
Netherlands	0,52	2005	0,52	2005
New Zealand	0,55	2005	0,55	2005
Norway	0,50	2005	0,50	2005
Poland	0,30	2005	0,30	2005
Portugal	0,14	2005	0,14	2005
Slovak Republic	0,36	2005	0,36	2005
Spain	0,36	2005	0,36	2005
Sweden	0,50	2005	0,50	2005
Switzerland	0,38	2005	0,38	2005
Turkey	0,45	2005	0,45	2005
United Kingdom	0,15	2005	0,15	2005
United States	0,44	2005	0,44	2005

Source: OECD, The Taxation of Employee Stock Options.

Indicator	SME tax rates			
	The indicator measures the corporate SME tax rate			
Country	Actual Values	Year	Actual Values	Year
Australia	30,0	2004	30,0	2009
Austria	34,0	2004	25,0	2009
Belgium	25,0	2005	34,0	2009
Canada	18,6	2005	31,3	2009
Czech Republic	28,0	2004	20,0	2009
Denmark	30,0	2004	25,0	2009
Finland	29,0	2004	26,0	2009
France	15,0	2004	34,4	2009
Germany	25,0	2004	30,2	2009
Greece	35,0	2004	25,0	2009
Hungary	18,0	2004	20,0	2009
Iceland	18,0	2004	15,0	2009
Ireland	12,5	2004	12,5	2009
Italy	34,0	2004	27,5	2009
Japan	22,0	2004	39,5	2009
Korea	15,0	2004	24,2	2009
Luxembourg	24,0	2004	28,6	2009
Mexico	33,0	2004	28,0	2009
Netherlands	29,0	2004	25,5	2009
New Zealand	33,0	2004	30,0	2009
Norway	28,0	2004	28,0	2009
Poland	19,0	2004	19,0	2009
Portugal	20,0	2004	26,5	2009
Slovak Republic	19,0	2004	19,0	2009
Spain	30,0	2004	30,0	2009
Sweden	28,0	2004	26,3	2009
Switzerland	22,0	2004	21,2	2009
Turkey	30,0	2004	20,0	2009
United Kingdom	19,0	2004	28,0	2009
United States	15,0	2004	39,1	2009

Source: OECD, Taxation of Corporate and Capital Income.

Indicator	Taxation of corporate income			
	The indicator measures the revenue from corporate income tax as percentage of GDP on a three year moving average.			
Country	Actual Values	Year	Actual Values	Year
Australia	5,3	2001	6,6	2007
Austria	2,5	2002	2,3	2007
Belgium	3,0	2002	3,6	2007
Canada	3,2	2002	3,6	2007
Czech Republic	4,3	2002	4,8	2007
Denmark	2,8	2002	3,9	2007
Finland	3,9	2002	3,5	2007
France	2,9	2002	2,8	2007
Germany	1,0	2002	2,0	2007
Greece	2,8	2002	2,8	2007
Hungary	2,3	2002	2,4	2007
Iceland	1,2	2001	2,3	2007
Ireland	3,7	2002	3,5	2007
Italy	3,1	2002	3,3	2007
Japan	3,5	2001	4,6	2007
Korea	3,3	2002	4,0	2007
Luxembourg	7,6	2002	5,4	2007
Mexico				
Netherlands	3,3	2002	3,5	2007
New Zealand	4,2	2002	5,7	2007
Norway	8,3	2002	12,0	2007
Poland	2,1	2001	2,4	2007
Portugal	3,2	2002	3,2	2007
Slovak Republic	2,6	2002	2,9	2007
Spain	3,0	2002	4,2	2007
Sweden	2,6	2002	3,7	2007
Switzerland	2,7	2002	2,9	2007
Turkey	2,4	2002	1,6	2007
United Kingdom	3,1	2002	3,6	2007
United States	1,9	2002	3,1	2007

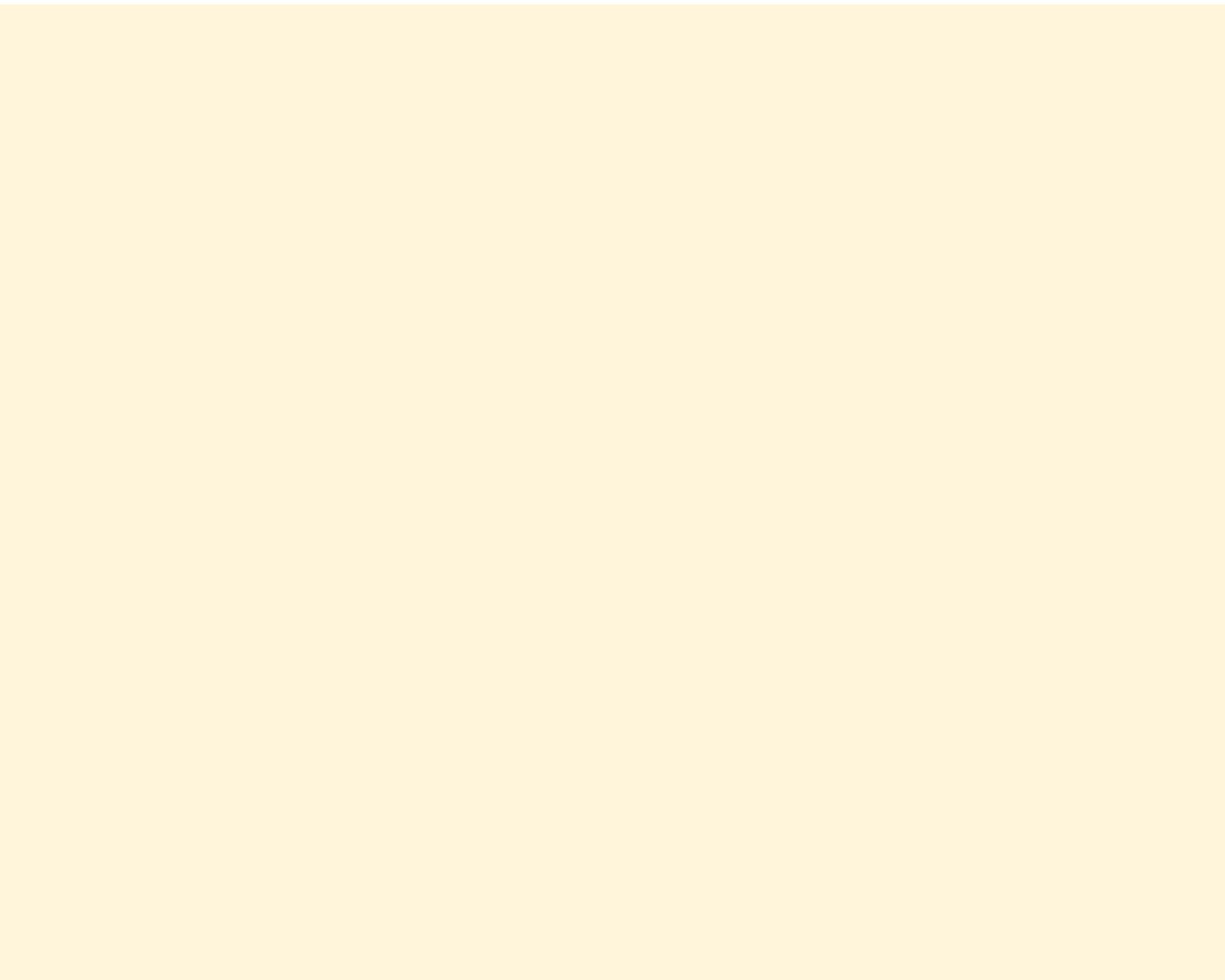
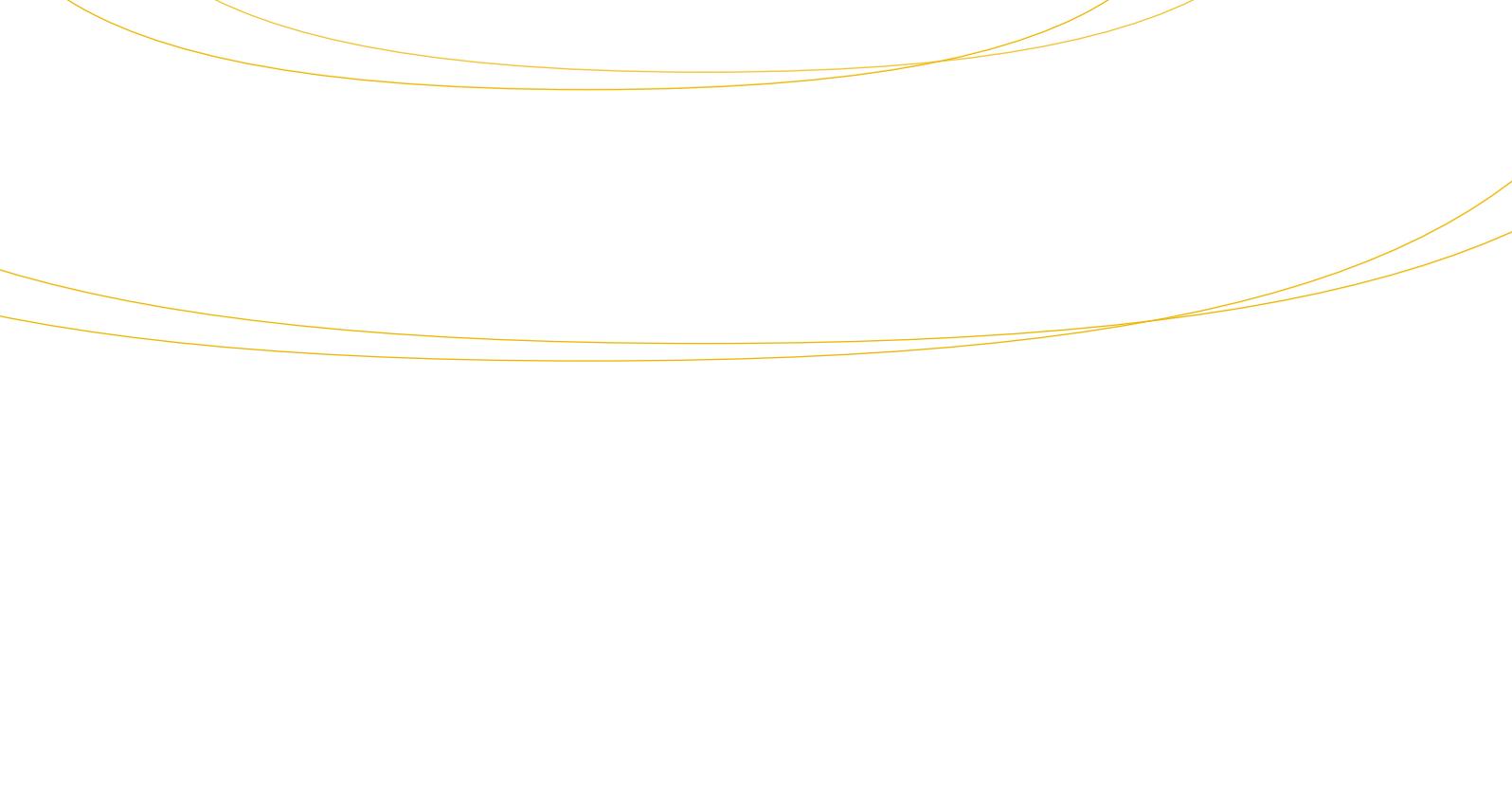
Source: OECD, Revenue Statistics.

Indicator	Intellectual property rights			
	Average of the two labels: (Property rights, including over financial assets (1 = are poorly defined and not protected by law, 7 = are clearly defined and well protected by law) og Intellectual property protection in your country (1 = is weak or nonexiststent, 7 = is equal to the world's most stringent)			
Country	Actual Values	Year	Actual Values	Year
Australia	6,0	2004	6,1	2009
Austria	6,3	2004	6,4	2009
Belgium	5,4	2004	5,8	2009
Canada	5,5	2004	6,0	2009
Czech Republic	3,8	2004	4,3	2009
Denmark	6,3	2004	6,4	2009
Finland	6,3	2004	6,4	2009
France	5,8	2004	6,1	2009
Germany	6,2	2004	6,3	2009
Greece	4,6	2004	4,6	2009
Hungary	4,7	2004	4,7	2009
Iceland	6,0	2004	6,2	2009
Ireland	5,1	2004	6,0	2009
Italy	4,9	2004	4,6	2009
Japan	5,0	2004	6,0	2009
Korea	4,9	2004	5,2	2009
Luxembourg	5,7	2004	5,9	2009
Mexico	4,3	2004	3,7	2009
Netherlands	6,0	2004	6,1	2009
New Zealand	5,9	2004	6,0	2009
Norway	5,3	2004	6,1	2009
Poland	3,7	2004	3,7	2009
Portugal	5,0	2004	5,3	2009
Slovak Republic	4,0	2004	4,3	2009
Spain	5,1	2004	5,1	2009
Sweden	6,0	2004	6,3	2009
Switzerland	6,2	2004	6,5	2009
Turkey	3,5	2004	3,6	2009
United Kingdom	6,2	2004	5,5	2009
United States	6,2	2004	5,7	2009

Source: World Economic Forum (WEF), World Competitiveness Report.

Indicator	Property rights Measuring financial assets (1 = are poorly defined and not protected by law, 7 = are clearly defined and well protected by law)			
	Actual Values	Year	Actual Values	Year
Australia	6,4	2007	6,3	2009
Austria	6,4	2007	6,6	2009
Belgium	5,9	2007	6,0	2009
Canada	5,9	2007	6,4	2009
Czech Republic	4,6	2007	4,7	2009
Denmark	6,6	2007	6,6	2009
Finland	6,4	2007	6,5	2009
France	6,1	2007	6,1	2009
Germany	6,8	2007	6,5	2009
Greece	5,3	2007	5,1	2009
Hungary	5,5	2007	5,2	2009
Iceland	6,7	2007	6,4	2009
Ireland	6,4	2007	6,4	2009
Italy	5,1	2007	4,8	2009
Japan	6,2	2007	6,3	2009
Korea	5,4	2007	5,4	2009
Luxembourg	6,3	2007	6,1	2009
Mexico	4,6	2007	4,1	2009
Netherlands	6,5	2007	6,3	2009
New Zealand	6,2	2007	6,2	2009
Norway	6,3	2007	6,4	2009
Poland	3,7	2007	4,0	2009
Portugal	5,5	2007	5,6	2009
Slovak Republic	5,0	2007	4,9	2009
Spain	5,6	2007	5,4	2009
Sweden	6,2	2007	6,5	2009
Switzerland	6,6	2007	6,7	2009
Turkey	4,8	2007	4,2	2009
United Kingdom	6,5	2007	5,5	2009
United States	5,8	2007	5,8	2009

Source: WEF, World Competitiveness Report.



Market Conditions

Indicator	Antitrust framework			
	The indicator measures the scope and enforcement of law and independence of competition authority (Scale from 0 to 6 from best to worst performance)			
Country	Actual Values	Year	Actual Values	Year
Australia	1,8	2007	1,8	2007
Austria	3,1	2007	3,1	2007
Belgium	3,2	2007	3,2	2007
Canada	1,7	2007	1,7	2007
Czech Republic	1,5	2007	1,5	2007
Denmark	2,1	2007	2,1	2007
Finland	2,0	2007	2,0	2007
France	2,5	2007	2,5	2007
Germany	1,8	2007	1,8	2007
Greece	3,3	2007	3,3	2007
Hungary	2,0	2007	2,0	2007
Iceland	2,1	2007	2,1	2007
Ireland	2,3	2007	2,3	2007
Italy	2,0	2007	2,0	2007
Japan	1,9	2007	1,9	2007
Korea	1,4	2007	1,4	2007
Luxembourg	2,7	2007	2,7	2007
Mexico	2,6	2007	2,6	2007
Netherlands	2,3	2007	2,3	2007
New Zealand	1,6	2007	1,6	2007
Norway	2,8	2007	2,8	2007
Poland	2,2	2007	2,2	2007
Portugal	2,9	2007	2,9	2007
Slovak Republic	1,8	2007	1,8	2007
Spain	3,1	2007	3,1	2007
Sweden	2,0	2007	2,0	2007
Switzerland	2,6	2007	2,6	2007
Turkey	2,5	2007	2,5	2007
United Kingdom	2,0	2007	2,0	2007
United States	1,4	2007	1,4	2007

Source: OECD, Competitive Law and Policy (CLP).

Indicator	Network policies			
	The indicator measures the independence of sector regulators and network access (Scale from 0 to 6 from best to worst performance)			
Country	Actual Values	Year	Actual Values	Year
Australia	1,37	2007	1,37	2007
Austria	2,20	2007	2,20	2007
Belgium	2,04	2007	2,04	2007
Canada	2,09	2007	2,09	2007
Czech Republic	1,44	2007	1,44	2007
Denmark	1,75	2007	1,75	2007
Finland	2,08	2007	2,08	2007
France	1,89	2007	1,89	2007
Germany	2,96	2007	2,96	2007
Greece	2,23	2007	2,23	2007
Hungary	2,15	2007	2,15	2007
Iceland	2,98	2007	2,98	2007
Ireland	2,16	2007	2,16	2007
Italy	1,53	2007	1,53	2007
Japan	5,43	2007	5,43	2007
Korea	2,25	2007	2,25	2007
Luxembourg	2,15	2007	2,15	2007
Mexico	2,92	2007	2,92	2007
Netherlands	2,24	2007	2,24	2007
New Zealand	3,31	2007	3,31	2007
Norway	2,89	2007	2,89	2007
Poland	1,89	2007	1,89	2007
Portugal	1,68	2007	1,68	2007
Slovak Republic	4,13	2007	4,13	2007
Spain	2,06	2007	2,06	2007
Sweden	2,47	2007	2,47	2007
Switzerland	4,46	2007	4,46	2007
Turkey	2,82	2007	2,82	2007
United Kingdom	1,52	2007	1,52	2007
United States	1,45	2007	1,45	2007

Source: OECD, Competitive Law and Policy (CLP) Indicators for the OECD Countries, 2007.

Indicator	Import burdens			
	Calculated as an average of: 1. Trading Across borders – Documents for import; 2. Trading Across borders – Time for import; 3. Trading Across borders – Cost to import			
Country	Actual Values	Year	Actual Values	Year
Australia	41,97	2006	33,30	2010
Austria	34,39	2006	35,07	2010
Belgium	12,30	2006	46,18	2010
Canada	33,18	2006	45,35	2010
Czech Republic	56,73	2006	65,48	2010
Denmark	15,79	2006	8,45	2010
Finland	14,57	2006	21,67	2010
France	72,25	2006	24,64	2010
Germany	25,65	2006	27,39	2010
Greece	53,86	2006	70,59	2010
Hungary	39,79	2006	61,65	2010
Iceland	32,13	2006	56,24	2010
Ireland	46,24	2006	34,46	2010
Italy	51,73	2006	47,02	2010
Japan	41,93	2006	36,62	2010
Korea	20,87	2006	13,40	2010
Luxembourg	22,08	2008	31,43	2010
Mexico	36,99	2006	70,00	2010
Netherlands	33,81	2006	25,84	2010
New Zealand	40,81	2006	28,69	2010
Norway	18,54	2006	16,99	2010
Poland	34,43	2006	56,15	2010
Portugal	59,41	2006	42,17	2010
Slovak Republic	31,21	2006	85,90	2010
Spain	10,88	2006	55,68	2010
Sweden	25,46	2006	9,90	2010
Switzerland	25,46	2006	44,78	2010
Turkey	20,08	2006	60,33	2010
United Kingdom	35,02	2006	28,70	2010
United States	28,00	2006	32,87	2010

Source: World Bank, Doing Business.

Indicator	Export burdens			
	Calculate as an average of: 1) Trading Across borders – Number of all documents required to export the goods, 2) Trading Across borders – of signatures required to export the goods, 3) Trading Across borders – time necessary to comply with all procedures required to export goods			
Country	Actual Values	Year	Actual Values	Year
Australia	52,38	2005	51,62	2010
Austria	38,78	2005	37,55	2010
Belgium	13,90	2005	53,33	2010
Canada	28,10	2005	44,17	2010
Czech Republic	57,74	2005	56,06	2010
Denmark	19,53	2005	19,64	2010
Finland	23,51	2005	20,00	2010
France	77,90	2005	25,51	2010
Germany	33,39	2005	28,03	2010
Greece	55,57	2005	72,27	2010
Hungary	75,00	2005	70,05	2010
Iceland	53,07	2005	81,76	2010
Ireland	13,89	2005	35,36	2010
Italy	41,68	2005	68,01	2010
Japan	48,00	2005	38,32	2010
Korea	49,06	2005	19,57	2010
Luxembourg	41,78	2007	49,41	2010
Mexico	33,33	2005	68,79	2010
Netherlands	45,56	2005	26,52	2010
New Zealand	28,10	2005	54,58	2010
Norway	27,06	2005	26,74	2010
Poland	36,16	2005	57,29	2010
Portugal	38,73	2005	42,26	2010
Slovak Republic	54,17	2005	87,96	2010
Spain	11,11	2005	53,50	2010
Sweden	37,02	2005	24,85	2010
Switzerland	37,02	2005	50,80	2010
Turkey	22,23	2005	67,24	2010
United Kingdom	48,07	2005	37,36	2010
United States	44,83	2005	31,31	2010

Source: World Bank, Doing Business.

Indicator	Government enterprise and investment			
	The indicator measures the extent to which countries use private rather than government enterprises to produce goods and services (maximum rating equals 10)			
Country	Actual Values	Year	Actual Values	Year
Australia	10	2002	10	2007
Austria	10	2002	10	2007
Belgium	7	2002	10	2007
Canada	10	2002	10	2007
Czech Republic	8	2002	8	2007
Denmark	10	2002	10	2007
Finland	8	2002	10	2007
France	4	2002	10	2007
Germany	6	2002	10	2007
Greece	8	2002	10	2007
Hungary	4	2002	8	2007
Iceland	7	2002	10	2007
Ireland	10	2002	10	2007
Italy	6	2002	10	2007
Japan	7	2002	10	2007
Korea				
Luxembourg	7	2002	8	2007
Mexico	7	2002	8	2007
Netherlands	10	2002	8	2007
New Zealand	10	2002	10	2007
Norway	8	2002	10	2007
Poland	4	2002	8	2007
Portugal	10	2002	10	2007
Slovak Republic	6	2002	10	2007
Spain	4	2002	10	2007
Sweden	6	2002	8	2007
Switzerland	8	2002	10	2007
Turkey	7	2002	8	2007
United Kingdom	10	2002	10	2007
United States	8	2002	8	2007

Source: Economic Freedom of the World 2008 Annual Report.

Indicator	Ownership of banks			
	The indicator measures the extent to which Banks are owned by government (maximum rating equals 10)			
Country	Actual Values	Year	Actual Values	Year
Australia	10	2002	10	2007
Austria	10	2002	10	2007
Belgium	10	2002	10	2007
Canada	10	2002	10	2007
Czech Republic	8	2002	10	2007
Denmark	10	2002	10	2007
Finland	10	2002	10	2007
France	10	2002	10	2007
Germany	5	2002	5	2007
Greece	8	2002	8	2007
Hungary	8	2002	10	2007
Iceland	10	2002	10	2007
Ireland	8	2002	8	2007
Italy	8	2002	8	2007
Japan	5	2002	8	2007
Korea				
Luxembourg	10	2002	8	2007
Mexico	10	2002	10	2007
Netherlands	10	2002	10	2007
New Zealand	10	2002	10	2007
Norway	10	2002	10	2007
Poland	8	2002	8	2007
Portugal	8	2002	5	2007
Slovak Republic	10	2002	10	2007
Spain	10	2002	10	2007
Sweden	10	2002	10	2007
Switzerland	8	2002	8	2007
Turkey	5	2002	5	2007
United Kingdom	10	2002	10	2007
United States	10	2002	10	2007

Source: Economic Freedom of the World 2008 Annual Report.

Indicator	Price controls			
	The indicator measures the extent to which Prices are determined by the market or by the government (maximum rating equals 10)			
Country	Actual Values	Year	Actual Values	Year
Australia	8	2002	7	2007
Austria	7	2002	9	2007
Belgium	5	2002	6	2007
Canada	8	2002	7	2007
Czech Republic	7	2002	8	2007
Denmark	7	2002	8	2007
Finland	9	2002	5	2007
France	7	2002	5	2007
Germany	6	2002	7	2007
Greece	6	2002	4	2007
Hungary	5	2002	8	2007
Iceland	8	2002	8	2007
Ireland	7	2002	7	2007
Italy	5	2002	5	2007
Japan	5	2002	5	2007
Korea				
Luxembourg	6	2002	7	2007
Mexico	6	2002	3	2007
Netherlands	7	2002	7	2007
New Zealand	10	2002	9	2007
Norway	6	2002	6	2007
Poland	3	2002	1	2007
Portugal	6	2002	6	2007
Slovak Republic	4	2002	3	2007
Spain	6	2002	5	2007
Sweden	9	2002	7	2007
Switzerland	6	2002	6	2007
Turkey	5	2002	6	2007
United Kingdom	6	2002	6	2007
United States	8	2002	6	2007

Source: Economic Freedom of the World 2008 Annual Report.

Indicator	Licensing restrictions			
	The indicator measures how easy it is for companies to attain licenses from the government, and if this is done transparently and open on the market (maximum rating equals 10)			
Country	Actual Values	Year	Actual Values	Year
Australia	8,9	2005	7,3	2007
Austria	7,6	2005	7,6	2007
Belgium	7,8	2005	8,0	2007
Canada	9,3	2005	9,5	2007
Czech Republic	6,9	2005	8,0	2007
Denmark	9,6	2005	9,7	2007
Finland	9,9	2005	9,8	2007
France	7,8	2005	8,6	2007
Germany	8,1	2005	9,2	2007
Greece	7,9	2005	8,1	2007
Hungary	6,9	2005	7,6	2007
Iceland	8,9	2005	9,7	2007
Ireland	7,9	2005	7,8	2007
Italy	6,0	2005	6,5	2007
Japan	9,5	2005	7,8	2007
Korea				
Luxembourg	7,3	2007	7,3	2007
Mexico	7,0	2005	8,4	2007
Netherlands	7,7	2005	7,0	2007
New Zealand	9,8	2005	9,8	2007
Norway	9,2	2005	6,7	2007
Poland	5,5	2005	5,6	2007
Portugal	5,5	2005	5,5	2007
Slovak Republic	6,5	2005	6,2	2007
Spain	6,3	2005	7,0	2007
Sweden	8,8	2005	8,8	2007
Switzerland	8,3	2005	8,3	2007
Turkey	6,5	2005	7,4	2007
United Kingdom	8,9	2005	8,5	2007
United States	9,7	2005	10,0	2007

Source: Economic Freedom of the World 2008 Annual Report.

Access to Finance

Indicator	Private credit			
	The indicator measures the ratio of credit towards the private sector from deposit-taking financial institutions relative to GDP			
Country	Actual Values	Year	Actual Values	Year
Australia	0,99	2004	1,22	2008
Austria	1,05	2004	1,19	2008
Belgium	0,72	2004	0,94	2008
Canada	1,7	2004	1,28	2008
Czech Republic	0,33	2004	0,53	2008
Denmark	1,59	2004	2,18	2008
Finland	0,68	2004	0,86	2008
France	0,9	2004	1,08	2008
Germany	1,12	2004	1,08	2008
Greece	0,61	2004	0,93	2008
Hungary	0,46	2004	0,70	2008
Iceland	1,65	2004	3,27	2006
Ireland	1,36	2004	2,17	2008
Italy	0,85	2004	1,05	2008
Japan	1,75	2004	1,63	2008
Korea	0,98	2004	1,09	2008
Luxembourg	1,08	2004	1,97	2008
Mexico	0,17	2004	0,21	2008
Netherlands	1,58	2004	1,93	2008
New Zealand	1,22	2004	1,50	2008
Norway				
Poland	0,28	2004	0,50	2008
Portugal	1,41	2004	1,80	2008
Slovak Republic	0,31	2004	0,45	2008
Spain	1,25	2004	2,01	2008
Sweden	1,05	2004	1,30	2008
Switzerland	1,6	2004	1,68	2008
Turkey	0,23	2004	0,33	2008
United Kingdom	1,54	2004	2,11	2008
United States	1,91	2004	1,94	2008

Source: World Bank: World Development Indicators.

Indicator	Interest rate spread			
	The indicator measures the lending rate minus deposit rate based on an average of annual rates for each country			
Country	Actual Values	Year	Actual Values	Year
Australia	5,09	2002	5,36	2007
Austria	1,11	2003	0,74	2008
Belgium	2,00	2003	1,78	2008
Canada	4,64	2003	4,63	2008
Czech Republic	6,94	2003	5,36	2008
Denmark	3,46	2003	2,43	2008
Finland	2,74	2003	2,54	2008
France	0,72	2003	0,88	2008
Germany	1,32	2003	1,22	2008
Greece	1,49	2003	1,23	2008
Hungary	-1,38	2003	0,26	2008
Iceland				
Ireland	2,12	2003	1,72	2008
Italy	4,79	2003	4,67	2008
Japan	1,78	2003	1,32	2008
Korea	2,09	2003	1,46	2008
Luxembourg	1,76	2003	1,25	2008
Mexico	3,93	2003	5,67	2008
Netherlands	0,77	2003	0,77	2008
New Zealand	4,71	2003	5,95	2008
Norway	2,00	2003	1,00	2008
Poland	3,55	2003	2,02	2008
Portugal	1,59	2003	1,54	2008
Slovak Republic	3,60	2002	4,27	2007
Spain	0,92	2003	0,84	2008
Sweden	3,65	2000	2,52	2005
Switzerland	3,10	2003	3,18	2008
Turkey				
United Kingdom	1,19	2003	1,20	2004
United States	2,97	2003	2,12	2008

Source: IMD World Competitiveness.

Indicator	Ease of access to loans			
	The indicator measures how easy is it to obtain a bank loan in a country with only a good business plan and no collateral (1 = impossible, 7 = easy)			
Country	Actual Values	Year	Actual Values	Year
Australia	4,8	2004	4,4	2010
Austria	3,7	2004	3,5	2010
Belgium	4,2	2004	3,9	2010
Canada	4,1	2004	3,9	2010
Czech Republic	2,7	2004	3,5	2010
Denmark	5,1	2004	4,3	2010
Finland	5,2	2004	4,7	2010
France	4,2	2004	3,5	2010
Germany	3,5	2004	3	2010
Greece	3,8	2004	3,1	2010
Hungary	3,3	2004	2,8	2010
Iceland	4,8	2004	2,8	2010
Ireland	5	2004	3	2010
Italy	3,5	2004	2,2	2010
Japan	2,5	2004	3,2	2010
Korea	3,7	2004	2,8	2010
Luxembourg	4,9	2004	5	2010
Mexico	2,3	2004	2,7	2010
Netherlands	4,4	2004	4,2	2010
New Zealand	4,6	2004	4	2010
Norway	4,7	2004	4,6	2010
Poland	3,3	2004	3,1	2010
Portugal	3,9	2004	3,2	2010
Slovak Republic	3,5	2004	4	2010
Spain	3,8	2004	2,9	2010
Sweden	4,8	2004	4,4	2010
Switzerland	3,9	2004	3,7	2010
Turkey	2,7	2004	2,8	2010
United Kingdom	5,1	2004	3,2	2010
United States	4,6	2004	3,7	2010

Source: WEF, World Competitiveness Report.

Indicator	Country credit rating			
	The indicator measures the country credit rating, which is based on an assessment by the Institutional Investor Magazine Ranking.			
Country	Actual Values	Year	Actual Values	Year
Australia	87,1	2003	87,6	2009
Austria	92,1	2003	87,6	2009
Belgium	89,1	2003	87,2	2009
Canada	92,4	2003	92,1	2009
Czech Republic	68,6	2003	75,5	2009
Denmark	93	2003	90,4	2009
Finland	92,3	2003	90,6	2009
France	92,7	2003	90,2	2009
Germany	92,4	2003	91,5	2009
Greece	78,1	2003	74,9	2009
Hungary	66	2003	57,6	2009
Iceland	71,2	2002	80,8	2006
Ireland	90,5	2003	80	2009
Italy	84,9	2003	78,5	2009
Japan	83,2	2003	87,3	2009
Korea	70,6	2003	72,7	2009
Luxembourg	93,9	2003	92,6	2009
Mexico	60	2003	66	2009
Netherlands	92,9	2003	91,7	2009
New Zealand	83,4	2003	83,9	2009
Norway	93,7	2003	92,5	2009
Poland	65,1	2003	70,5	2009
Portugal	83,6	2003	80,1	2009
Slovak Republic	63,2	2001	75,4	2009
Spain	88,2	2003	81,6	2009
Sweden	92,1	2003	88,8	2009
Switzerland	95,2	2003	92,8	2009
Turkey	40	2003	52,5	2009
United Kingdom	93,6	2003	86,8	2009
United States	93,7	2003	88,9	2009

Source: IMD: Competitiveness Yearbook.

Indicator	Venture capital – early stage			
	The indicator measures the total early stage venture capital investment per year as a share of GDP			
Country	Actual Values	Year	Actual Values	Year
Australia	0,011	2007	0,018	2008
Austria	0,011	2007	0,011	2008
Belgium	0,028	2007	0,021	2008
Canada	0,016	2007	0,012	2008
Czech Republic	0,000	2007	0,000	2008
Denmark	0,061	2007	0,041	2008
Finland	0,043	2007	0,049	2008
France	0,019	2007	0,025	2008
Germany	0,016	2007	0,018	2008
Greece	0,000	2007	0,006	2008
Hungary	0,001	2007	0,001	2008
Iceland				
Ireland	0,018	2007	0,025	2008
Italy	0,002	2007	0,002	2008
Japan	0,007	2006	0,007	2006
Korea	0,058	2007	0,028	2008
Luxembourg	0,202	2007	0,022	2008
Mexico				
Netherlands	0,036	2007	0,044	2008
New Zealand	0,046	2007	0,046	2007
Norway	0,060	2007	0,050	2008
Poland	0,001	2007	0,003	2008
Portugal	0,015	2007	0,025	2008
Slovak Republic				
Spain	0,012	2007	0,010	2008
Sweden	0,098	2007	0,066	2008
Switzerland	0,042	2007	0,033	2008
Turkey				
United Kingdom	0,026	2007	0,032	2008
United States	0,010	2007	0,011	2008

Source: OECD, EIP.

Indicator	Venture capital availability			
	Entrepreneurs with innovative but risky projects can generally find venture capital in your country (1 = not true, 7 = true)			
Country	Actual Values	Year	Actual Values	Year
Australia	4,8	2004	4	2009
Austria	3,7	2004	3,2	2009
Belgium	4,2	2004	3,5	2009
Canada	4,1	2004	3,8	2009
Czech Republic	2,7	2004	2,9	2009
Denmark	5,1	2004	3,8	2009
Finland	5,2	2004	4,3	2009
France	4,2	2004	3,5	2009
Germany	3,5	2004	3	2009
Greece	3,8	2004	2,7	2009
Hungary	3,3	2004	2,4	2009
Iceland	4,8	2004	2,9	2009
Ireland	5	2004	3,2	2009
Italy	3,5	2004	2,3	2009
Japan	2,5	2004	3	2009
Korea	3,7	2004	2,8	2009
Luxembourg	4,9	2004	4,3	2009
Mexico	2,3	2004	2,4	2009
Netherlands	4,4	2004	4,1	2009
New Zealand	4,6	2004	3,6	2009
Norway	4,7	2004	4,4	2009
Poland	3,3	2004	3,1	2009
Portugal	3,9	2004	2,9	2009
Slovak Republic	3,5	2004	3,2	2009
Spain	3,8	2004	3,1	2009
Sweden	4,8	2004	4,3	2009
Switzerland	3,9	2004	3,6	2009
Turkey	2,7	2004	2,3	2009
United Kingdom	5,1	2004	3,5	2009
United States	5,6	2007	4,2	2009

Source: WEF, World Competitiveness Report.

Indicator	Venture capital – expansion stage			
	The indicator measures the total expansion stage venture capital investment per year as a share of GDP			
Country	Actual Values	Year	Actual Values	Year
Australia	0,128	2003	0,12	2008
Austria	0,025	2003	0,02	2008
Belgium	0,087	2003	0,08	2008
Canada	0,118	2003	0,07	2008
Czech Republic	0,045	2003	0,12	2008
Denmark	0,258	2003	0,11	2008
Finland	0,178	2003	0,19	2008
France	0,068	2003	0,10	2008
Germany	0,030	2003	0,07	2008
Greece	0,001	2003	0,01	2008
Hungary	0,008	2000	0,04	2008
Iceland				
Ireland	0,121	2003	0,11	2008
Italy	0,020	2000	0,04	2008
Japan				
Korea	0,052	2007	0,04	2008
Luxembourg	0,037	2007	1,03	2008
Mexico				
Netherlands	0,112	2000	0,06	2008
New Zealand	0,000	2003	0,00	2007
Norway	0,086	2003	0,11	2008
Poland	0,025	2003	0,02	2008
Portugal	0,025	2000	0,01	2008
Slovak Republic				
Spain	0,087	2003	0,12	2008
Sweden	0,144	2003	0,14	2008
Switzerland	0,160	2007	0,10	2008
Turkey				
United Kingdom	0,176	2003	0,17	2008
United States	0,124	2007	0,11	2008

Source: OECD, EIP.

Indicator	Investor protection			
	The indicator measures the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain			
Country	Actual Values	Year	Actual Values	Year
Australia	5,7	2005	5,7	2010
Austria	3,7	2005	4,0	2010
Belgium	7,0	2005	7,0	2010
Canada	8,3	2005	8,3	2010
Czech Republic	5,0	2005	5,0	2010
Denmark	6,3	2005	6,3	2010
Finland	5,7	2005	5,7	2010
France	5,3	2005	5,3	2010
Germany	5,0	2005	5,0	2010
Greece	3,0	2005	3,3	2010
Hungary	4,3	2005	4,3	2010
Iceland	5,0	2005	5,3	2010
Ireland	8,3	2005	8,3	2010
Italy	5,0	2005	5,7	2010
Japan	7,0	2005	7,0	2010
Korea	5,3	2005	5,3	2010
Luxembourg	4,3	2008	4,3	2010
Mexico	6,0	2005	6,0	2010
Netherlands	4,7	2005	4,7	2010
New Zealand	9,7	2005	9,7	2010
Norway	6,7	2005	6,7	2010
Poland	6,0	2005	6,0	2010
Portugal	6,0	2005	6,0	2010
Slovak Republic	4,3	2005	4,7	2010
Spain	5,0	2005	5,0	2010
Sweden	5,7	2005	5,7	2010
Switzerland	3,0	2005	3,0	2010
Turkey	5,3	2005	5,7	2010
United Kingdom	8,0	2005	8,0	2010
United States	8,3	2005	8,3	2010

Source: World Bank, Doing Business.

Indicator	Market capitalization of domestic shares			
	Market capitalization (mill. dollars) of newly listed companies relative to GDP			
Country	Actual Values	Year	Actual Values	Year
Australia	0,029	2005	0,002	2008
Austria	0,023	2003	0,002	2008
Belgium				
Canada	0,035	2004	0,008	2008
Czech Republic				
Denmark	0,000	2003	0,002	2008
Finland	0,008	2003	0,002	2008
France				
Germany	0,000	2003	0,001	2008
Greece	0,005	2003	0,002	2008
Hungary	0,002	2003	0,000	2008
Iceland	0,034	2006	0,002	2008
Ireland	0,000	2003	0,000	2008
Italy	0,029	2003	0,000	2008
Japan	0,018	2003	0,008	2008
Korea	0,002	2003	0,020	2008
Luxembourg	0,000	2003	0,081	2008
Mexico	0,003	2006	0,013	2008
Netherlands				
New Zealand	0,006	2003	0,005	2008
Norway	0,040	2003	0,007	2008
Poland	0,002	2003	0,007	2008
Portugal				
Slovak Republic				
Spain	0,024	2003	0,019	2008
Sweden	0,003	2003	0,002	2008
Switzerland	0,005	2003	0,007	2008
Turkey	0,000	2003	0,013	2008
United Kingdom	0,021	2003	0,025	2008
United States	0,007	2003	0,027	2008

Source: World Federation of Exchange.

Indicator	Capitalization of primary stock market			
	The indicator measures the capitalisation of the primary stock market (the value of the issued shares on the market) in percentage of GDP			
Country	Actual Values	Year	Actual Values	Year
Australia	1,153	2003	0,674	2008
Austria	0,222	2003	0,183	2008
Belgium				
Canada	1,022	2003	0,738	2008
Czech Republic				
Denmark	0,557	2003	0,507	2008
Finland	1,058	2003	0,507	2008
France				
Germany	0,450	2003	0,304	2008
Greece	0,601	2003	0,255	2008
Hungary	0,228	2003	0,119	2008
Iceland	1,267	2006	0,507	2008
Ireland	0,560	2003	0,176	2008
Italy	0,419	2003	0,228	2008
Japan	1,142	2003	0,635	2008
Korea	0,485	2003	0,507	2008
Luxembourg	1,382	2003	1,228	2008
Mexico	0,415	2006	0,216	2008
Netherlands				
New Zealand	0,422	2003	0,185	2008
Norway	0,435	2003	0,324	2008
Poland	0,179	2003	0,172	2008
Portugal				
Slovak Republic				
Spain	0,865	2003	0,591	2008
Sweden	0,962	2003	0,507	2008
Switzerland	2,262	2003	1,755	2008
Turkey	0,042	2001	0,149	2008
United Kingdom	1,371	2003	0,706	2008
United States	1,038	2003	0,826	2008

Source: World Federation of Exchange.

Indicator	Turnover in primary stock market			
	The indicator measures the total shares traded on the stock market exchange in percentage of GDP			
Country	Actual Values	Year	Actual Values	Year
Australia	0,6354	2003	1,774	2008
Austria	0,1970	2003	1,490	2008
Belgium				
Canada	0,5306	2003	1,661	2008
Czech Republic				
Denmark	0,5751	2003	2,376	2008
Finland	0,9726	2003	2,376	2008
France				
Germany	1,2042	2003	4,213	2008
Greece	0,3823	2003	1,250	2008
Hungary	0,4383	2003	1,663	2008
Iceland	2,3765	2008	2,376	2008
Ireland	0,5181	2003	1,655	2008
Italy	1,3347	2003	2,872	2008
Japan	0,4529	2003	1,800	2008
Korea	1,5620	2003	3,043	2008
Luxembourg	0,0111	2003	0,029	2008
Mexico	0,2111	2003	0,472	2008
Netherlands				
New Zealand	0,3604	2003	0,747	2008
Norway	0,8153	2003	3,034	2008
Poland	0,2583	2003	0,765	2008
Portugal				
Slovak Republic				
Spain	1,2848	2003	2,542	2008
Sweden	1,0531	2003	2,376	2008
Switzerland	0,8394	2003	1,750	2008
Turkey	1,4355	2003	0,129	2008
United Kingdom	1,4673	2003	3,357	2008
United States	0,8978	2003	2,914	2008

Source: World Federation of Exchange.

Creation and Diffusion of Knowledge

Indicator	Total GOVERD as Procent of GDP Government expenditure on R&D – GOVERD as percentage of GDP			
	Actual Values	Year	Actual Values	Year
Australia	0,342	2000	0,282	2006
Austria	0,122	2002	0,135	2007
Belgium	0,129	2003	0,164	2008
Canada	0,194	2003	0,188	2008
Czech Republic	0,292	2003	0,307	2008
Denmark	0,181	2003	0,085	2008
Finland	0,333	2003	0,299	2008
France	0,362	2003	0,324	2008
Germany	0,342	2002	0,335	2007
Greece	0,128	2001	0,125	2007
Hungary	0,328	2002	0,232	2007
Iceland	0,681	2000	0,470	2008
Ireland	0,091	2003	0,111	2008
Italy	0,193	2003	0,155	2008
Japan	0,298	2001	0,282	2006
Korea	0,306	2001	0,347	2006
Luxembourg	0,174	2003	0,248	2008
Mexico	0,142	2000	0,101	2005
Netherlands	0,255	2003	0,213	2008
New Zealand	0,366	2001	0,297	2005
Norway	0,259	2003	0,235	2008
Poland	0,254	2002	0,219	2008
Portugal	0,124	2003	0,116	2008
Slovak Republic	0,181	2003	0,154	2008
Spain	0,161	2003	0,248	2008
Sweden	0,135	2003	0,168	2008
Switzerland	0,033	2000	0,023	2008
Turkey	0,040	2001	0,065	2006
United Kingdom	0,164	2002	0,158	2008
United States	0,322	2003	0,294	2008

Source: OECD.

Indicator	BERD Business expenditure on R&D – BERD as percentage of GDP			
	Actual Values	Year	Actual Values	Year
Australia	0,842	2001	1,200	2006
Austria	1,431	2002	1,790	2007
Belgium	1,313	2003	1,325	2008
Canada	1,175	2002	1,034	2007
Czech Republic	0,763	2003	0,904	2008
Denmark	1,780	2003	1,912	2008
Finland	2,420	2003	2,523	2008
France	1,357	2003	1,274	2008
Germany	1,758	2003	1,831	2008
Greece	0,183	2002	0,156	2007
Hungary	0,355	2002	0,485	2007
Iceland	1,688	2002	1,459	2008
Ireland	0,791	2003	0,928	2008
Italy	0,523	2003	0,601	2008
Japan	2,356	2002	2,681	2007
Korea	1,801	2002	2,448	2007
Luxembourg	1,469	2003	1,322	2008
Mexico	0,136	2002	0,178	2007
Netherlands	1,007	2003	0,894	2008
New Zealand	0,420	2001	0,514	2007
Norway	0,984	2003	0,870	2008
Poland	0,148	2003	0,187	2008
Portugal	0,244	2003	0,756	2008
Slovak Republic	0,317	2003	0,202	2008
Spain	0,568	2003	0,737	2008
Sweden	2,861	2003	2,777	2008
Switzerland	1,869	2000	2,140	2004
Turkey	0,151	2002	0,293	2007
United Kingdom	1,112	2003	1,210	2008
United States	1,810	2003	2,012	2008

Source: OECD.

Indicator	HERD Higher Education expenditure on R&D – HERD as percent of GDP			
	Actual Values	Year	Actual Values	Year
Australia	0,405	2000	0,515	2006
Austria	0,579	2002	0,625	2007
Belgium	0,419	2003	0,405	2008
Canada	0,670	2003	0,644	2008
Czech Republic	0,191	2003	0,246	2008
Denmark	0,598	2003	0,707	2008
Finland	0,660	2003	0,654	2008
France	0,420	2003	0,398	2008
Germany	0,424	2002	0,399	2007
Greece	0,261	2001	0,294	2007
Hungary	0,252	2002	0,225	2007
Iceland	0,433	2000	0,663	2008
Ireland	0,290	2003	0,396	2008
Italy	0,370	2002	0,381	2008
Japan	0,452	2001	0,432	2006
Korea	0,257	2001	0,299	2006
Luxembourg	0,006	2003	0,048	2008
Mexico	0,096	2000	0,125	2005
Netherlands	0,494	2003	0,526	2008
New Zealand	0,349	2001	0,376	2005
Norway	0,471	2003	0,508	2008
Poland	0,190	2002	0,208	2008
Portugal	0,283	2003	0,505	2008
Slovak Republic	0,076	2003	0,114	2008
Spain	0,319	2003	0,365	2008
Sweden	0,838	2003	0,807	2008
Switzerland	0,578	2000	0,665	2004
Turkey	0,317	2001	0,284	2006
United Kingdom	0,429	2002	0,477	2008
United States	0,365	2003	0,356	2008

Source: OECD.

Indicator	Public funding of R&D activity The indicator measures public funding of R&D activity (GOVERD + HERD) as percent of GDP			
	Actual Values	Year	Actual Values	Year
Australia	0,041	2001	0,463	2006
Austria	0,375	2003	0,597	2008
Belgium	1,426	2002	1,523	2007
Canada	0,412	2000	0,443	2008
Czech Republic	0,302	2002	0,381	2008
Denmark	0,518	2003	0,252	2008
Finland	0,583	2001	0,583	2006
France	0,608	2002	0,576	2008
Germany	0,525	2001	0,357	2006
Greece	0,146	2001	0,148	2005
Hungary	0,520	2002	0,406	2007
Iceland	0,693	2001	0,692	2008
Ireland	0,284	2003	0,300	2008
Italy	0,258	2003	0,095	2008
Japan	0,410	2001	0,383	2006
Korea	0,441	2001	0,462	2006
Luxembourg	0,127	2000	0,250	2005
Mexico	0,160	2000	0,113	2005
Netherlands	0,239	2000	0,267	2003
New Zealand	0,453	2001	0,430	2005
Norway	1,011	2001	0,736	2006
Poland	0,346	2002	0,351	2008
Portugal	0,237	2000	0,179	2005
Slovak Republic	0,221	2003	0,153	2008
Spain	0,220	2001	0,349	2006
Sweden	0,543	2001	0,227	2006
Switzerland	0,195	2000	0,188	2008
Turkey	0,167	2001	0,078	2006
United Kingdom	0,365	2002	0,396	2008
United States	0,785	2003	0,749	2008

Source: OECD.

Indicator	Private funding of R&D activity Total private founded R&D Investments, independent of where the funding were spent as a percentage of GDP			
	Actual Values	Year	Actual Values	Year
Australia	0,73	2001	1,15	2006
Austria	1,02	2003	1,24	2008
Belgium	1,15	2002	1,19	2007
Canada	1,02	2003	0,88	2008
Czech Republic	0,64	2003	0,76	2008
Denmark	1,54	2003	1,65	2008
Finland	2,34	2002	2,33	2007
France	1,10	2003	1,02	2008
Germany	1,63	2002	1,71	2007
Greece	0,19	2001	0,18	2005
Hungary	0,30	2002	0,42	2007
Iceland	1,36	2001	1,33	2008
Ireland	0,71	2003	0,70	2008
Italy	0,40	2003	0,47	2008
Japan	2,34	2002	2,67	2007
Korea	1,74	2002	2,39	2007
Luxembourg				
Mexico	0,28	2002	0,39	2007
Netherlands	5,46	2000	4,48	2007
New Zealand	0,22	2001	0,22	2007
Norway	0,33	2001	0,30	2007
Poland	0,38	2003	0,06	2008
Portugal	0,24	2002	0,57	2007
Slovak Republic	0,26	2003	0,16	2008
Spain	0,48	2002	0,58	2007
Sweden	2,99	2001	2,30	2007
Switzerland	1,75	2000	0,06	2006
Turkey	0,22	2002	0,35	2007
United Kingdom	0,74	2003	0,89	2008
United States	1,68	2003	1,86	2008

Source: OECD.

Indicator	International co-operation Between Patent applications The indicator measure International co-operation between patent applications as percentage of total patents.			
	Actual Values	Year	Actual Values	Year
Australia	13,90	2002	14,62	2007
Austria	29,17	2002	24,29	2007
Belgium	43,94	2002	40,31	2007
Canada	26,81	2002	27,11	2007
Czech Republic	33,33	2002	31,65	2007
Denmark	22,11	2002	19,58	2007
Finland	15,77	2002	17,42	2007
France	20,54	2002	20,85	2007
Germany	15,64	2002	15,55	2007
Greece	35,85	2002	34,02	2007
Hungary	22,61	2002	32,64	2007
Iceland	41,94	2002	25,00	2007
Ireland	38,60	2002	28,82	2007
Italy	14,59	2002	13,85	2007
Japan	4,27	2002	2,82	2007
Korea	5,57	2002	3,93	2007
Luxembourg	57,69	2002	68,29	2007
Mexico	21,38	2002	18,90	2007
Netherlands	17,26	2002	19,15	2007
New Zealand	18,60	2002	16,14	2007
Norway	22,68	2002	21,81	2007
Poland	28,21	2002	29,17	2007
Portugal	28,57	2002	26,37	2007
Slovak Republic	44,64	2002	34,00	2007
Spain	20,35	2002	15,37	2007
Sweden	15,11	2002	18,57	2007
Switzerland	41,24	2002	45,09	2007
Turkey	13,93	2002	5,65	2007
United Kingdom	22,63	2002	22,86	2007
United States	10,46	2002	10,62	2007

Source: OECD.

Indicator	Patents awarded based on inventors residence			
	Number of patents awarded to inventors based on their residence. Summed up by EPO and PCT			
Country	Actual Values	Year	Actual Values	Year
Australia	2696,7	2001	2660,0	2006
Austria	1916,0	2001	2655,4	2006
Belgium	1975,6	2001	2219,4	2006
Canada	4006,1	2001	4582,4	2006
Czech Republic	163,6	2001	264,0	2006
Denmark	1893,7	2001	1892,3	2006
Finland	2767,6	2001	2520,6	2006
France	12253,5	2001	12592,1	2006
Germany	35306,4	2001	36375,6	2006
Greece	147,0	2001	168,3	2006
Hungary	270,0	2001	303,4	2006
Iceland	53,8	2001	56,3	2006
Ireland	499,9	2001	530,9	2006
Italy	6003,9	2001	7300,0	2006
Japan	32143,6	2001	40401,1	2006
Korea	3787,9	2001	10676,2	2006
Luxembourg	104,5	2001	143,2	2006
Mexico	167,1	2001	239,4	2006
Netherlands	7524,6	2001	5938,4	2006
New Zealand	452,6	2001	425,2	2006
Norway	918,5	2001	939,3	2006
Poland	168,9	2001	232,2	2006
Portugal	77,2	2001	181,5	2006
Slovak Republic	33,8	2001	74,8	2006
Spain	1651,0	2001	2421,2	2006
Sweden	4600,4	2001	4591,7	2006
Switzerland	4445,8	2001	4555,6	2006
Turkey	124,0	2001	418,1	2006
United Kingdom	11425,4	2001	10234,9	2006
United States	70157,6	2001	72228,8	2006

Source: OECD.

Indicator	University/industry research collaboration			
	In the area of R&D, business executives' perceptions of the collaboration between the business community and local universities is (1 = minimal or nonexistent, 7 = intensive and ongoing)			
Country	Actual Values	Year	Actual Values	Year
Australia	4,20	2004	4,90	2010
Austria	4,10	2004	4,90	2010
Belgium	4,60	2004	5,30	2010
Canada	5,00	2004	5,20	2010
Czech Republic	3,70	2004	4,40	2010
Denmark	4,60	2004	5,50	2010
Finland	5,90	2004	5,60	2010
France	4,20	2004	3,90	2010
Germany	5,10	2004	5,20	2010
Greece	3,60	2004	3,20	2010
Hungary	3,00	2004	4,20	2010
Iceland	4,60	2004	4,80	2010
Ireland	4,70	2004	5,00	2010
Italy	3,90	2004	3,40	2010
Japan	4,50	2004	4,70	2010
Korea	4,30	2004	4,60	2010
Luxembourg	2,90	2004	4,70	2010
Mexico	3,30	2004	3,50	2010
Netherlands	4,40	2004	5,20	2010
New Zealand	4,00	2004	4,70	2010
Norway	4,30	2004	4,90	2010
Poland	3,40	2004	3,30	2010
Portugal	3,30	2004	4,10	2010
Slovak Republic	3,50	2004	3,30	2010
Spain	3,60	2004	3,70	2010
Sweden	5,30	2004	5,60	2010
Switzerland	4,70	2004	5,70	2010
Turkey	2,80	2004	3,40	2010
United Kingdom	4,90	2004	5,40	2010
United States	5,40	2004	5,90	2010

Source: WEF, The Global Competitiveness Report.

Indicator	Research in higher education sector financed by business			
	Percentage of R&D expenditure performed at higher education funded by business Measured in Million national Currencies			
Country	Actual Values	Year	Actual Values	Year
Australia	8,26	2000	8,41	2006
Austria	4,70	2002	7,69	2007
Belgium	13,20	2002	13,70	2007
Canada	15,69	2003	17,27	2008
Czech Republic	1,02	2003	0,66	2008
Denmark	11,50	2003	13,33	2008
Finland	8,57	2002	10,49	2007
France	3,18	2003	1,97	2008
Germany	11,83	2002	14,24	2007
Greece	7,53	2001	10,06	2005
Hungary	12,53	2002	15,51	2007
Iceland	11,77	2001	14,14	2008
Ireland	3,02	2003	6,32	2008
Italy	2,36	2005	2,25	2008
Japan	3,63	2002	4,05	2007
Korea	15,23	2002	15,29	2007
Luxembourg	1,41	2005	1,14	2007
Mexico	3,01	2002	1,37	2007
Netherlands	14,72	2000	9,25	2003
New Zealand	10,12	2001	6,53	2007
Norway	9,23	2001	6,78	2007
Poland	6,10	2003	4,12	2008
Portugal	2,66	2002	2,26	2007
Slovak Republic	0,34	2001	3,70	2008
Spain	9,02	2002	10,47	2007
Sweden	19,14	2001	15,26	2007
Switzerland	7,38	2000	9,29	2006
Turkey	32,12	2002	31,32	2007
United Kingdom	20,79	2003	18,04	2008
United States	12,26	2003	13,55	2008

Source: Eurostat.

Indicator	Innovative companies cooperating with universities or other public research organizations (PROs)			
	Percentage of companies that indicated universities or other public research organizations as sources of innovation			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	5,0	2000	8,1	2006
Belgium	5,0	2000	4,0	2006
Canada				
Czech Republic	2,9	2006	2,9	2006
Denmark	4,0	2000	2,3	2006
Finland	3,0	2000	4,9	2004
France	2,3	2004	2,3	2004
Germany	8,0	2000	3,4	2004
Greece	7,0	2000	9,3	2006
Hungary	7,6	2006	7,6	2006
Iceland				
Ireland	5,0	2000	2,7	2004
Italy	2,0	2000	2,0	2004
Japan				
Korea				
Luxembourg				
Mexico				
Netherlands	2,0	2000	2,4	2006
New Zealand				
Norway	3,0	2000	3,1	2004
Poland	4,1	2006	4,1	2006
Portugal	4,0	2000	4,7	2006
Slovak Republic	1,1	2006	1,1	2006
Spain	3,0	2000	3,2	2006
Sweden	7,0	2000	7,0	2000
Switzerland				
Turkey	5,6	2006	5,6	2006
United Kingdom	2,0	2000	2,0	2000
United States				

Source: Eurostat.

Indicator	Number of patent applications by universities & Government institutions Percentage of patents owned by universities, only countries/economies with more than 300 patents over the period are included.			
	Actual Values	Year	Actual Values	Year
Australia	5,2	1997	4,8	2005
Austria	0,0	1997	2,6	2005
Belgium	5,4	1997	6,6	2005
Canada	7,3	1997	5,4	2005
Czech Republic	0,0	1997	2,2	2005
Denmark	0,2	1997	3,0	2005
Finland	0,7	1997	0,2	2005
France	2,6	1997	4,4	2005
Germany	0,3	1997	1,7	2005
Greece				
Hungary	0,8	2005	0,8	2005
Iceland				
Ireland	2,8	1997	9,5	2005
Italy	0,9	1997	3,3	2005
Japan	0,1	1997	2,6	2005
Korea	0,6	1997	2,3	2005
Luxembourg	0,1	2005	0,1	2005
Mexico	5,4	2005	5,4	2005
Netherlands	1,9	1997	1,3	2005
New Zealand	1,6	1997	1,7	2005
Norway	0,3	1997	1,1	2005
Poland				
Portugal				
Slovak Republic				
Spain	5,2	1997	8,6	2005
Sweden				
Switzerland	1,2	1997	2,0	2005
Turkey	0,7	2005	0,7	2005
United Kingdom	5,1	1997	6,6	2005
United States	6,7	1997	6,0	2005

Source: OECD.

Indicator	Percentages of enterprises using eGovernment Percentage of enterprises using any eGovernment services. All, without financial sector (all enterprises with 10 or more employees)			
	Actual Values	Year	Actual Values	Year
Australia				
Austria	81	2003	80	2008
Belgium	60	2004	69	2008
Canada				
Czech Republic	75	2004	73	2008
Denmark	75	2003	90	2008
Finland	89	2003	95	2008
France	66	2006	73	2008
Germany	35	2003	56	2008
Greece	77	2004	83	2008
Hungary	35	2004	60	2008
Iceland	97	2003	91	2008
Ireland	69	2004	91	2008
Italy	65	2004	82	2008
Japan				
Korea				
Luxembourg	65	2003	90	2008
Mexico				
Netherlands	41	2003	85	2008
New Zealand				
Norway	65	2003	76	2008
Poland	74	2004	68	2008
Portugal	57	2004	75	2008
Slovak Republic	47	2004	88	2008
Spain	44	2003	64	2008
Sweden	92	2004	78	2008
Switzerland				
Turkey				
United Kingdom	34	2004	64	2008
United States				

Source: Eurostat.

Indicator	E-commerce			
	The indicator measures the total internet sales over the last calendar year, excluding VAT, as a percentage of total turnover based on all, without financial sector (min. 10 employed)			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	1	2003	3	2007
Belgium	2	2003	3	2007
Canada				
Czech Republic	3	2003	3	2007
Denmark	2	2003	11	2006
Finland	1	2003	5	2006
France				
Germany	3	2004	3	2007
Greece	0	2003	1	2007
Hungary	2	2007	2	2007
Iceland	0	2003	5	2006
Ireland	9	2003	9	2007
Italy	0	2003	1	2007
Japan				
Korea				
Luxembourg				
Mexico				
Netherlands				
New Zealand				
Norway	2	2003	8	2007
Poland	1	2004	3	2007
Portugal	0	2003	2	2007
Slovak Republic	1	2004	1	2007
Spain	0	2003	5	2007
Sweden	3	2003	6	2007
Switzerland				
Turkey				
United Kingdom	1	2003	7	2007
United States				

Source: Eurostat.

Indicator	ICT expenditure on IT			
	ICT expenditure, Information Technology Expenditure, as Percentage of GDP			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	2,8	2004	2,8	2006
Belgium	2,8	2004	2,8	2006
Canada				
Czech Republic	2,8	2004	3,2	2006
Denmark	3,3	2004	3,2	2006
Finland	3,2	2004	3,2	2006
France	3,0	2004	3,1	2006
Germany	2,9	2004	2,9	2006
Greece	1,3	2004	1,2	2006
Hungary	2,4	2004	2,5	2006
Iceland				
Ireland	1,6	2004	1,5	2006
Italy	1,8	2004	1,7	2006
Japan	3,4	2004	3,4	2006
Korea				
Luxembourg				
Mexico				
Netherlands	3,3	2004	3,3	2006
New Zealand				
Norway	2,8	2004	2,4	2006
Poland	1,9	2004	2,6	2006
Portugal	1,8	2004	1,8	2006
Slovak Republic	2,1	2004	2,5	2006
Spain	1,4	2004	1,4	2006
Sweden	3,8	2004	3,8	2006
Switzerland				
Turkey				
United Kingdom	3,5	2004	3,5	2006
United States	3,3	2004	3,3	2006

Source: Eurostat.

Indicator	ICT expenditure in communications ICT expenditure, Communications Expenditure, as Percentage of GDP			
	Actual Values	Year	Actual Values	Year
Australia				
Austria	3,2	2004	3,0	2006
Belgium	3,3	2004	3,1	2006
Canada				
Czech Republic	3,9	2004	4,4	2006
Denmark	3,0	2004	2,8	2006
Finland	3,0	2004	2,8	2006
France	2,4	2004	2,3	2006
Germany	2,9	2004	2,8	2006
Greece	3,5	2004	3,2	2006
Hungary	4,9	2004	5,0	2006
Iceland				
Ireland	2,6	2004	2,3	2006
Italy	3,1	2004	3,1	2006
Japan	4,1	2004	4,2	2006
Korea				
Luxembourg				
Mexico				
Netherlands	3,1	2004	3,0	2006
New Zealand				
Norway	2,0	2004	1,6	2006
Poland	4,6	2004	5,0	2006
Portugal	4,3	2004	4,3	2006
Slovak Republic	4,0	2004	4,2	2006
Spain	3,4	2004	3,2	2006
Sweden	3,7	2004	3,5	2006
Switzerland				
Turkey				
United Kingdom	3,1	2004	3,0	2006
United States	2,3	2004	2,1	2006

Source: Eurostat.

Entrepreneurship Capabilities

Indicator	International students with tertiary education			
	The indicator measures International students with tertiary education as a percentage of total tertiary enrolment			
Country	Actual Values	Year	Actual Values	Year
Australia	17,7	2002	19,5	2007
Austria	12,7	2002	12,4	2007
Belgium	11,0	2002	7,5	2007
Canada	3,3	2000	7,7	2007
Czech Republic	2,2	2000	5,6	2007
Denmark	7,4	2002	5,5	2007
Finland	2,4	2002	4,1	2007
France	6,8	2000	10,8	2005
Germany	9,1	2000	10,7	2003
Greece	1,6	2002	0,4	2005
Hungary	3,3	2002	3,0	2007
Iceland	4,2	2000	5,2	2007
Ireland	5,2	2002	8,8	2007
Italy	1,4	2000	1,9	2003
Japan	1,9	2002	2,9	2007
Korea	0,1	2000	0,2	2003
Luxembourg				
Mexico	0,1	2000	0,1	2002
Netherlands	3,7	2002	4,7	2007
New Zealand	6,2	2001	13,6	2007
Norway	4,8	2002	2,2	2007
Poland	0,4	2000	0,4	2003
Portugal	3,0	2000	3,9	2003
Slovak Republic	1,2	2001	0,9	2007
Spain	2,4	2002	1,8	2007
Sweden	7,5	2002	5,4	2007
Switzerland	17,2	2002	14,0	2007
Turkey	1,7	2000	0,8	2003
United Kingdom	10,1	2002	14,9	2007
United States	3,7	2002	3,4	2007

Source: OECD.

Indicator	Recieved training in starting a business school after school			
	The indicator measures the percentage of the population aged 18–64 that received training in starting a business after school.			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria				
Belgium	18,2	2008	18,2	2008
Canada				
Czech Republic				
Denmark	14,0	2008	14,0	2008
Finland	40,4	2008	40,4	2008
France	12,5	2008	12,5	2008
Germany	13,2	2008	13,2	2008
Greece	12,9	2008	12,9	2008
Hungary	10,0	2008	10,0	2008
Iceland	17,8	2008	17,8	2008
Ireland	17,5	2008	17,5	2008
Italy	9,1	2008	9,1	2008
Japan	15,7	2008	15,7	2008
Korea	9,2	2008	9,2	2008
Luxembourg				
Mexico	9,5	2008	9,5	2008
Netherlands				
New Zealand				
Norway				
Poland				
Portugal				
Slovak Republic				
Spain	14,7	2008	14,7	2008
Sweden				
Switzerland				
Turkey	4,2	2008	4,2	2008
United Kingdom	13,8	2008	13,8	2008
United States				

Source: Global Entrepreneurship Monitor (GEM).

Indicator	Received training in starting a business during school			
	Percentage of the Population Aged 18–64 that Received Training in Starting a Business During School			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria				
Belgium	25,0	2008	25,0	2008
Canada				
Czech Republic				
Denmark	9,5	2008	9,5	2008
Finland	17,9	2008	17,9	2008
France	10,2	2008	10,2	2008
Germany	12,3	2008	12,3	2008
Greece	6,1	2008	6,1	2008
Hungary	17,1	2008	17,1	2008
Iceland	11,8	2008	11,8	2008
Ireland	14,0	2008	14,0	2008
Italy	10,2	2008	10,2	2008
Japan	4,9	2008	4,9	2008
Korea	5,9	2008	5,9	2008
Luxembourg				
Mexico	9,5	2008	9,5	2008
Netherlands				
New Zealand				
Norway				
Poland				
Portugal				
Slovak Republic				
Spain	12,5	2008	12,5	2008
Sweden				
Switzerland				
Turkey	2,5	2008	2,5	2008
United Kingdom	8,9	2008	8,9	2008
United States				

Source: GEM.

Indicator	Perceived capabilities			
	Percentage of the Population Aged 18–64 who believe to have the required skills and knowledge to start a business			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria				
Belgium	37	2009	37	2009
Canada				
Czech Republic				
Denmark	35	2009	35	2009
Finland	35	2009	35	2009
France	27	2009	27	2009
Germany	40	2009	40	2009
Greece	58	2009	58	2009
Hungary	41	2009	41	2009
Iceland	50	2009	50	2009
Ireland				
Italy	41	2009	41	2009
Japan	14	2009	14	2009
Korea	53	2009	53	2009
Luxembourg				
Mexico				
Netherlands	47	2009	47	2009
New Zealand				
Norway	44	2009	44	2009
Poland				
Portugal				
Slovak Republic				
Spain	48	2009	48	2009
Sweden				
Switzerland	49	2009	49	2009
Turkey				
United Kingdom	47	2009	47	2009
United States	56	2009	56	2009

Source: GEM.

Indicator	Quality of management schools			
	The indicator measures business executives' perception of the quality of management/business schools. Business executives are asked to state their opinion on the quality of business schools (1: limited or poor quality – 7: the best in the world).			
Country	Actual Values	Year	Actual Values	Year
Australia	5,6	2004	5,4	2008
Austria	5,2	2004	5,3	2008
Belgium	5,5	2004	5,9	2008
Canada	6,2	2004	5,9	2008
Czech Republic	4,3	2004	4,7	2008
Denmark	5,2	2004	5,6	2008
Finland	5,8	2004	5,5	2008
France	6,3	2004	6,1	2008
Germany	5,3	2004	5,1	2008
Greece	4,1	2004	3,8	2008
Hungary	4,5	2004	3,9	2008
Iceland	5,3	2004	5,4	2008
Ireland	5,5	2004	5,4	2008
Italy	5,0	2004	4,2	2008
Japan	4,1	2004	3,8	2008
Korea	4,2	2004	4,8	2008
Luxembourg	3,0	2004	3,8	2008
Mexico	4,6	2004	4,3	2008
Netherlands	5,5	2004	5,5	2008
New Zealand	5,3	2004	5,0	2008
Norway	5,6	2004	5,1	2008
Poland	4,1	2004	4,5	2008
Portugal	4,6	2004	4,6	2008
Slovak Republic	4,2	2004	4,0	2008
Spain	5,6	2004	5,9	2008
Sweden	5,8	2004	5,4	2008
Switzerland	6,0	2004	6,0	2008
Turkey	4,1	2004	4,1	2008
United Kingdom	5,9	2004	5,3	2008
United States	6,5	2004	6,0	2008

Source: WEF, World Competitiveness Report.

Indicator	Inflows of foreign labour			
	Inflows of foreign workers into selected OECD countries			
Country	Actual Values	Year	Actual Values	Year
Australia	0,7	2001	1,2	2006
Austria	0,7	2001	0,5	2006
Belgium	0,2	2001	0,3	2006
Canada	0,6	2001	0,6	2006
Czech Republic				
Denmark	0,2	2001	0,5	2006
Finland	0,5	2001	0,9	2006
France	0,1	2001	0,1	2006
Germany	0,8	2000	1,0	2004
Greece				
Hungary	1,2	2001	1,7	2006
Iceland				
Ireland	2,0	2001	1,2	2006
Italy	0,2	2000	0,3	2006
Japan	0,2	2001	0,1	2006
Korea				
Luxembourg				
Mexico	0,2	2001	0,2	2006
Netherlands	0,4	2001	0,9	2006
New Zealand	3,1	2001	5,4	2006
Norway	0,8	2001	1,7	2006
Poland	0,1	2001	0,1	2006
Portugal	2,6	2001	0,2	2006
Slovak Republic				
Spain	0,9	2001	0,5	2006
Sweden	0,2	2003	0,4	2006
Switzerland	1,0	2001	1,0	2006
Turkey				
United Kingdom	0,3	2001	0,3	2006
United States	0,3	2000	0,4	2004

Source: OECD.

Indicator	Stocks of foreign labour			
	The indicator measures the stock of foreign labour force as a percentage of total labour force			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	11,0	2001	11,9	2006
Belgium	8,6	2001	9,2	2006
Canada				
Czech Republic	2,0	2001	3,6	2006
Denmark	3,5	2001	4,2	2006
Finland	1,7	2001	2,2	2006
France	6,0	2000	5,3	2005
Germany	9,1	2001	8,5	2006
Greece	4,5	2001	6,7	2006
Hungary	0,9	2001	1,5	2006
Iceland				
Ireland	3,7	2000	5,5	2002
Italy	3,9	2001	5,9	2006
Japan	0,2	2001	0,3	2006
Korea				
Luxembourg				
Mexico				
Netherlands	3,8	2001	3,3	2006
New Zealand				
Norway	5,7	2001	7,4	2006
Poland				
Portugal	2,0	2000	4,9	2005
Slovak Republic	0,2	2001	0,2	2006
Spain	3,4	2001	8,5	2006
Sweden	5,1	2001	4,3	2006
Switzerland	21,1	2001	21,0	2006
Turkey				
United Kingdom	4,4	2001	6,3	2006
United States				

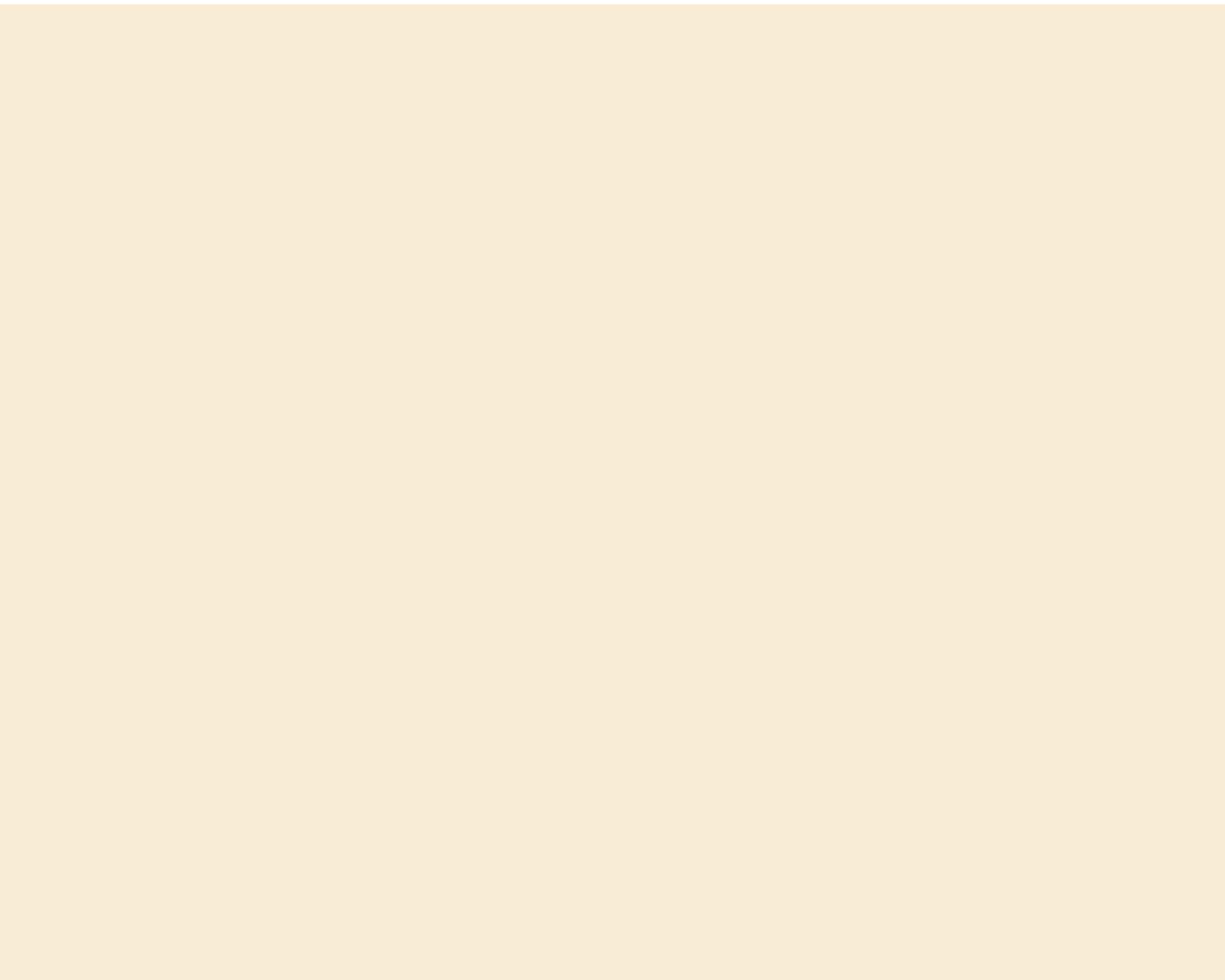
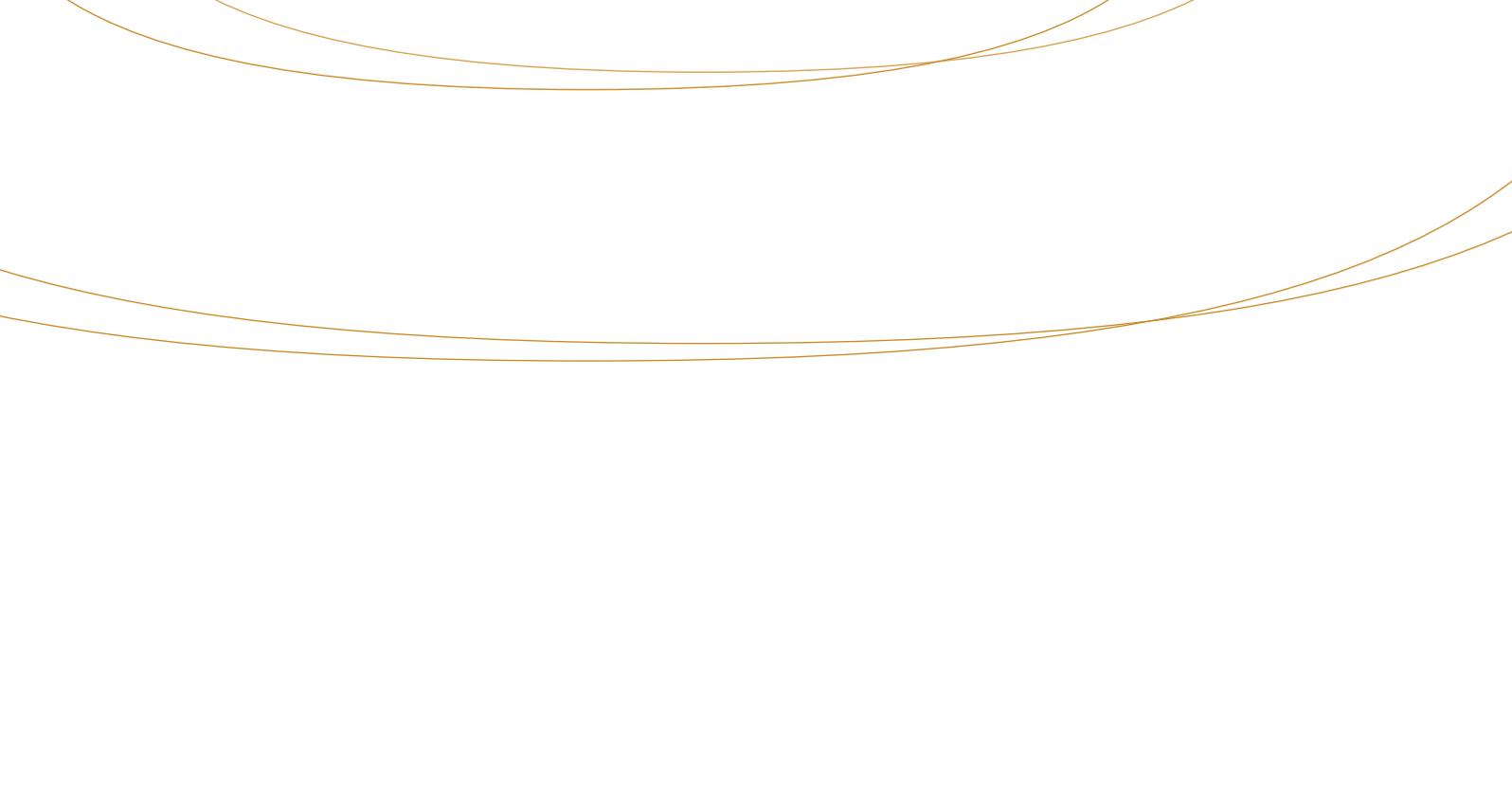
Source: OECD.

Indicator	Self-employment			
	The indicator measures self-employment by place of birth (15-to-64-year-olds) as percentage of total employment			
Country	Actual Values	Year	Actual Values	Year
Australia	18,8	2007	18,8	2007
Austria	8,4	2007	8,4	2007
Belgium	15,5	2007	15,5	2007
Canada	17,5	2007	17,5	2007
Czech Republic	19,6	2007	19,6	2007
Denmark	9,6	2007	9,6	2007
Finland	14,1	2007	14,1	2007
France	10,8	2007	10,8	2007
Germany	9,5	2007	9,5	2007
Greece	10,6	2007	10,6	2007
Hungary	16,4	2007	16,4	2007
Iceland				
Ireland	9,3	2007	9,3	2007
Italy	17,5	2007	17,5	2007
Japan				
Korea				
Luxembourg	6,5	2007	6,5	2007
Mexico				
Netherlands	11,0	2007	11,0	2007
New Zealand				
Norway	6,9	2007	6,9	2007
Poland	29,2	2007	29,2	2007
Portugal	12,1	2007	12,1	2007
Slovak Republic	26,4	2007	26,4	2007
Spain	11,7	2007	11,7	2007
Sweden	10,0	2007	10,0	2007
Switzerland	9,1	2007	9,1	2007
Turkey	18,2	2007	18,2	2007
United Kingdom	13,4	2007	13,4	2007
United States	10,2	2007	10,2	2007

Source: OECD.

Indicator	Immigrants with high education Immigrants with high education as percentage of total immigrants.			
	Actual Values	Year	Actual Values	Year
Australia	25,8	2000	25,8	2000
Austria	11,3	2000	11,3	2000
Belgium	23,0	2000	23,0	2000
Canada	38,0	2000	38,0	2000
Czech Republic	12,8	2000	12,8	2000
Denmark	23,9	2000	23,9	2000
Finland	18,9	2000	18,9	2000
France	18,1	2000	18,1	2000
Germany	14,9	2000	14,9	2000
Greece	15,9	2000	15,9	2000
Hungary	19,8	2000	19,8	2000
Iceland				
Ireland	41,1	2000	41,1	2000
Italy	12,2	2000	12,2	2000
Japan	30,0	2000	30,0	2000
Korea				
Luxembourg				
Mexico	34,8	2000	34,8	2000
Netherlands	19,2	2000	19,2	2000
New Zealand	31,0	2000	31,0	2000
Norway	30,5	2000	30,5	2000
Poland	11,9	2000	11,9	2000
Portugal	19,3	2000	19,3	2000
Slovak Republic	15,7	2000	15,7	2000
Spain	21,1	2000	21,1	2000
Sweden	24,3	2000	24,3	2000
Switzerland				
Turkey	15,2	2000	15,2	2000
United Kingdom	34,8	2000	34,8	2000
United States	26,1	2000	26,1	2000

Source: OECD.



Entrepreneurship Culture

Indicator	Entrepreneurship among managers Entrepreneurship of managers is widespread in business. IMD WCY Executive Opinion Survey based on an index from 0 to 10			
	Actual Values	Year	Actual Values	Year
Australia	6,58	2004	5,72	2009
Austria	6,53	2004	6,48	2009
Belgium	5,77	2004	5,28	2009
Canada	6,79	2004	5,71	2009
Czech Republic	4,75	2004	5,21	2009
Denmark	5,88	2004	6,21	2009
Finland	5,63	2004	5,83	2009
France	5,57	2004	4,82	2009
Germany	4,92	2004	5,53	2009
Greece	5,82	2004	5,53	2009
Hungary	5,03	2004	4,41	2009
Iceland				
Ireland	6,43	2004	5,85	2009
Italy	5,01	2004	4,85	2009
Japan	4,15	2004	4,37	2009
Korea	6,09	2004	6,00	2009
Luxembourg	5,59	2004	5,42	2009
Mexico	4,58	2004	4,63	2009
Netherlands	5,90	2004	5,90	2009
New Zealand	6,52	2004	5,46	2009
Norway	4,74	2004	5,53	2009
Poland	5,45	2004	5,43	2009
Portugal	4,55	2004	5,00	2009
Slovak Republic	5,83	2004	6,10	2009
Spain	5,43	2004	4,27	2009
Sweden	5,56	2004	5,52	2009
Switzerland	5,64	2004	6,15	2009
Turkey	5,91	2004	6,29	2009
United Kingdom	5,30	2004	4,70	2009
United States	7,47	2004	5,75	2009

Source: IMD World Competitiveness.

Indicator	Image of Entrepreneurs The indicator measures the image of entrepreneurs according to their status in society. People are asked to rank the following three categories of people: entrepreneurs, civil servants, and managers in large companies, according to their status in society.			
	Actual Values	Year	Actual Values	Year
Australia				
Austria	31,9	2007	31,9	2007
Belgium	24,6	2007	24,6	2007
Canada				
Czech Republic	14,6	2007	14,6	2007
Denmark	19,6	2007	19,6	2007
Finland	24,1	2007	24,1	2007
France	23,2	2007	23,2	2007
Germany	33,1	2007	33,1	2007
Greece	48,2	2007	48,2	2007
Hungary	8,4	2007	8,4	2007
Iceland	32,4	2007	32,4	2007
Ireland	38,5	2007	38,5	2007
Italy	37,6	2007	37,6	2007
Japan				
Korea				
Luxembourg	26,2	2007	26,2	2007
Mexico				
Netherlands	43,3	2007	43,3	2007
New Zealand				
Norway	24,6	2007	24,6	2007
Poland	31,1	2007	31,1	2007
Portugal	35,0	2007	35,0	2007
Slovak Republic	22,1	2007	22,1	2007
Spain	36,6	2007	36,6	2007
Sweden	27,6	2007	27,6	2007
Switzerland				
Turkey				
United Kingdom	33,8	2007	33,8	2007
United States	40,3	2007	40,3	2007

Source: Flash Euro Barometer: Entrepreneurship.

Indicator	Desirability of becoming self-employed			
	The indicator measures people's desire to become self-employed within the next 5 years. This question was asked only to non-self-employed individuals			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	0,18	2004	0,16	2007
Belgium	0,19	2004	0,18	2007
Canada				
Czech Republic	0,22	2004	0,30	2007
Denmark	0,26	2004	0,20	2007
Finland	0,15	2004	0,31	2007
France	0,38	2004	0,28	2007
Germany	0,23	2004	0,19	2007
Greece	0,39	2004	0,47	2007
Hungary	0,34	2004	0,26	2007
Iceland	0,41	2004	0,41	2007
Ireland	0,38	2004	0,37	2007
Italy	0,38	2004	0,39	2007
Japan				
Korea				
Luxembourg	0,28	2004	0,29	2007
Mexico				
Netherlands	0,26	2004	0,21	2007
New Zealand				
Norway	0,23	2004	0,23	2007
Poland	0,50	2004	0,48	2007
Portugal	0,48	2004	0,30	2007
Slovak Republic	0,15	2004	0,28	2007
Spain	0,50	2004	0,29	2007
Sweden	0,20	2004	0,21	2007
Switzerland				
Turkey				
United Kingdom	0,25	2004	0,29	2007
United States	0,46	2004	0,42	2007

Source: Flash Euro Barometer: Entrepreneurship.

Indicator	Risk			
	The indicator measures people's perception of being willing to start a business if a risk exists that it might fail			
Country	Actual Values	Year	Actual Values	Year
Australia				
Austria	0,54	2003	0,425	2007
Belgium	0,54	2003	0,523	2007
Canada				
Czech Republic	0,61	2004	0,384	2007
Denmark	0,39	2003	0,313	2007
Finland	0,43	2003	0,411	2007
France	0,38	2003	0,408	2007
Germany	0,52	2003	0,548	2007
Greece	0,42	2003	0,398	2007
Hungary	0,8	2004	0,542	2007
Iceland	0,43	2003	0,369	2007
Ireland	0,25	2003	0,326	2007
Italy	0,46	2003	0,529	2007
Japan				
Korea				
Luxembourg	0,47	2003	0,463	2007
Mexico				
Netherlands	0,49	2003	0,386	2007
New Zealand				
Norway	0,63	2003	0,323	2007
Poland	0,56	2004	0,534	2007
Portugal	0,57	2003	0,658	2007
Slovak Republic	0,6	2004	0,468	2007
Spain	0,4	2003	0,425	2007
Sweden	0,51	2003	0,451	2007
Switzerland				
Turkey				
United Kingdom	0,34	2003	0,426	2007
United States	0,29	2003	0,186	2007

Source: Flash Euro Barometer: Entrepreneurship.

Sammenfatning

Iværksætteri er vigtigt!

I kølvandet på den globale økonomiske krise prøver regeringer over hele verden at finde veje til at styrke jobskabelse og understøtte økonomisk vækst. I løbet af de seneste 10 år er der blandt policymakers en voksende erkendelse af den vitale rolle, som iværksætteri spiller i forhold til at bygge innovative samfund, og iværksætteri er blevet en vigtig drivkraft i vækstskabelse og økonomisk genopretning.

Udviklingen af iværksætteraktiviteter og opbyggelsen af sunde forretningsmiljøer og rammebetingelser i forhold til at starte virksomheder og få dem til at vokse bliver kritiske drivkræfter for økonomisk vækst i de kommende år.

Nye firmaer der kan udfordre eksisterende virksomheder er vitale for den overordnede dynamik i økonomien. Nye firmaer øger konkurrencepresset og tvinger eksisterende firma til at styrke deres konkurrencekraft – eller langsomt sygne hen og dø. Nye hurtigt-voksende firmaer bidrager relativt mere til jobskabelse i forhold til deres antal. Derfor fungerer nye firmaer som en "redningsveste" i forhold til at trække et land ud af den økonomiske krise.

Vel vidende at iværksætteri er vigtigt for økonomisk vækst vil evnen til at skabe nye vækstvirksomheder være helt central for formuleringen af iværksætterpolitikker, og regeringer over hele verden kan høste økonomiske gevinster ved at opbygge et levende iværksættermiljø.

Nordisk Entrepreneurship Monitor

Det Nordiske Ministerråd har påbegyndt arbejdet med at analysere iværksætteri i regionen. Dette markerer det første forsøg på at benchmarke iværksætterpræstationer og rammebetingelser på baggrund af sammenlignelige internationale data. Nordisk Entrepreneurship Monitor bibringer policymakers og forskere med et unikt indblik i iværksætteri i Norden og introducerer et række nordiske og

nationalt politikanbefalinger. Endvidere indeholder rapporten et helt nyt sæt data for iværksætterpræstationer, og for enkelte lande en række ikke-tidligere offentliggjort data.

Præstationer

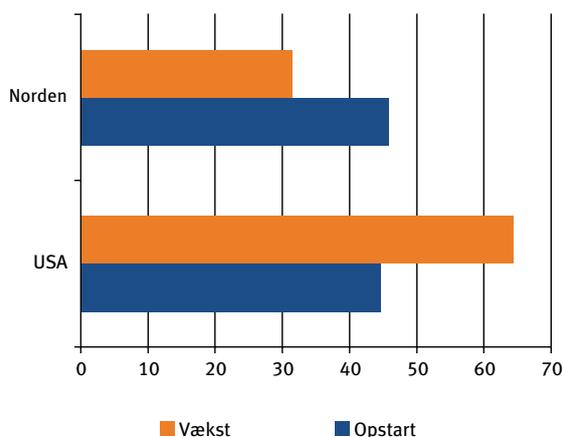
Et markant budskab i Nordisk Entrepreneurship Monitor er, at iværksætterpolitik virker. De lande, der har arbejdet strategisk med iværksætteri har også opnået de bedste resultater. Med andre ord kan regeringer få et positivt udbytte af at arbejde strategisk med iværksætteri i forbindelse med formulering af forslag inden for erhvervs- og innovationspolitik.

Den nordiske region har høje opstartsrate og ligger på niveau med USA, hvilket peger på, at regionen har løst udfordringen med at skabe nye firmaer. Den største udfordring for regionen ligger i at fremme vækst i virksomhederne. De høje opstartsrate har ikke givet sig udslag tilsvarende høje vækstrate og de nordiske lande høster derfor ikke frugterne af et højt opstarts niveau.

Vækstanalysen suppleres med ny data, der antyder, at den nordiske region som helhed har udfordringer i forhold til opskalere virksomheder til store globale spillere, som tilfældet er i USA. Mens 10 procent af de amerikanske virksomheder med mere end 1000 ansatte er mindre end 10 år gamle er denne andel 1 procent i nogle af de nordiske lande.

Endelig ser man en vis variation i iværksætterpræstationer på tværs af de nordiske lande. Nogle lande klarer sig meget bedre end andre – både hvad angår opstartsrate og vækst – hvilket efterlader plads til at udveksle politikerfaringer blandt policymakers i de nordiske lande.

Iværksætterpræstationer – Norden og USA (opstart og vækst), sammensat indeks.



Kilde: FORA, 2010.

Note:

Figuren viser værdien af de sammensatte indeks for opstart og vækst for Norden og USA. Hver af underindikatorerne er standardiseret på en skala fra 1 til 100. Jo tættere på den maksimale værdi (=100) jo bedre. En score på 100 på det sammensatte indeks kræver topplaceringer på hver af underindikatorerne.

Rammebetingelser

Overordnet set er de nordiske iværksætterrammebetingelser konkurrencedygtige. Der er dog plads til forbedring i forhold til at indhente de bedst præsterende regioner. På områderne adgang til finansiering og videndeling og videnopbygning står Norden stærkt, mens iværksættermuligheder og iværksætterkultur er blandt de mere problematiske områder. På den anden side har en del nordiske lande gjort store fremskridt inden for netop iværksætterkultur.

Samtaler med nationale policymakers samt nordiske og internationale iværksætter eksperter har kastet lys på vigtigheden af en effektiv nordisk iværksætterinfrastruktur og økosystemer.¹ I dag understøtter den nationale infrastruktur skabelsen af nye virksomheder. Og mens nogle lande har etableret regionale eller nationale vækstprogrammer er der ingen blandt de nordiske lande der kan tilbyde en effektiv iværksætterinfrastruktur og -rådgivning i forhold til at opskalere virksomheder efter den indledende vækstfase.

Danmark

Danmark viser de bedste iværksætterpræstationer blandt alle de nordiske lande. Der er klare og målbare iværksættertermål, og Danmark præsterer godt på områder som regulering og markedsforhold. På den anden side står Danmark over for en udfordring i forhold til at tiltrække højt-kvalificerede udenlandske iværksættere. Der er også behov for styrkelse af iværksætterkulturen og iværksætterelevner.

1) Iværksætter økosystemer – eller iværksætteri infrastruktur – bruges til at betegne forretningsudviklingsmiljøer hvor opstartsvirksomheder befinder sig inde for denne rette kulturelle setting, har adgang til de rette netværk og interagerer med de rette folk for at få virksomheden til at vokse.

Finland

Finland præsterer også godt og har de bedste iværksætterrammebetingelser blandt alle nordiske lande. Finlands iværksættere er blandt de bedste. På den anden side har Finland, som det var tilfældet i Danmark, en udfordring i forhold til at tiltrække højt-kvalificerede udenlandske iværksættere. Endvidere har en rigid regulering af arbejdsmarkedet en negativ effekt på mulighederne for at ansætte og fyre nye medarbejdere. Finland mangler også en stærk iværksætterkultur.

Island

Island adskiller sig på væsentlige områder fra de øvrige nordiske lande pga. den meget voldsomme økonomiske og finansielle krise. Det er det eneste nordiske land, hvor sunde rammebetingelser ikke har udmøntet sig i solide iværksætterpræstationer. Island står stærkt på regulering og har den stærkeste iværksætterkultur blandt de nordiske lande. Island har også gode betingelser for videnopbygning og videndeling. Omvendt rangerer Island lavt på præstationer sammenlignet med de øvrige nordiske lande, og der mangler internationalt sammenlignelige data. For første gang nogensinde har vi produceret internationalt sammenlignelige tal for opstart og vækst. Island rangerer også lavt på markedsforhold og adgang til finansiering.

Norge

Norge klarer sig bedst blandt alle de nordiske lande på områderne konkurslovgivning og adgang til finansiering. Norge har også lave eksport og importbegrænsninger. På den anden side er Norges præstationer lave både hvad angår opstart og vækst. Der er også plads til forbedringer på det norske arbejdsmarked og i forhold til iværksætterkulturen.

Sverige

Sverige har fremragende betingelser for videnopbygning og videndeling, hvilket har haft en positiv indflydelse på iværksættere. I de senere år har Sverige haft et stærkt fokus på opstart ved bl.a. at eliminere administrative byrder og gennem forbedringer af markedsforhold og adgang til finansiering. I dag er adgangen til venture kapital blandt de bedste i Norden. For så vidt angår iværksætterpræstationer er Sverige placeret i midten både hvad angår opstartsrate og vækst. Sverige er rangeret lavt på konkurslovgivning, arbejdsmarkedsregulering og på evnen til at tiltrække udenlandske arbejdere. Sverige kunne også med fordel styrke iværksætterkulturen.

Politikimplikationer

Nordisk Entrepreneurship Monitor dokumenterer, at de nordiske lande og regeringer er godt positioneret i forhold til at få det fulde udbytte af iværksætteri. De grundlæggende rammebetingelser er blevet forbedret i de seneste år. Nordiske policymakere er generelt opmærksomme på den vigtige rolle som iværksættere spiller, og iværksætteri er højt placeret på den politiske agenda i alle de nordiske lande.

Der er dog en række udfordringer, som fortsat skal løses, og som kan adresseres via politikker. Politikanbefalingerne præsenteres både på nordisk og nationalt plan.

Nordiske anbefalinger

En nordisk indsats kunne være formålstjenstlig på områder, hvor de Nordiske lande møder identiske udfordringer og hvor en koordineret nordisk indsats kunne føre til et bedre resultat, end hvis de enkelte lande arbejder på egen hånd.

Vi anbefaler følgende Nordiske initiativer:

- *Et fælles nordisk vækstprogram*

Den nordiske region står over for en stor udfordring i forhold til at få virksomheder til at gro, hvilket forhindrer det fulde udbytte af høje opstartsrate i regionen. Den regionale vækstudfordring kunne med fordel blive behandlet på et fælles nordisk niveau. Den nordiske region kunne bygge et fælles nordisk vækstprogram for virksomheder med et globalt potentiale (jf. Boks 1). Et nordisk vækstprogram kunne løfte eksisterende nationale og regionale vækstprogrammer ved at samle og udvikle de hurtigst voksende virksomheder fra hver af de nordiske regioner. Ydermere kunne programmet bidrage til udviklingen af et nordisk iværksætterøkosystem af allerhøjeste klasse. Det vil være langt nemmere at udvikle et fælles nordisk økosystem frem for at udvikle 5 nationale økosystemer, da de enkelte nordiske lande er for små til at bygge et økosystem der kan tiltrække iværksætter kompetencer viden til regionen og samarbejde med eksperter og investorer fra resten af verden. Endelig vil et fælles nordisk økosystem styrke de nationale økosystemer med en "spill-over" effekt på de nationale vækstprogrammer, hvis et sådant blev designet på den helt rigtige måde. "Spill-over" effekten kunne bestå af viden, færdigheder og internationalt netværk, som kunne bidrage til at udvikle den nationale og regionale infrastruktur i de nordiske lande.

- *Et nordisk iværksætteruddannelsesprogram*

Rammebetingelserne for iværksættere og iværksætterkultur er svage i Norden. For at styrke disse kunne man med fordel bygge et nordisk iværksætteruddannelsesprogram med et fokus på "train-the-trainers", der kobles med et nordisk iværksætteruddannelsesforum. Det er nødvendigt at bygge en bred forståelse og viden om iværksætteri, der gør de studerende i stand til at gå fra idé til handling. Dette omhandler ikke kun opstartsfasen, men også udvidelse og vækst. Den største barriere for denne udvikling er en udpræget mangel på iværksættertræning i uddannelsessystemet. For at styrke dette foreslås det, at der arbejdes mere strategisk med at styrke iværksætterundervisningen. Iværksætterundervisere inkluderer lærerkræfter fra alle dele af undervisningssystemet, fra folkeskole til universitetet, samt andre relevante interessenter. Et nordisk iværksætteruddannelsesprogram kunne bibringe nødvendig træning for iværksætterformidlere, bl.a. ved samarbejde med internationale iværksætterprogrammer, der fokuserer på "train-the-trainers". Det kunne fx være Harvard Business School.

- *Et nordisk Iværksætter Policy Forum*

Præstationer og rammebetingelser fordrer yderligere politisk fokus for at kunne opnå en position i absolut verdensklasse i international benchmarks. Det gælder

især vækstvirksomheder. De nordiske lande, der har arbejdet mest strategisk med iværksætteri har også opnået de bedste præstationer – og iværksætterpolitik gør en forskel! Policymakers og andre interessenter har brug for et fælles forum på tværs af de nordiske lande, hvor man kan diskutere politikudvikling på en kontinuerlig basis. Mens interessenterne kunne diskutere bedre og nye måder at bruge eksisterende rammebetingelser, kunne policymakers diskutere måder, hvorpå man kunne forbedre de nuværende rammebetingelser og identificere nye, især de som understøtter vækstvirksomheder og en vækstorienteret iværksætter infrastruktur.

- *Forbedre iværksætterfinansiering i Norden*

De nordiske rammebetingelser for finansiering er generelt gode. På det nationale niveau tilbyder de nordiske lande relativt god adgang til venture kapital. Men et fælles Nordisk venture kapital program, der går på

tværs af de nordiske lande, ville forbedre virksomheders adgang til venture kapital og ville kunne underbygge hurtigere vækst.

- *Styrke nordisk iværksætterdata, policy analyser og internationale benchmarks*

Iværksætteri er fortsat et relativt nyt politikområde. Nordisk Entrepreneurship Monitor markerer det første forsøg på at overvåge nordisk iværksætteri på en systematisk måde. Men der er et hul i vores viden. Der er akut behov for at fortsætte processen med at indsamle sammenlignelige iværksætterdata og statistikker i de nordiske lande. En fakta-baseret analyse af vækstvirksomheder er nødvendig for at forstå deres betydelige rolle i den nordiske økonomi – og får at kunne fortsætte arbejdet med Nordisk Entrepreneurship Monitor .

Box 1: Opsummering af nordisk vækstprogram

Formål

- At gear de eksisterende nationale og regionale vækstprogrammer ved indsamling og videreudvikling af de bedste virksomheder fra hvert af de nordiske vækstprogrammer (gazeller med ca. 10-20 ansatte med et globalt potentiale).
- Bygge et Nordisk iværksætterøkosystem i absolut verdensklasse og derigennem styrke de nationale vækstprogrammer med "spill-over" effekter på de nationale programmer.

Et nordisk vækstprogram ville give en række fordele:

- De deltagende firmaer får nemmere adgang til netværk, kontakter og ekspertise fra andre nordiske lande. Det vil være nødvendigt at lave et survey blandt potentielle deltagere og blandt eksisterende programmer for at spore sig ind på de specifikke værdiskabende aktiviteter, som et nordisk program kunne bidrage med i forhold til de eksisterende programmer.
- Et fælles nordisk program ville bibringe en "spill-over" effekt i forhold til viden, færdigheder, ekspertise og international netværk, som kunne bidrage til at udvikle den nationale og regionale infrastruktur i de nordiske lande.
- Det vil være nemmere at udvikle et fælles nordisk økosystem frem for at udvikle 5 nationale systemer. Individuelt vil de nordiske lande være for små til at bygge verdensklasse økosystemer, der kan tiltrække den nødvendige ekspertise fra andre dele af verden.
- Det vil være nemmer at tiltrække international ekspertise og venture kapital hvis de deltagende virksomheder er blandt de bedste i regionen.
- Endelig vil det være nemmere at få den kritiske masse, der er nødvendig for at kunne honorere internationale eksperter for deres bidrag til programmet.

Målgruppe

- Det nordiske vækstprogram vil blive et flagskib for de bedste opstartsvirksomheder i den nordiske region og kunne bygges på international best-practice indenfor virksomhedsudvikling og vækstvirksomheder.
- Det nordiske vækstprogram kunne forankres i eksisterende nationale eller regionale vækstprogrammer i de enkelte lande. Hvert af de nordiske lande skulle identificere de bedste nationale/regionale programmer til at forankre initiativet.
- Hvert af de nationale programmer skulle identificere 5 virksomheder med et betydeligt vækstpotentiale ud fra en række stramme kriterier. Screeningen kunne med fordel udføres af de, som er ansvarlige for screeningen af de nationale vækstprogrammer.
- For at få adgang til det nordiske vækstprogram skulle de deltagende virksomheder have gennemført eller deltaget i et eller flere nationale/regionale vækstprogrammer.

Aktiviteter

- Det nordiske vækstprogram skulle tilbyde en række aktiviteter for deltagende virksomheder med det overordnede formål at styrke virksomhedernes vækstmuligheder. Deltagende virksomheder vil konkurrere i fælles virksomhedstrænings "camps" i fx Silicon Valley, modtage coaching fra professionelle iværksættere og industrieksperter, serie-iværksættere, udvikle international netværk, matchmaking med førende venture kapitalister m.m.
- Udover internationale "træningslejre" kunne programmet med fordel finde sted i et nordisk set-up, mens andre dele ville foregå national og i nogle tilfælde i virksomheden. Programmet er ikke tænkt som en ku-vøse, og de deltagende firmaer skulle kunne fortsætte deres daglige forretning ved siden af programmet.
- Der skulle være mulighed for at det nordiske vækstprogram tilbyder investeringer/tilskud til de deltagende virksomheder i forbindelse med specifikke aktiviteter eller milepæle.







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The Nordic Entrepreneurship Monitor offers policymakers, practitioners and academics a unique insight into entrepreneurship across the Nordic region as well as including new and previously unpublished Nordic data on entrepreneurship performance.

The Nordic Entrepreneurship Monitor builds on the central finding that entrepreneurship policy matters. When governments work strategically with providing good entrepreneurship conditions they experience better entrepreneurship performance as a result.

In the analysis of the entrepreneurship performance of the Nordic region, the Nordic Entrepreneurship Monitor finds that the challenge of creating new firms seems to have been overcome. The major challenge in the Nordic region today is fostering firm growth.

The analysis of the entrepreneurship conditions shows that access to finance as well as knowledge creation and diffusion are the two Nordic strongholds, while entrepreneurial capabilities and culture are the major challenges faced by the Nordic region.

The Nordic Entrepreneurship Monitor identifies one central problem in the Nordic region to be an inadequate entrepreneurship infrastructure. In order to help firms scale-up after the initial growth phase Hubs for business development must be created where start-up companies exist in the right culture, have access to the right networks and interact with the right people.

On the basis of the analysis, the following recommendations are put forward:

- *Build a common Nordic Growth Programme*
- *Establish a Nordic Entrepreneurship Education Programme*
- *Create a Nordic Entrepreneurship Policy Forum*
- *Improve Nordic entrepreneurship financing opportunities*
- *Strengthen Nordic entrepreneurship data, policy analysis and international benchmarks*

The Nordic Entrepreneurship Monitor provides an in-depth analysis of entrepreneurship across the Nordic region, building on detailed descriptions of entrepreneurship in each of the Nordic countries.