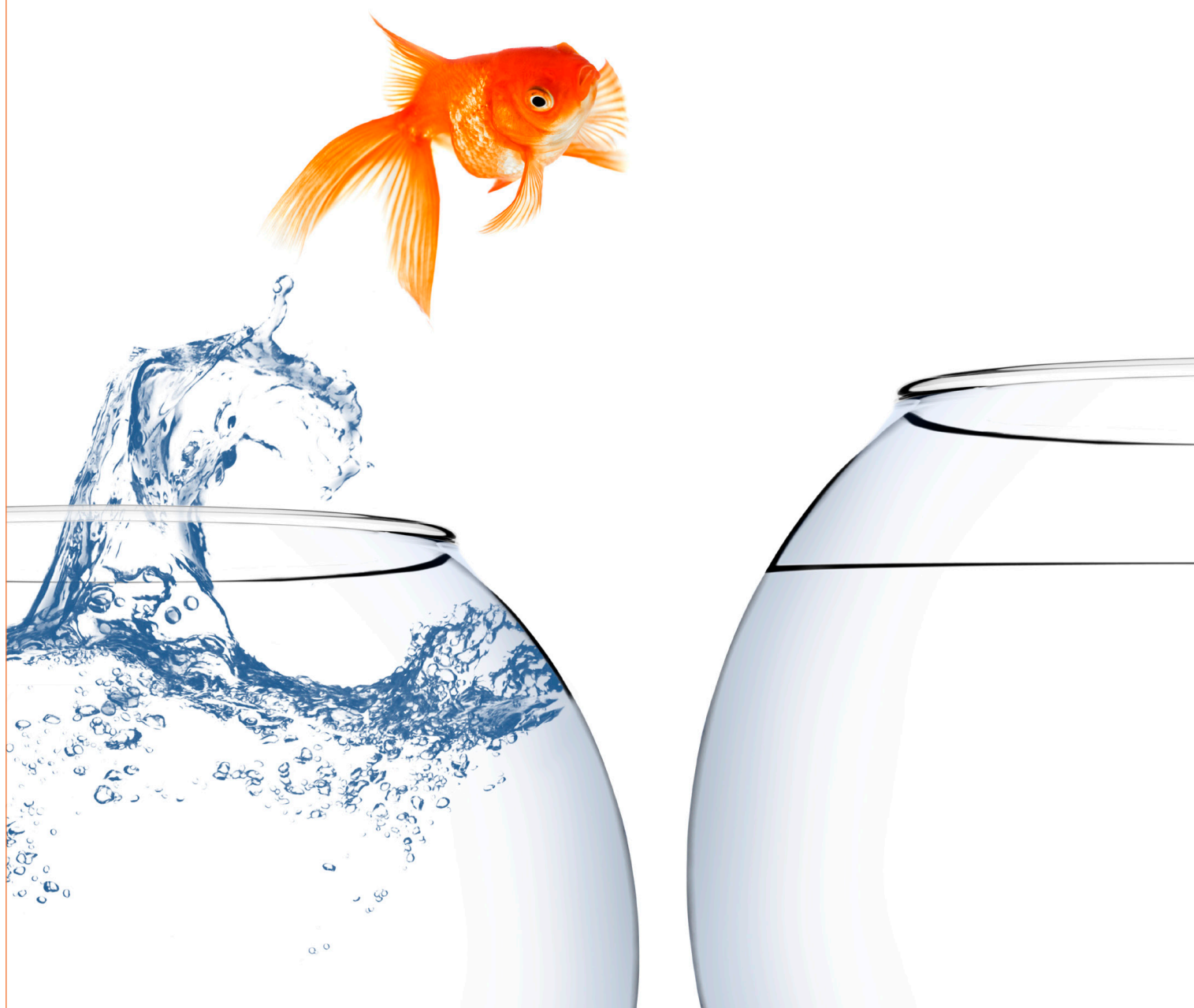


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The Nordic Growth Entrepreneurship Review 2012

Final report



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Foreword



Growth-oriented entrepreneurship and providing favorable framework conditions for starting and growing new businesses will be crucial drivers for economic growth in the Nordic region in the following years. New firms that challenge and put competitive pressure on existing companies, thereby forcing them to innovate and improve performance, are essential for the dynamics in the economy. Young growth firms also contribute disproportionately to the creation of new jobs.

New growth firms are quick and agile to capitalize on emerging ideas and solutions, that is needed to turn the Nordic investments in research, product development and know-how into innovations and business operations. The ability to generate new growth firms is essential for enterprise and innovation policy across the Nordic countries.

This Nordic Growth Entrepreneurship Review provides an analysis of Nordic framework conditions for entrepreneurship and growth of young firms. The Review concludes that there is a good level of startup activity across the Nordic region and also a relatively good share of young fast-growing gazelle firms. However, the area in which the Nordic region seems to struggle is successfully scaling up of young firms, so they would grow to large companies.

The Review highlights regulatory framework and market conditions as the Nordic strongholds. It also notes the good development of entrepreneurial culture over the most recent years, reflecting some new initiatives in the Nordic entrepreneurship ecosystem. According to the Review the areas especially challenging are access to expansion stage finance, and

entrepreneurial capabilities and business skills which are crucial to company success.

Nordic Innovation hopes that the findings and recommendations of the Nordic Growth Entrepreneurship Review will facilitate the discussion and development of the framework conditions and policy for growth entrepreneurship in the Nordic region, in order to fully capitalize companies' growth potential.

Oslo, December 2012

Roger Moe Bjørgan
Managing Director
Nordic Innovation

Preface

The Nordic Growth Entrepreneurship Review (NGER) has been prepared by a Nordic consortium led by REG X and the University of Southern Denmark, with participation from ETLA, HUI Research, RANNIS, NIFU and DBA, for Nordic Innovation.

This study should be regarded as being closely related to the Nordic Entrepreneurship Monitor in 2010. It was then recommended to conduct more analysis in the area of growth entrepreneurship, both in order to enhance the understanding of Nordic growth entrepreneurship performance and to develop input for better growth entrepreneurship policy in the Nordic region.

On the basis of the Nordic Entrepreneurship Monitor, the Nordic ministers included in the Co-operation Programme for Innovation and Business Policy 2011-2013 a “lighthouse project” on entrepreneurship with the overall aim of establishing a ‘Nordic Knowledge Centre for Entrepreneurship’.

The objective of the Nordic Growth Entrepreneurship Review is to feed new policy relevant and fact based information and analysis of Nordic growth entrepreneurship into the ‘Nordic Knowledge Centre for Entrepreneurship’. The NGER aims to provide policymakers across the Nordic countries with a better understanding of growth entrepreneurship performance and challenges in the Nordic region. These objectives are achieved by comparing the latest available data and some new indicators for growth entrepreneurship performance and framework conditions. Furthermore, certain policy recommendations are made to address the Nordic challenges in these areas.

We hope this Review will be useful.

The NGER Team, November 2012

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Contents



Contents	
Preface	7
Executive summary	10
Background	11
Methodology	14
The NGER model	14
Entrepreneurship performance	15
Framework conditions for entrepreneurship	15
Normalizing the indicators	16
The total score	17
The development in framework conditions	17
NGER and national reviews	18
Definitions	19
Nordic growth entrepreneurship performance	21
Introduction	21
High level of Nordic startups	22
Fairly high shares of gazelles in the Nordic region	23
Nordic 'born-big' firms are few	24
Nordic gazelles contribute to employment	25
Nordic gazelles are mainly in the service sectors	27
High potential Nordic startups need to be tuned into growth - from day one	27
Nordic framework conditions for entrepreneurship	29
Introduction	29
Nordic framework conditions are improving	29
Regulatory framework, market conditions, and creation and diffusion of knowledge are the key	
Nordic strengths	30
Entrepreneurial culture	32
Nordic entrepreneurial capabilities are lagging behind	32
Access to expansion stage finance is a Nordic challenge	33
The combined score for each Nordic country	34
Country similarities and differences	35
Development in the framework conditions over the years 2008 to 2012	36
Country specific findings - Denmark	38
Highlights	38
Introduction	38
Growth entrepreneurship performance	39
Framework conditions	40
Development in the framework conditions over the period 2008-2012	42

Recent policy initiatives	43
Concluding remarks	46
Country specific findings - Finland	47
Highlights	47
Introduction	47
Growth entrepreneurship performance	48
Framework conditions	49
Development in the framework conditions over the period 2008- 2012	50
Recent policy initiatives	51
Concluding remarks.	53
Country specific findings - Iceland.	55
Highlights	55
Introduction	55
Growth entrepreneurship performance	56
Framework conditions	57
Development in the framework conditions over the period 2008-2012	58
Recent policy initiatives	60
Concluding remarks.	61
Country specific findings - Norway	63
Highlights	63
Introduction	63
Growth entrepreneurship performance	64
Framework conditions	64
Development in the framework conditions over the period 2008-2012	67
Recent policy initiatives	68
Concluding remarks	69
Country specific findings - Sweden	71
Highlights	71
Introduction	71
Growth entrepreneurship performance	72
Framework conditions	72
Development in the framework conditions over the period 2008-2012	74
Recent policy initiatives	75
Concluding remarks.	77
Benchmarking entrepreneurship ecosystems	78
Introduction	78
Benchmarking entrepreneurship ecosystems	79
Some key actors in strong ecosystems	81
Building blocks in strong entrepreneurship ecosystems.	84
Strong ecosystems are built around a common vision	86
Relevant policy initiatives.	86
Venture capital in the Nordic countries	89
Introduction	89
The size of venture capital markets	90
Venture capital for expanding and growing firms	91
The role of public sector in venture capital markets	92
Nordic policy recommendations	94
Knowledge-oriented recommendations	94
Action-oriented recommendations	96

Executive summary

In recent years, the Nordic countries have improved the framework conditions for entrepreneurship and thereby continued the development that has taken place over the last decades. In important areas, the framework conditions for entrepreneurship in the Nordic countries are as strong as those in the best-performing countries.

The strong framework conditions for entrepreneurship that are gradually being developed in the Nordic countries have led to many startups. Entrepreneurship is attracting more media attention, and entrepreneurs now have a much better public image. The Nordic entrepreneurial culture is now closer to the entrepreneurial culture of the best-performing countries.

Young Nordic growth firms (gazelles) have a considerable impact on job creation in relation to their number. In the Nordic region, a total of 602 gazelles created 29 588 new jobs during the period of 2006-2009.

However, the Nordic countries are faced with a major challenge in a crucial area. This study reveals that, throughout the Nordic region, there is a lack of ability and skills to accelerate growth in young firms and to fully realize their global potential – in spite of a somewhat greater gazelle growth in Finland compared to other Nordic countries. The lack of entrepreneurial capabilities seems to relate to the lack of experienced management teams in young companies, resulting in difficulties in attracting later-stage venture capital.

The report highlights entrepreneurial ecosystems as a possible instrument for stimulating growth in young firms and as a supplement to effective framework conditions. In strong ecosystems, multiple private-sector resources are mobilized, and intensive collaboration and networking provides complementary skills, experience and networks to young growth firms, thereby stimulating growth. It could be argued that ecosystem operators seem to provide cohesion to the various framework conditions, and function as network fertilizers in strong ecosystems.

Background

Entrepreneurship is important for employment and innovation

The first Nordic Growth Entrepreneurship Review is published at a time when innovation-led growth entrepreneurship is much in demand. It seems necessary to consider growth entrepreneurship as a viable way out of the current economic crisis.

Growth-oriented entrepreneurship is crucial for job creation. It is often argued that small firms are job creators. However, there is no systematic relationship between firm size and growth. Instead, new jobs are created in younger firms rather than smaller firms². The more young firms survive and grow, the more jobs are created.

Today, it is less likely that large established businesses create lots of new jobs. Although large firms employ the majority of people and thus remain important for employment, it seems that new jobs are generated by young, surviving growth firms³. To compensate for the lack of job creation, lay-offs or relocation of jobs by established firms, global growth-seeking entrepreneurs are necessary to create successful ventures and employ a significant number of people.

Growth-oriented entrepreneurship is also an important driver of innovation, i.e. new services, products and business models. In their search for the 'next big thing', entrepreneurial firms often exploit new market opportunities and, due to their size, are able to be more agile and flexible compared to established firms. They engage in industry creation and renewal, thus contributing to more dynamic and competitive markets⁴.

Entrepreneurs with growth ambitions must provide innovative and creative products to global markets in order to succeed, and their success has spillover effects throughout the economy. Consequently, new firms with growth ambition cultivate what societies desperately need today such as innovation, productivity and jobs.

2 Haltiwanger et al, Who Creates Jobs? Small vs. Large vs. Young, 2010

3 EBST, Entrepreneurship Index , 2010; Haltiwanger et al, Who Creates Jobs? Small vs. Large vs. Young, 2010

4 Criscuolo and Menon, What Drives the Dynamics of Business Growth, 2012

Fostering growth entrepreneurship is difficult

Although growth-seeking entrepreneurs make a vital economic contribution through their business activities, their presence is not evenly spread across countries or regions. Some countries or regions are better at fostering growth-seeking entrepreneurs.

Only a small share of new firms turns into growth enterprises. Although the Nordic region has many new businesses starting every year, the high share of startups does not translate into a correspondingly high share of young growth firms⁵.

The question is how to increase the odds of having more growth-oriented entrepreneurs?

A continuous need to have policy focus on growth-oriented entrepreneurship

Governments can support growth entrepreneurship through relevant policy areas and various forms of intervention.

Over the past decades, policymakers and the private sector have recognized the opportunities related to entrepreneurship. The term 'entrepreneurship' has evolved from mainly referring to 'starting new firms' to also include the process of 'enabling new firms to grow rapidly'. In many countries, including the Nordic countries, public policy support has shifted accordingly from addressing the birth of new firms to also supporting the actual growth process.

Although the governments in the Nordic countries have taken many actions to foster growth-oriented entrepreneurship, the question is whether they are providing enough – or the right – incentives to really support rapid global growth of young firms. It might be time for developing 'growth entrepreneurship policy - generation 2.0'.

A demand for policy analysis and direction

In order to enhance the entrepreneurial growth that also leads to economic growth in the Nordic region, there is a need to know more about the ability to scale up Nordic growth-seeking firms. Moreover, it is necessary to link the related Nordic performance to the Nordic framework conditions for growth entrepreneurship in order to identify possible areas of further improvement or new directions of policy.

5 Nordic Council of Ministers, Nordic Entrepreneurship Monitor, 2010.

Responding to this, the Nordic Growth Entrepreneurship Review provides policy analysis in the area of growth entrepreneurship and highlights possible directions for policymakers in the Nordic countries.

The study investigates and benchmarks growth entrepreneurship performance across the Nordic countries and the Nordic framework conditions. Finally, some Nordic policy recommendations are made in order to address the challenges regarding growth-seeking firms in the Nordic region.

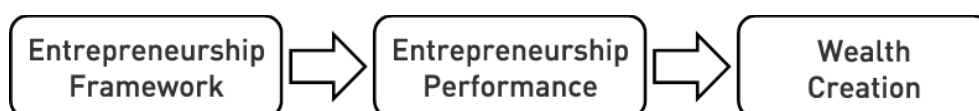
Methodology

The NGER model

The Nordic Growth Entrepreneurship Review builds on a methodology that has been used and tested over a number of years by the OECD and the Danish Business Authority (DBA).

According to this model, companies' entrepreneurship performance is viewed as a driver of wealth creation, and working strategically with targets for entrepreneurship enables governments to meet a number of macroeconomic targets (cf. Figure 1).

Figure 1: Relation between framework conditions and entrepreneurship performance



The external factors that influence entrepreneurship performance can be strengthened - or in the worst case weakened - through public policymaking. Governments can work strategically to strengthen entrepreneurship performance through a mix of different policies (framework conditions).⁶

The initial model was developed in 2004, and has been further developed over the years based on theoretical foundations as well as work taking place in international working groups such as the OECD and the Entrepreneurship Indicator Programme (EIP).

⁶ Hoffmann and Gabr, 2006, A General Policy Framework, FORA.

Entrepreneurship performance⁷

Normally, entrepreneurship performance reflects the creation and growth of young firms. The focus of this study is on growth-oriented entrepreneurship, which refers to the ability to foster new firms that grow and become global players. These firms export and create new jobs. The creation of firms that are able to develop products and services relevant for markets outside their own national boundaries is important for wealth creation and economic growth.

Often when conducting analysis on entrepreneurship, such as the Nordic Entrepreneurship Monitor, an index for different entrepreneurship performance indicators is developed including startup indicators, gazelle indicators and indicators for high-growth firms. This is not the case in this report, where different indicators for growth entrepreneurship are used, but based on only one OECD indicator: the gazelle indicator. The reason for this is the Review's focus on growth in young firms, thus excluding a more general analysis of high-growth firms. As there are no international comparable indicators (yet) similar to the ones that are developed in this report, it has not been found useful or even possible to develop a performance index.

In this study, the growth entrepreneurship performance data is business register data.

Framework conditions for entrepreneurship

Entrepreneurship framework conditions reflect the key policy areas affecting entrepreneurship performance, which has an impact on the economy and wealth creation.

The core purpose of the entrepreneurship benchmark model is to identify the policy-affected areas in the framework conditions that will help improve entrepreneurship performance - referred to as framework conditions for entrepreneurship. 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 Review benchmarks six policy areas which are considered decisive for a country's framework conditions for entrepreneurship, including: regulatory framework, market

⁷ Data on entrepreneurship performance in this review is based on register data derived from national statistical offices in the five Nordic countries (Statistics Sweden, Statistics Norway, Statistics Finland, Statistics Denmark and Statistics Iceland). For practical reasons these sources will, in the following, be referred to as National statistical offices.

conditions, access to finance, the creation and diffusion of knowledge, entrepreneurial capabilities and entrepreneurial culture (cf. Figure 2).

Figure 2: The Entrepreneurship Framework Condition Model

Regulatory Framework	Market Conditions	Access to Finance	Creation and Diffusion of Knowledge	Entrepreneurial capabilities	Entrepreneurial culture
Administrative burdens	Foreign Markets	Access to Debt Financing	R&D Activity	Business and Entrepreneurship Education (skills)	Entrepreneurial attitude in Society
Bankruptcy legislation	Degree of Public Involvement	Access to Venture capital	Transfer of Non-commercial Knowledge	Immigration	Entrepreneurial education (mindset)
Product and labor legislation	Public Procurement	Stock markets	Technology Availability and Take-up		
Court and legal framework					
Competition legislation					
Income taxes					
Business and Capital Taxes					
Patent System: Standards					

Source: NGER adjusted, based on DBA

The six policy areas are divided into 21 sub-policy areas. Each policy area is assessed on the basis of a number of internationally-comparable indicators from sources such as the OECD, the World Economic Forum and World Bank, and other reliable international sources. Each policy area is typically covered by 3 to 5 internationally comparable indicators that capture the current situation of and trends in the policy area.

Normalizing the indicators

The Nordic Growth Entrepreneurship Review is based on a total of 84 indicators for entrepreneurship framework conditions (as mentioned it is not done for the

performance indicators).⁸ The various indicators for framework conditions are not directly comparable. Some indicators are monetary values, some are percentages or ratios, and others are calculated based on time. To make the indicators comparable, they must be converted into index values.

Each indicator is normalized by setting the value of the best country at 100 and the weakest at 0. After normalizing all the indicators in a policy area, the countries' scores are determined for each policy area by calculating the average value of the indicators.

The total score

Based on each country's score for the individual policy areas, a total score is calculated as a simple unweighted average of all policy areas, and the countries are ranked accordingly in the benchmark analysis.

The results are presented in figures illustrating the total indexed score for 2012 (between 0-100).

The development in framework conditions

In this study, a country's development in framework conditions has been tracked for the period 2008-2012.

The method for calculating the development is different from the method used to calculate the 2012 value. This is so as to capture the actual changes. To measure and compare the development, the first step is standardizing the 2012 data using the following formula:

$$\frac{X_{2012} - \text{minimum}_{2012}}{\text{maximum}_{2012} - \text{minimum}_{2012}}$$

This formula makes sure that it is possible to compare values with different scale and create a composite indicator. Furthermore, it ties the values in 2012 from 0-100 so that the weakest performing country in 2012 gets the value 0 and the best performing country the value 100. The composite indicator is composed of a simple average of all the indicators.

⁸ The method for normalization of 2012 values is based on the method used in the yearly Danish Entrepreneurship Index.

The relative percentage change in the actual data is then applied to the standardized 2012 value. In such raw data, where the lowest value equals the best performance, the raw data must be inverted, and the relative change is also inverted, to assure that an increase is translated correctly (i.e. into a decrease).

NGER and national reviews

Some Nordic countries conduct national entrepreneurship analysis on a regular basis using business register data, as also used in the NGER. For instance, Denmark has been conducting an annual national entrepreneurship index using only internationally comparable data since 2004/2005. This work has also contributed to the development of new entrepreneurship indicators at OECD level. Since 2010, Finland has also conducted a national entrepreneurship review. However, the Finnish review does not apply much internationally comparable entrepreneurship data (e.g. regarding the OECD definition for gazelles).

In Iceland, Norway and Sweden, annual/biannual entrepreneurship reviews are not being carried out. However, in many of the Nordic countries, the Global Entrepreneurship Monitor (GEM) surveys have been conducted and provide survey-based data on entrepreneurship.

The NGER differs from the national reports in some ways. Generally, the current national indexes provide only limited international benchmarks of entrepreneurship performance and framework conditions, also regarding the data for all the Nordic countries, which is included in the NGER. Moreover, the national reviews do not provide policy recommendations beyond the national level, if recommendations are provided at all.

Definitions

ENTREPRENEURSHIP PERFORMANCE refers to the creation of new entrepreneurial firms that grow.

STARTUP ACTIVITY is register-based data and refers to the birth of an enterprise with at least one employee in 2009. It includes enterprises born in 2009 and enterprises that existed before 2009 but were below the threshold of one employee. This indicator is found to be more relevant for international comparisons of startup activities than indicators covering all enterprises, as these are sensitive to the coverage of business registers. This definition follows the OECD definition of Employer Enterprise Birth.

GAZELLES refer to register based data for firms that over the three-year period 2006-2009 have experienced an annual average growth in employment of at least 20 percent. They have a minimum of 10 employees and are less than 2 years old at the beginning of the growth period. The share of gazelles is measured as the number of gazelles relative to all firms with a minimum of 10 employees in 2009. This definition follows the OECD definition of gazelles.

THE ABILITY TO UPSCALE GAZELLES measures the share of gazelles that have reached more than 50 and 100 employees at the end of the growth period in 2009.

ENTREPRENEURSHIP FRAMEWORK CONDITIONS are the external factors that influence entrepreneurship performance. Governments can work strategically with and address entrepreneurship through 6 policy areas:

- **REGULATORY FRAMEWORK** includes regulation that can potentially affect entrepreneurship performance such as administrative burden, bankruptcy legislation, product and labor legislation, court and legal framework, competition legislation, tax structures, and patents.
- **MARKET CONDITIONS** are an important underlying requirement for effective firm growth and include import and export burdens and tariffs, degree of public involvement, and public procurement.

- **ACCESS TO FINANCE** has an impact on the resources available to entrepreneurs. It includes access to venture capital, loan finance and stock markets.
- **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. It includes R&D activity, technology availability and take-up, and transfer of non-commercial knowledge such as collaboration between universities and firms.
- **ENTREPRENEURIAL CAPABILITIES** refer to the stock of people with capabilities for creating value through new innovative products. It includes stock and inflow of foreign labor, the share of highly educated immigrants as well as the population's own perception of entrepreneurial capabilities.
- **ENTREPRENEURIAL CULTURE** refers to how society and individuals perceive entrepreneurship. It includes the image of entrepreneurs, the population's willingness to take risks and the desire to become an entrepreneur.

Nordic growth entrepreneurship performance

Introduction

Entrepreneurship performance is both about starting and growing new firms. However, the Nordic Growth Entrepreneurship Review is formed based on the recommendations provided by the Nordic Entrepreneurship Monitor 2010 that highlighted the need to enhance the understanding of young growth firms in the Nordic countries and develop new data about young growth firms across the Nordic region.

Therefore, the main focus of the Nordic Growth Entrepreneurship Review is to provide a more nuanced picture of young Nordic growth firms and to contribute to the development of new growth entrepreneurship data and indicators across the Nordic region.

The only way of comparing growth in young firms across countries today is by using the OECD definition of gazelles. Gazelles are young firms that experience a minimum of 20 percentage annual growth in employment in their early years (see Definitions section for more details)⁹.

In the analysis, the gazelle rates are first compared across the Nordic countries. However, analyzing the gazelle data more carefully, it is evident that the majority of the Nordic gazelles remain small even after the end of the growth period. The gazelle measure therefore seems to capture mainly the initial growth in young firms growing from 10 to 20 employees.

The gazelle data does not provide a full picture of the more explosive growth firms, i.e. the firms that grow significantly over a short period of time reaching for instance 50 or 100 employees. For varying reasons, these firms are highly important for economic growth and the dynamics in the private sector. In the following analysis of gazelles and growth entrepreneurs, we have therefore tried to identify firms with more explosive

⁹ It is also possible to calculate growth in turn-over for some countries.

growth rates separately. This is a new approach and is done by comparing the actual size of the gazelles, and identifying the share of gazelles that reach more than 50 employees. We refer to this set of firms as “born-big firms”.¹⁰

The analysis will provide new comparable data highlighting how much the young growth firms grow in the Nordic countries. Some updated performance data for the Nordic startup activity is also included in the analysis, although the emphasis is on the growth related performance.

High level of Nordic startups

Successful growth-seeking entrepreneurs are a portion of the many new firms started every year. It is therefore important to have a certain number of new firms starting up each year in order to ensure a pipeline of potential growth firms. As shown in previous studies (see for instance Nordic Entrepreneurship Monitor 2010), the Nordic region is generally good at starting new firms, which is reflected in the relatively high level of startup activity.

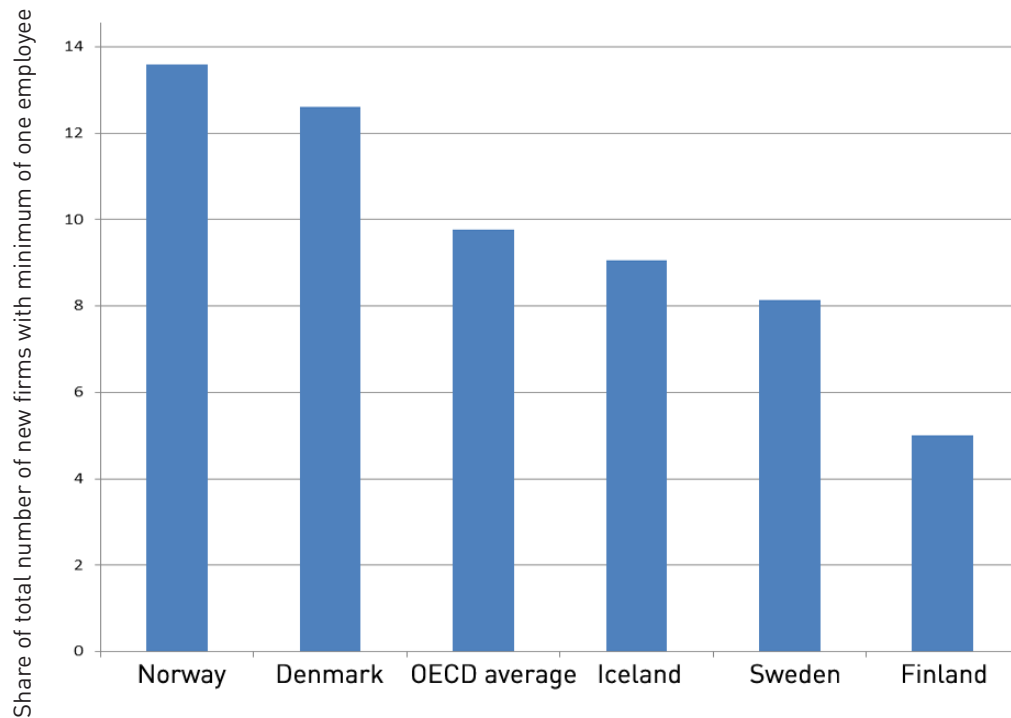
Based on the latest available data on startup activities, the trend is confirmed in this report (cf. Figure 3). The Nordic countries are still relatively good at starting new firms, despite their varying performance.

There are differences in the startup levels across the Nordic countries. In 2009, Norway and Denmark were the two Nordic countries that generated the most new firms, and also the only Nordic countries with startup activity levels above the OECD average. While both Sweden and Iceland have medium-high levels of new firms, Finland has the lowest startup rate of the Nordic countries.

However, as discussed below, it is not automatically given that the countries with high startup rates are the same countries that also have high levels of growth in young firms. In other words, high startup rates are not a guarantee for high growth rates.

¹⁰ The firm size ‘big’ could be understood differently in different countries. In the Nordic countries, young firms reaching more than 50 employees is not that common, and these firms are considered ‘big’ in this context. The term ‘born-big firms’ is used to indicate that the scope of this part of the analysis is not only at the initial growth stages, for instance when the firms are growing from 10 to 20 employees.

Figure 3: Startup rates across the Nordic countries (employer enterprise birth rates), 2009

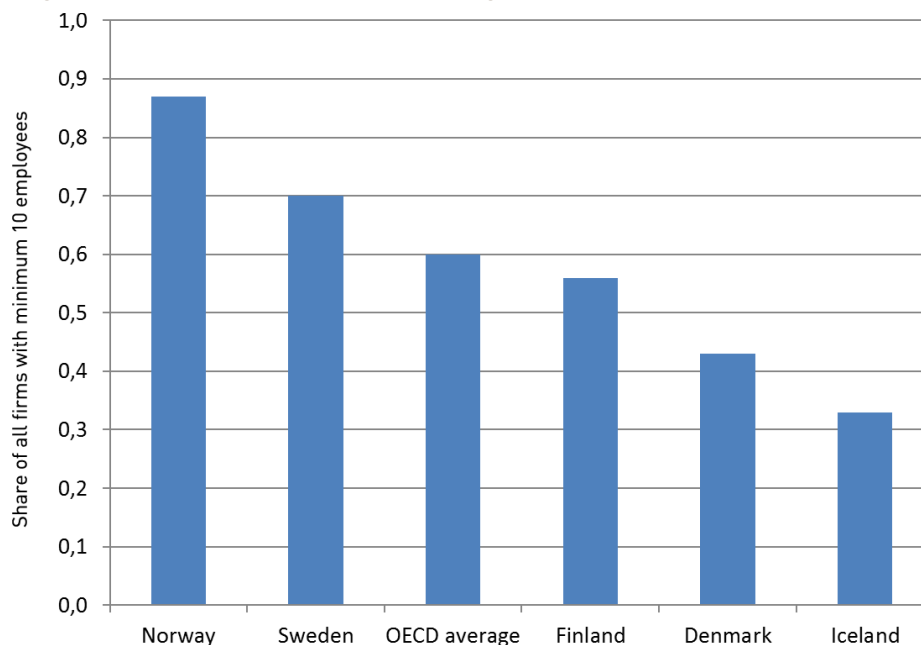


Source: NGER own calculations based on the National Statistic Offices in the Nordic countries and OECD data.

Fairly high shares of gazelles in the Nordic region

When comparing shares of gazelles across the Nordic region relative to the OECD average, it is highlighted that there is a fairly high level of gazelles in the Nordic countries. Again the analysis shows notable differences among the Nordic countries.

Norway and Sweden both have shares of gazelles that are well above the OECD average, followed by Finland, Denmark and Iceland with shares of gazelles that only reach around half of the Norwegian level (cf. Figure 4).

Figure 4: Gazelles across the Nordic region, 2009

Source: NGER own calculations based on National Statistic Offices in the Nordic countries and OECD data.

Nordic 'born-big' firms are few

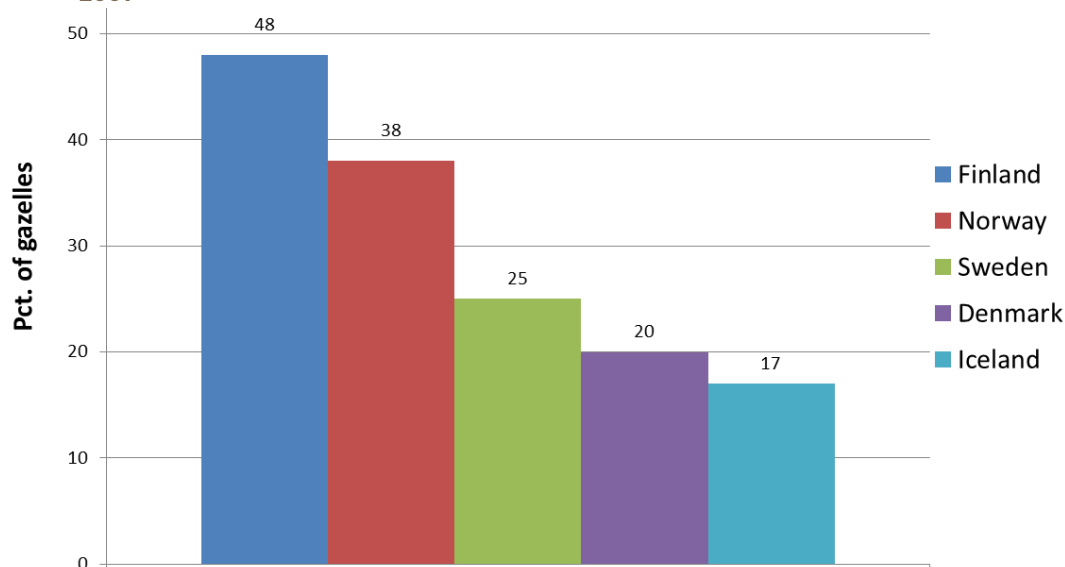
It is important for societies that they can create new firms that are able to compete on the global market and grow into large firms in a short period of time. This ability is really critical for the Nordic countries. When the absolute number of gazelles is small it is even more important that those that exist are able to become successful in terms of generating jobs and growth.

It is important for several reasons. Firstly, the more young firms that survive and grow, the more jobs are created. It is less likely that large established businesses will create lots of new jobs. Although large firms employ the majority of people and thus remain important for employment, it seems that new jobs are generated by young, surviving growth firms (this being even more the case in the USA).¹¹ Secondly, in their search for the 'next big thing', entrepreneurial firms will exploit new market opportunities and are able to be more flexible compared to established firms. They engage in industry creation and renewal and contribute to more dynamic and competitive markets. Therefore, societies need young firms that are very successful and act as global frontrunners and exporters.

However, not many of the Nordic gazelles become really big players. The vast majority of Nordic gazelles remains under 50 employees at the end of their growth period and therefore grows from 'small to small' (cf. Figure 5).

¹¹ EBST, Entrepreneurship Index, 2010; Haltiwanger et al, Who Creates Jobs? Small vs. Large vs. Young, 2010.

Figure 5: Share of Nordic gazelles that grow to reach more than 50 employees, 2009



Source: NGER own calculations based on National Statistic Offices in the Nordic countries.

This report marks the first time that the size of gazelles is compared across countries. Hence for now, internationally-comparable measures for size of gazelles or young firms do not exist. It is therefore not possible to benchmark these Nordic findings with similar findings in other countries.

However, some data within the Nordic Entrepreneurship Monitor could be used as a benchmark. Previously it has been found that the USA is much better at upscaling young firms than the Nordic countries. While 20 percent of firms with 250-500 employees are less than 10 years old in the USA, the percentage of firms with this level of employment is only around 1 percent in Denmark and Finland.¹² This data highlights the Nordic challenge to foster young firms that grow large.

Nordic gazelles contribute to employment

We have also looked at the contribution of the Nordic gazelles to job creation. In the period of the financial crisis, unemployment and outsourcing of jobs in traditional production and manufacturing companies increased; thus, the need for new jobs also increased.

Nordic gazelles have a considerable impact on job creation relative to their absolute numbers (cf. Table 1), although there are marked differences across Nordic countries in terms of the impact on employment and the average gazelle growth rate.

¹² Nordic Entrepreneurship Monitor, 2010.

Table 1: Job creation by Nordic gazelles in 2006-2009

	Norway	Sweden	Finland	Denmark	Iceland
<i>Initial employment by gazelles</i>	6932	5048	4359	2140	101
<i>Final employment by gazelles</i>	17526	13495	11977	4940	231
<i>New jobs created by gazelles</i>	10594	8447	7617	2800	130
<i>Numbers of gazelles</i>	214	206	92	84	6

Source: NGER own calculations based on National Statistic Offices in the Nordic countries.

Gazelles are clearly important for job creation across the Nordic region. For instance, in Norway, 214 gazelles increased employment with 10549 new jobs; and in Finland 92 gazelles alone created 7617 new jobs.

Evidently, an average Finnish gazelle creates significantly more jobs compared to gazelles in other Nordic countries (cf. Table 2).

Table 2: Average jobs created per gazelles in 2006-2009

	Finland	Norway	Sweden	Denmark	Iceland
<i>Average jobs created per gazelle</i>	83	50	41	33	22

Source: NGER own calculations based on National Statistic Offices in the Nordic countries.

On average, 83 new jobs are created by a single gazelle in Finland, while this is 50 or less in other Nordic countries. This is obviously linked to the higher share of born-big firms in Finland.

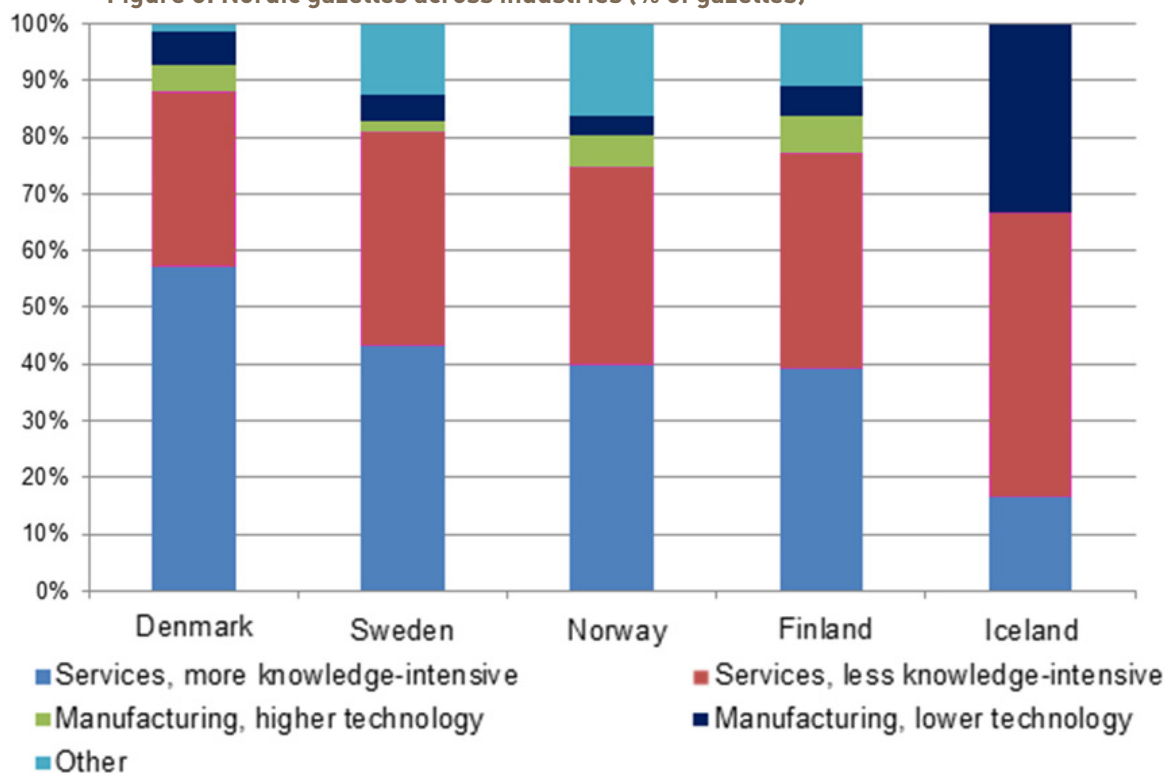
It would be interesting to compare the data internationally and examine what framework conditions seem most relevant for fostering born-big firms and employment growth.

Nordic gazelles are mainly in the service sectors

Most of the Nordic gazelles are in the service industry. Compared to the other Nordic countries, Denmark has the highest share of gazelles in knowledge-intensive services (nearly 60%). In Norway and Finland, there is a slightly higher share of gazelles in high-tech manufacturing compared to the other Nordic countries (cf. Figure 6).

Iceland has the lowest share of more knowledge-intensive gazelles and a much higher level of gazelles involved in low-tech manufacturing.

Figure 6: Nordic gazelles across industries (% of gazelles)



Source: NGER own calculations based on National Statistic Offices in the Nordic countries.

High potential Nordic startups need to be tuned into growth - from day one

The Nordic countries are performing well in terms of the quantity of new firms. Every year high numbers of new firms are born and registered. However, startup data alone does not explain much about the quality of new firms, in terms of their contribution to economic growth and employment.

When comparing the ability to create gazelles (OECD definition), the Nordic countries perform relatively well. However, the bulk of Nordic gazelles do not grow significantly, and the majority of companies have less than 50 employees at the end of their growth period.

In the world of entrepreneurship, there is a saying that “you only grow as big as your vision”. If growth vision and strategies are not built in to new startups from the beginning, they are poorly equipped for becoming large successful growth firms later on. A new firm has a number of embedded flaws such as inexperienced management, and lack of employees and know-how. In order to grow fast, a company needs to overcome these challenges rapidly by, for instance, getting a professional board of directors, an experienced management team, orienting towards global markets and products and sorting out venture capital or other sources of growth capital.

When looking across the entrepreneurship performance indicators, it seems obvious to conclude that the Nordic region has sufficient number of startups, but insufficient number of gazelles that turn into large successful firms. However, this analysis does not investigate the quality of the new firms.

For future international data and analyses on entrepreneurship performance, it could be fruitful to distinguish startup activity to startups serving global or local markets. It is the startups that serve a global demand that tend to increase growth and employment significantly. Moreover, a regional breakdown of startup activity would be useful when comparing Nordic performance with countries like the USA with highly differentiated regional ecosystems.

When working with startup analyses and data it might also be useful to distinguish between companies that are spin-outs or established by serial entrepreneurs as these companies could – everything else being equal – stand a better chance to succeed due to stronger capabilities such as experience, relevant networks and market know-how.

Nordic framework conditions for entrepreneurship

Introduction

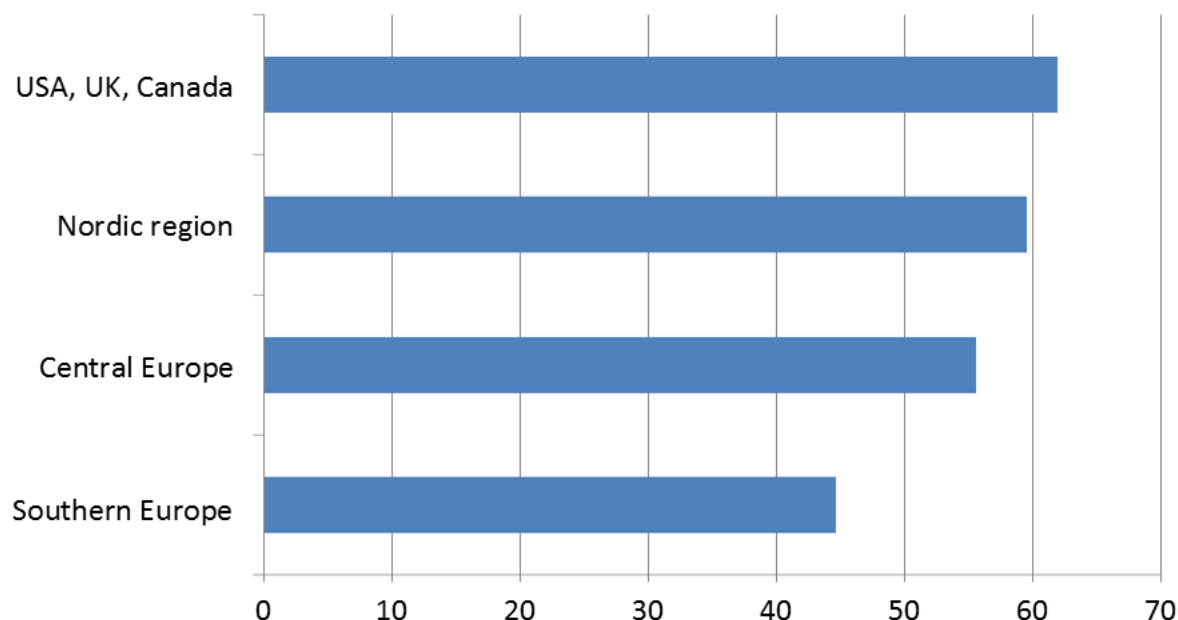
Framework conditions for entrepreneurship can encourage entrepreneurship and increase the possibilities for more growth-oriented entrepreneurship. The model that is used in this benchmark analysis has been developed over the years. It consists of six policy areas that form the framework conditions for entrepreneurship, that is, Regulation, Market conditions, Access to finance, Creation and diffusion of knowledge, Entrepreneurial capabilities, and Entrepreneurial culture (see Definitions section and Appendix 1 for details on the policy areas and indicators).

Nordic framework conditions are improving

It is important to understand the mechanisms that could help to increase the supply of growth enterprises.

When analyzing across all the framework conditions for entrepreneurship, the combined score for the Nordic framework conditions is relatively high and catching up with the best performing countries such as the USA, UK and Canada.

Overall, the framework conditions in the Nordic region are competitive, and, generally-speaking, the region is capable of promoting framework conditions for entrepreneurship. Compared to Central European countries including Austria, Belgium, Germany, Netherlands and Switzerland, the Nordic countries have framework conditions that are more conducive for entrepreneurship. Southern European countries including Greece, Italy, Spain and Portugal are lagging the other regions significantly (cf. Figure 7).

Figure 7: Overall framework conditions for entrepreneurship, 2012

Source: NGER own calculations.

Note: The figure shows the composite index values for the overall score for four regions. Each sub-indicator used to construct the composite index is standardized 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.

Breaking down the overall framework conditions into the six policy areas provides a more in-depth analysis of Nordic strengths and weaknesses across policy areas compared to the best-performing country groups. This analysis provides input on which policy areas could benefit from further development in the Nordic region.

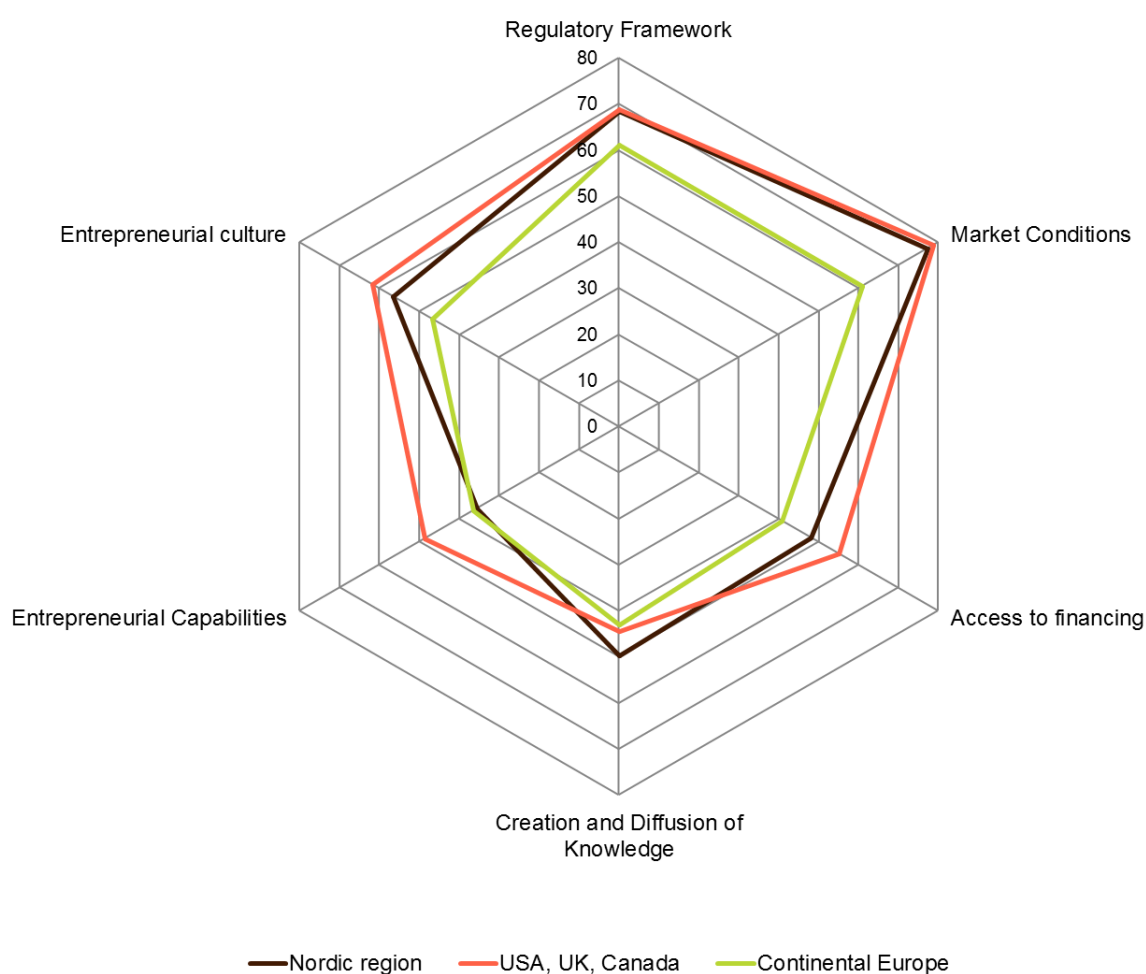
Regulatory framework, market conditions, and creation and diffusion of knowledge are the key Nordic strengths

The Nordic region generally offers good and solid framework conditions in three of the six policy areas (cf. Figure 8).

The Nordic region has, in particular, strong framework conditions in the policy areas related to the Regulatory framework and Market conditions. Generally, these areas are on par with the best-performing countries.

Years of policy improvement of the Nordic startup environment has resulted in the current state in which it is easy and cheap to start a new firm. Consequences and financial risk related to bankruptcy are fairly limited in the Nordic countries, and labor market regulations have improved in some countries despite marked differences across the Nordic countries. The sub-policy area in which the Nordic region is lagging the most in comparison to the best performing countries is taxation, which is an area deeply rooted in the Nordic welfare model.

Figure 8: Entrepreneurship framework conditions across six policy areas, 2012



Source: NGER own calculations.

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

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. This policy area is world-class in the Nordic region. The Nordic countries are doing particularly well in terms of R&D investment, although the Nordic region could gain from improving the collaboration between universities and private sector firms. Another Nordic strength in this area is eGovernance. The Nordic region scores high when comparing private sector firms using eGovernance.

The remaining three policy areas are entrepreneurial culture, entrepreneurial capabilities and access to finance.

Entrepreneurial culture

Regarding the entrepreneurial culture, the Nordic region scores high, but is still lagging behind the best-performing countries. Entrepreneurship is generally well-perceived across the Nordic countries, and has likely been influenced by the positive policy attention that entrepreneurship has received across the Nordic countries. However, some Nordic countries, for instance Finland and Iceland, have been able to develop a much stronger entrepreneurial culture compared to their Nordic peers.

Nordic entrepreneurial capabilities are lagging behind

Turning a new firm into a global success is a major challenge and requires, among other things, a unique combination of skills, talent and experience, i.e. entrepreneurial capabilities. However, out of these three, internationally-comparable data exists only for skills, and this is what is meant by entrepreneurial capabilities in this analysis.

This policy area includes perceived entrepreneurial capabilities i.e. the share of people who believe they have the required skills and knowledge to run a business. It also captures how well Nordic countries attract foreign talent and labor.

Together with Continental Europe, the Nordic region faces a major challenge in the area of entrepreneurial capabilities. The Nordic region's combined score for Entrepreneurial capabilities is low compared to the best performing countries, and is actually the lowest combined score across the six policy areas.¹³ Except for Iceland, all Nordic countries are ranked in the lower half when comparing Entrepreneurial capabilities across the OECD countries.

¹³ Compared to the other policy areas, Entrepreneurial Capabilities consists of fewer internationally comparable indicators. Due to only limited internationally comparable data in the area of Entrepreneurial Capabilities, the data quality in this policy area is not as high as in the other policy areas. Therefore, one has to be careful when comparing data in the area of entrepreneurial capabilities. Nevertheless, the area is a very important indicator in the analysis of entrepreneurial activity in the different countries.

On both areas, i.e. perceived skills and ability to attract foreign talent, the Nordic region lags behind the best-performing countries. For instance, entrepreneurs perceive their skills to run a business more positively, and there is a higher share of highly educated immigrants in the USA than in the Nordic region.

Entrepreneurial capability is about entrepreneurial skills and is shaped through entrepreneurial experience and serial entrepreneurship. If entrepreneurs in the Nordic region do not have sufficient experience to run successful growth firms within the region, it is necessary to compensate for lacking skills by attracting experienced entrepreneurs from abroad. Being able to attract foreign talent can be absolutely crucial for growth firms. Data from the USA shows that 25% of all US venture-backed publicly traded companies in 1990-2005 were founded by immigrants, of which the top countries of origin were India, Israel and Taiwan.

As we combine the above challenges with the analysis of growth entrepreneurship performance, it is possible to conclude that the low share of gazelles that grow significantly large in the Nordic countries is related to lacking entrepreneurial capabilities. It seems possible that strengthening of the entrepreneurial capabilities could contribute to stronger growth firms in the Nordic countries as, for instance, their management teams would turn out stronger. It is therefore necessary to address the lacking entrepreneurial capabilities from a policy perspective, but when doing so, focusing on capabilities that enhance growth in firms, not necessarily the startup of more firms. The critical question is how to move ahead. It will be discussed in more detail below and some discussions on the role of entrepreneurial ecosystems are highlighted.

Access to expansion stage finance is a Nordic challenge

Another challenging policy area in the Nordic region is Access to finance.

The combined score for Access to finance in the Nordic region is medium to low compared to the best performing countries. Access to finance has an impact on the resources available to entrepreneurs. As with other policy areas, this policy area consists of a number of sub-areas and indicators including loans, early and later stage venture capital.

While the Nordic region is performing relatively well in terms of access to early stage venture capital, the Nordic region is scoring low on indicators for later stage capital including access to expansion stage venture capital and stock markets. Access to expansion capital in the Nordic countries is elaborated further in the section concerning Venture Capital.

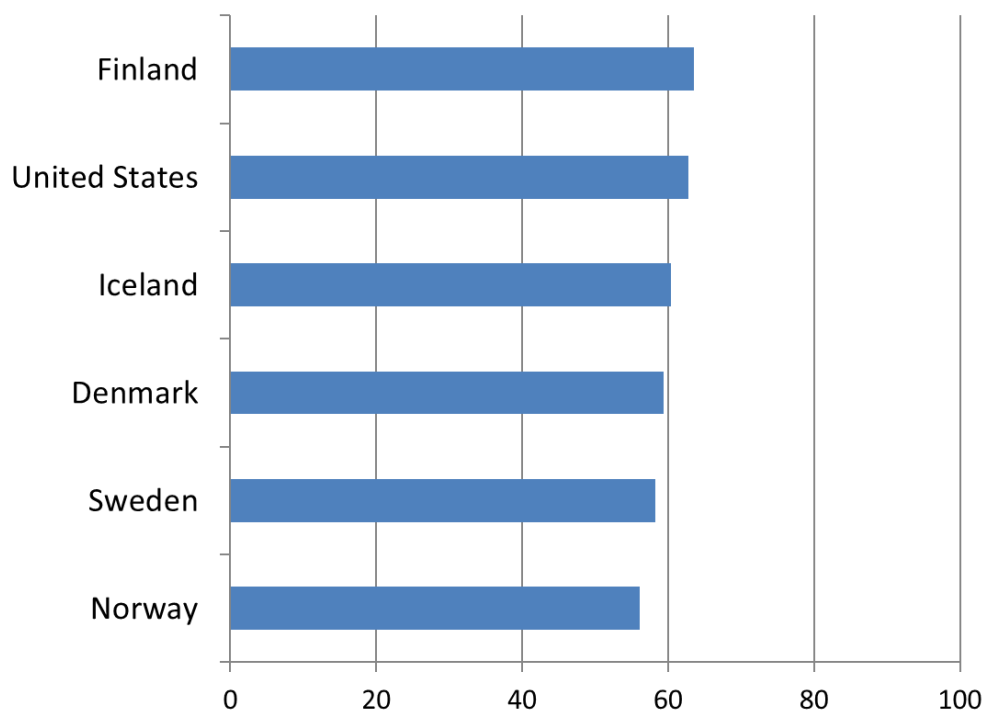
By linking the two Nordic challenges of the framework conditions that are identified in this report (finance and capabilities), a known but yet unsolved concern of demand and supply of capital occurs.

By definition, venture capital will spot and invest in the talent and markets with the highest return. Thus, private venture capital automatically flows to the most capable entrepreneurs. The lack of capable growth-seeking entrepreneurs and management teams in the Nordic countries could cause difficulties in raising venture capital at expansion stages, and vice versa. The meager expansion capital is not necessarily a mere question of lacking supply of capital, but relates to the demand of capital. Again this touches upon central issues regarding Nordic entrepreneurial capabilities.

The combined score for each Nordic country

The combined scoring of the framework conditions of each Nordic country shows that Finland has the best framework conditions for entrepreneurship, followed by Denmark and Sweden with Norway a bit behind. Iceland also has good framework conditions for entrepreneurship, but the economic and financial crisis in Iceland has reduced business opportunities for entrepreneurs, not the least because of lack of capital (cf. Figure 9).

Figure 9: Combined score for framework conditions across the Nordic countries



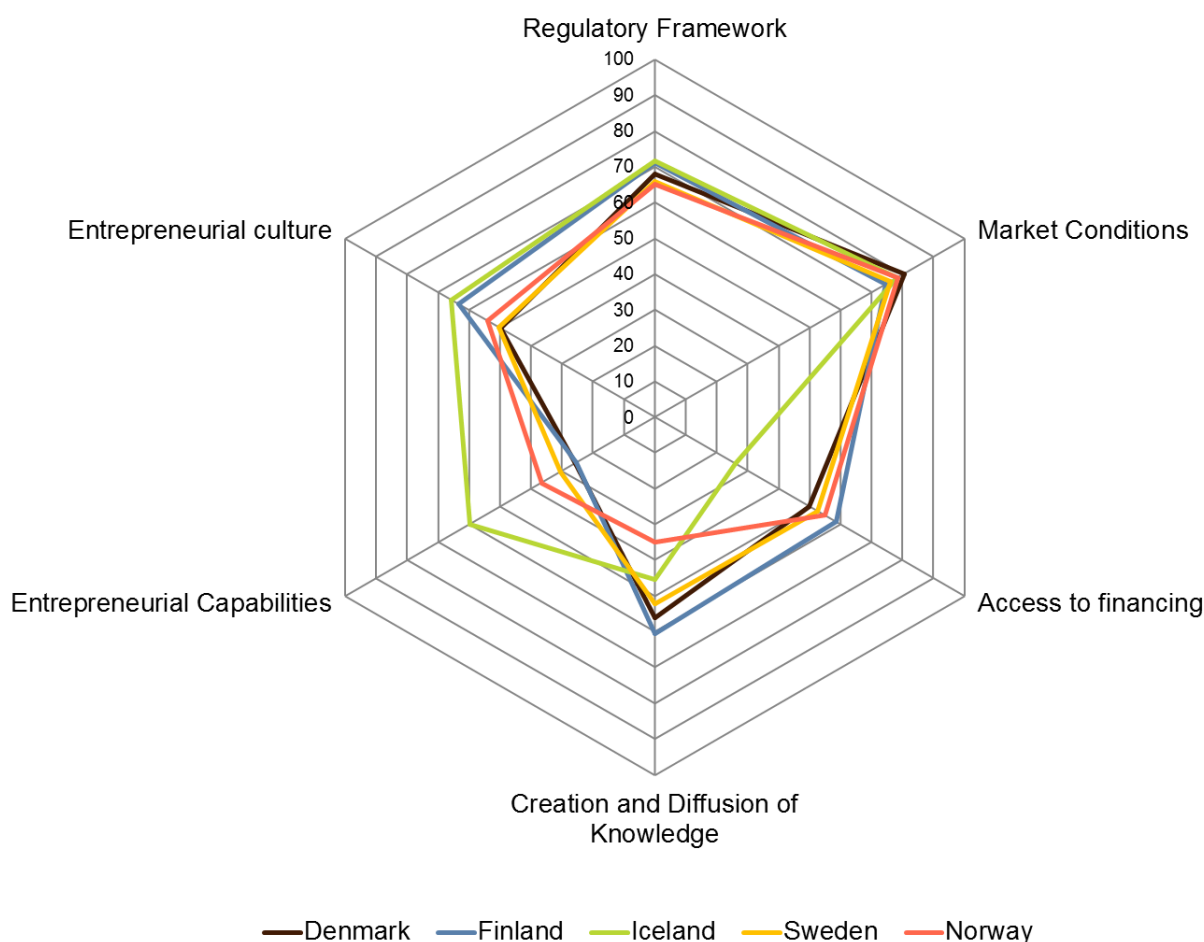
Source: NGER own calculations.

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

Country similarities and differences

When comparing the six policy areas across the Nordic countries, it is evident that each country has a unique mix of framework conditions with certain strengths and weaknesses (cf. Figure 10).

Figure 10: The six policy areas across the Nordic countries



Source: NGER own calculations.

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

Looking across the Nordic countries, it is clear that there are some similarities in framework conditions, as well as certain policy areas where some of the Nordic countries stand out more uniquely.

The Nordic countries are performing well in terms of regulatory framework and market conditions, while some countries stand out in other policy areas. For instance, Finland has one of the strongest entrepreneurial cultures in the Nordic countries, and Sweden and Denmark perform well in terms of knowledge creation and diffusion. However, access to finance is difficult in Iceland, and Norway performs less well in terms of creation and diffusion of knowledge.

A more detailed discussion regarding the country specific findings will be provided in the following country chapters.

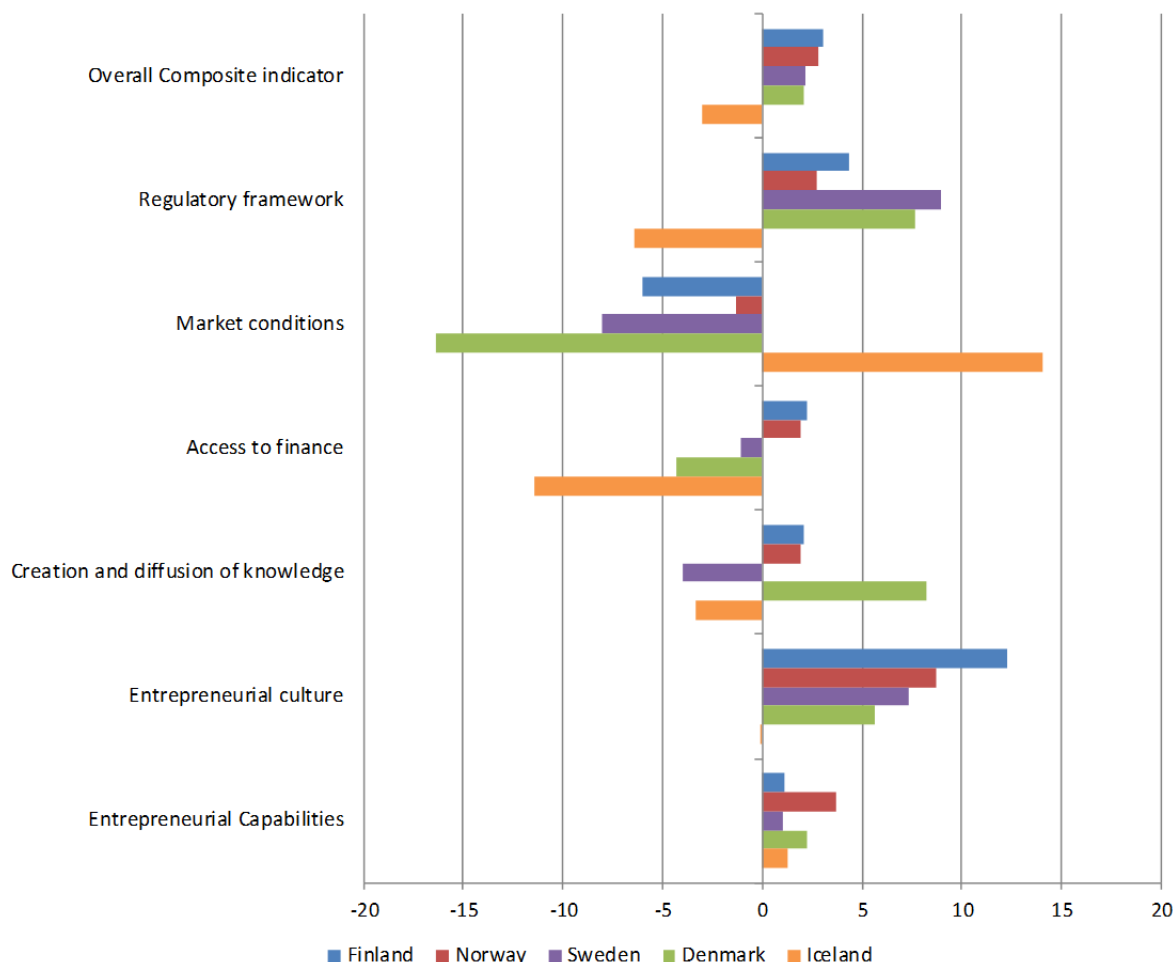
Development in the framework conditions over the years 2008 to 2012

The study has also investigated the development in framework conditions over time.¹⁴

To improve the business environment is a long journey, and the Nordic countries have been working on it for many years. The changes within a shorter period are relatively limited.

Finland is the Nordic country that has improved the framework conditions most in the last three to four years. Norway follows immediately behind, and also Denmark and Sweden have improved the framework conditions, while they have been deteriorating in Iceland (cf. Figure 11).

¹⁴ The method for calculating the development in framework conditions is different from the one used to measure 2012 values. See also Methodology for more details.

Figure 11: Development in composite indicator 2008-2012 in the Nordic countries

Source: NGER own calculations

Note: The figure shows the change in the composite indicator for entrepreneurship framework conditions.

It is a surprising but significant feature that - apart from Iceland - all the Nordic countries have experienced deterioration of the composite indicator Market conditions during the examination period. The reason for this, however, is the deterioration of one of the sub-indicator of the overall composite indicator of Market conditions, namely the costs of international trade, while other sub-indicators have remained nearly unchanged.¹⁵ A more detailed country review is made in the following.

¹⁵ As indicators for costs of international trade the World Bank's index of cost of container transport for import and export is used, in which the deterioration happened back in 2009 and 2010. The recent decline in freight rates is not yet included in the indicator.

Country specific findings

- Denmark¹⁶

Highlights

- Denmark ranks 4th among Nordic countries in terms of numbers of gazelles, and the gazelles are experiencing insufficient levels of growth.
- The Danish framework conditions for entrepreneurship are fairly good compared with other Nordic countries. In particular, regulatory framework and market conditions are good.
- The biggest Danish challenge is within the policy area of entrepreneurial capabilities, which is also the case when comparing the Danish strengths to the other Nordic countries. Denmark ranks 28th when comparing entrepreneurial capabilities across the OECD countries.
- Denmark has put a lot of effort in developing growth entrepreneurship policies in recent years based on annual analysis of entrepreneurship performance and framework conditions. New initiatives to enhance entrepreneurial capabilities have also been introduced.

Introduction

Entrepreneurship policies have been highly prioritized in Denmark during the past decade, and the policy focus has changed from merely addressing startup activity to also focusing on growth entrepreneurship by introducing initiatives aimed at making the new firms grow more.

Denmark was one of the first OECD countries engaging in a systematic surveillance of entrepreneurship performance and framework conditions, and has since 2004 contributed to the development of entrepreneurship indicators and models at OECD level.

¹⁶ Glenda Napier and Katrine Pedersen.

Today the Ministry of Business and Growth is responsible for entrepreneurship policies together with the Ministry of Science, Innovation and Higher Education. A number of agencies such as the Danish Business Authority¹⁷ and the Danish Council for Innovation and Technology are responsible for or involved in entrepreneurship policy development.

Growth entrepreneurship performance

In the Nordic region, Denmark has the second lowest rate of gazelles. In 2009, only 0.43% of all the enterprises with more than 10 employees were characterized as gazelles. Moreover, the majority of Danish gazelles generally remain small in size (cf. Table 3).

Table 3: Summary of Danish Growth Entrepreneurship Performance

Gazelle rate	Number of gazelles	Average jobs created by gazelles	Share of gazelles > 50 employees at the end of growth period
0.43%	84	33	20%

Source: NGER own calculations based on National Statistic Offices in the Nordic countries.

Only 20% of Danish gazelles reach more than 50 employees at the end of the growth period. It is a particular challenge if the share of gazelles is low, and at the same time they do not grow significantly.

In comparison to previous years, Denmark has experienced a large drop in the rate of gazelles. It seems that among the Nordic countries, Denmark is suffering relatively more in the aftermath of the economic and financial crisis.

Compared to the other Nordic countries, a large percentage of Danish gazelles are within service industries, and in particular within knowledge-intensive services. Out of all the gazelles within services, 65% are in more knowledge-intensive industries, compared to 53% of the gazelles in the other Nordic countries (on average).

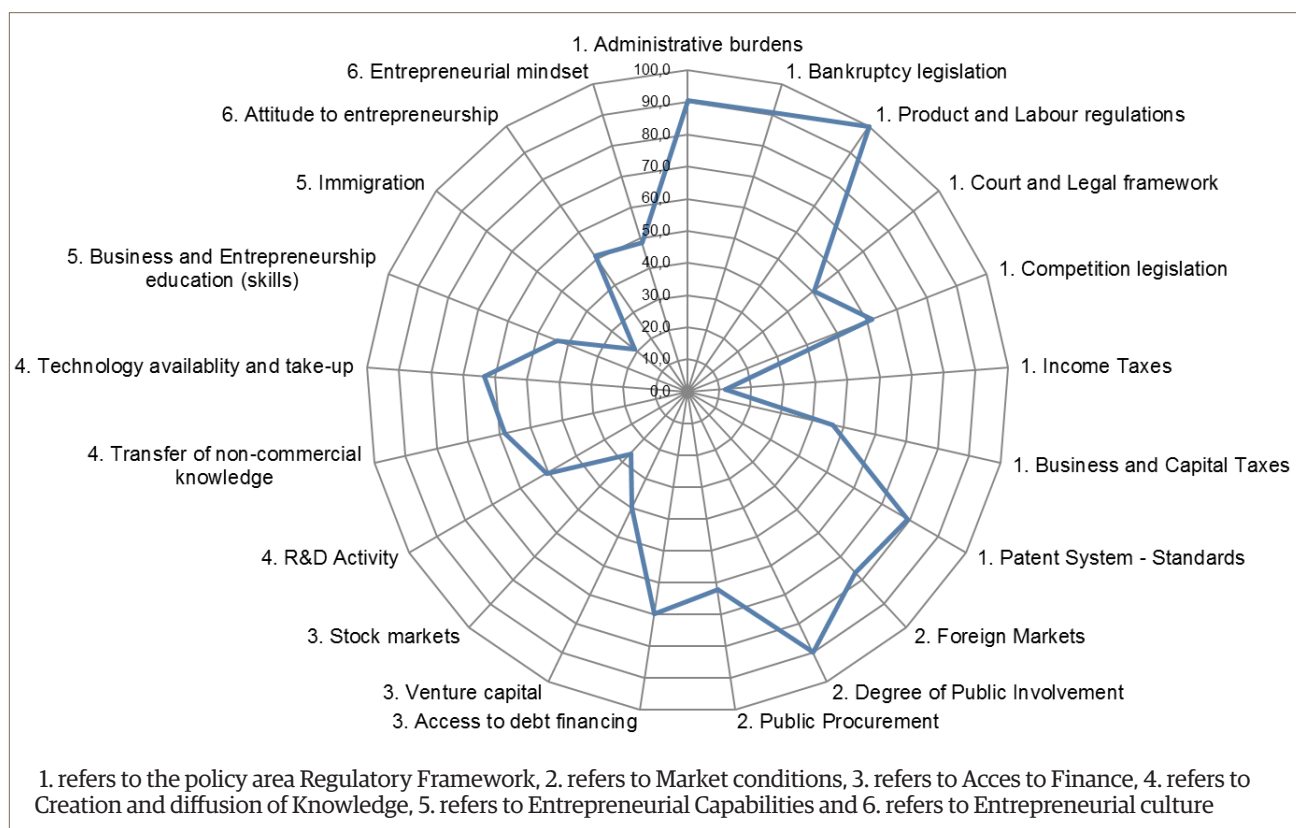
¹⁷ In 2012, the Danish Business Authority was created as a merge between the Danish Commerce and Companies Agency, the Danish Enterprise and Construction Authority and certain business areas of the National IT and Telecom Agency.

Framework conditions

Denmark ranks 8th when comparing the overall score for framework conditions for entrepreneurship across the OECD countries. This corresponds to a number 3 ranking among the Nordic countries, which was also the case in the Nordic Entrepreneurship Monitor 2010.

Looking across the six policy areas and comparing the relative strengths of Denmark to the other OECD countries, the best relative policy performance is Market Conditions, where Denmark ranks 3rd across the OECD, and Creation and Diffusion of Knowledge, where Denmark ranks 4th across the OECD (cf. Figure 12).

Figure 12: The sub-policy areas for Entrepreneurship in Denmark in 2012



Source: NGER own calculations.

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

In terms of Market Conditions, the overall Danish performance is world-class. Denmark scores high on access to foreign markets by providing good incentives in terms of low import burdens, although it has decreased its ranking in terms of burdens for export since 2007. Denmark also scores high by having a low degree of public involvement, for instance low price control and licensing restrictions.

In terms of Creation and Diffusion of Knowledge, Denmark is only exceeded by Finland, Switzerland and Australia. This policy area includes public and private R&D activities, transfer of non-commercial knowledge and technology availability and take-up, where eGovernance and eCommerce are particularly strong in Denmark.

Comparing the Regulatory Framework, Denmark performs relatively well, although exceeded by a few countries. In 2012, Denmark ranks 9th in terms of the Regulatory Framework across the OECD countries, which is up from 15th in 2007. This is the result of a high score on administrative burdens and very favorable bankruptcy legislation, with a short time and low costs related to closing a business. In addition, Denmark is the top performing country on labor market regulations. This is due to the 'flexicurity' model giving employers a high degree of flexibility in hiring and firing, combined with high security of employees in the case of e.g. unemployment. On the other hand, the reason that the overall score on Regulatory Framework is not higher is taxes. As with many of the other Nordic countries, Denmark scores low on taxes, which hampers the overall score.

Historically, access to finance has been relatively good in Denmark, but in the wake of the economic crisis, there has been a small decrease in Denmark's rank among OECD countries. This is due to a decline in the perception of the ease of getting a bank loan.

The utmost biggest Danish challenge is within the policy area of Entrepreneurial Capabilities, which is also the case when comparing the Danish strengths to the other Nordic countries. Denmark ranks 28th when comparing Entrepreneurial Capabilities across the OECD countries - up from 31st in 2007. This corresponds to second lowest Nordic score in terms of Entrepreneurial Capabilities (only lower in Finland). Even though Denmark has improved in terms of entrepreneurial capabilities in recent years, it ranks low. In particular, Denmark has a challenge of attracting foreign high-skilled labor and entrepreneurs to the country.

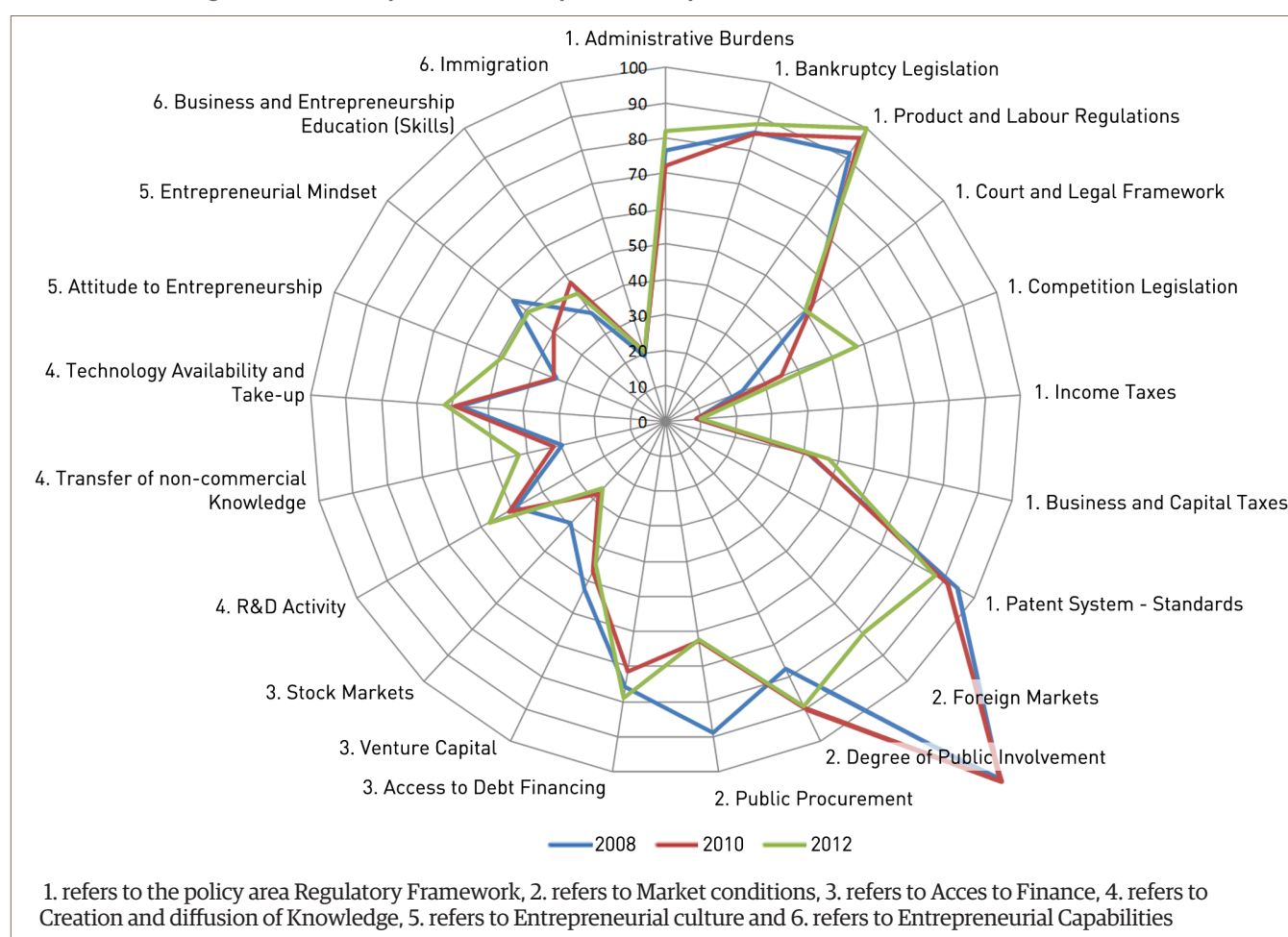
The entrepreneurial culture in Denmark also lags significantly behind the best performing countries (the US, Canada) as well as the other Nordic countries. The share of the Danish citizens who find it desirable to become an entrepreneur, is relatively low and has decreased in recent years. This might be explained by the uncertain economic environment caused by the financial and economic crisis, but also by the fact that entrepreneurship is generally not regarded as a good career choice in Denmark.

Development in the framework conditions over the period 2008-2012

Regarding the recent development of the framework conditions of Denmark, there has been improvement in business regulation. The development has been similar in Finland with lower administrative burdens and better competition.

Denmark has experienced the largest deterioration in market conditions. As for the other Nordic countries, the freight rates are the cause, but Denmark has also experienced a worsening in public procurement, due to the fact that there has been an increasing delay in payments made by the public authorities.

Figure 13: Development in entrepreneurship framework conditions 2008-2012



Source: NGER own calculations.

Note: In the applied standardization method for calculating changes is the best value in 2012 set to 100. If a framework condition in previous years is better the value will exceed 100.

Denmark has achieved a significant improvement in public and private investment in knowledge and sharing of knowledge. On the composite indicator of knowledge, Denmark is now second of the Nordic countries after Finland.

Like the other Nordic countries, Denmark has improved in entrepreneurial culture. The improvement in Denmark is due to a more positive attitude towards entrepreneurs. Denmark has also improved in entrepreneurial capabilities, but – similar to the other Nordic countries – there is still a way to go to match the U.S. level’.

Recent policy initiatives

In order to address the growth entrepreneurship challenges in recent years, the Danish government has implemented a number of initiatives. In the following, various recent policy initiatives are listed without providing an exhaustive overview¹⁸.

In the Government Work Programme 2012, it is stated that highly skilled foreigners may possess specific expertise and can thus help to increase Danish companies’ value creation and presence in export markets. To address the challenge with lacking entrepreneurial talent, the Danish Business Authority launched a call for a pilot project in October 2012 to invite talented entrepreneurs with a proven growth potential for a year to Denmark –encouraging them to get involved with growth-seeking ventures in Denmark. Furthermore, they are encouraged to file for extension of the work- and residency permit when the program has ended. This initiative is inspired by, among others, the Start-Up Chile initiative, where qualified entrepreneurs are invited to Chile to start and develop their business there (see Box 1 for more details on Start-up Chile).

¹⁸ See also Danish Business and Construction Authority, “2011 Entrepreneurship Index” for more details.

Box 1: Start-Up Chile

Start-Up Chile is a program created by the Chilean Government, executed by Corfo via InnovaChile, that seeks to attract early stage, high-potential entrepreneurs to bootstrap their startups in Chile, using it as a platform to go global. The end goal of the accelerator program is to convert Chile into the definitive innovation and entrepreneurial hub of Latin America; this is a mission shared by the Government of Chile and is a primary focus of the Ministry of Economy.

In 2010, the program, at that point just a pilot, brought 22 startups from 14 countries to Chile, providing them with US\$40,000 of equity-free seed capital, and a temporary 1-year visa to develop their projects for six months, along with access to the most potent social and capital networks in the country. These selected entrepreneurs were approved by an admission process conducted by Silicon Valley experts and a Chilean Innovation board that focuses ardently on global mindsets and worldwide potential. Of all required criteria, it is essential that the chosen entrepreneurs work in a global mindset, believing that the route to success is via expansion not isolation.

2010 acted as a pilot phase that lead into the 2011 application processes with the goal to bring 300 startups to Chile during the year, with the end hope of having 1,000 bootstrappers participate in the program by the culmination of 2014. The first application process of 2011 brought 87 startups to Chile from over 30 countries, after having received 330 applications- and, during the second process conducted in July of 2011, 650+ startups applied.

All of the Start-Up Chile entrepreneurs are measured during their time in the program by various indicators including participation in local events, presenting workshops on their particular expertise, raising local or international capital, and contracting talent.

Start-Up Chile is fully supported by the Chilean Government with special consideration of the Ministry of Economy, the Ministry of Foreign Affairs, and the Ministry of Internal Affairs.

Read more on: <http://startupchile.org/about/the-program/>

To address the meager access to finance for entrepreneurs, the Danish Growth Fund (Vaekstfonden) was created in 1992 and redesigned in 2001. This has contributed to the development of the Danish venture capital market. Also, a number of financial packages have been introduced in recent years. Most recently, in 2011, Danish Growth Capital,

a new investment fund was introduced with significant amount of capital from some of the large Danish pension funds. The aim is to improve access to venture capital for entrepreneurs with growth potential.

Entrepreneurial culture is being addressed by a repeated global event every year. The cultural efforts revolve around the annually recurring and world-wide Global Entrepreneurship Week (GEW) in late November. During the GEW, events are held all over the world for people interested in learning more about entrepreneurship, or for people who dream of starting their own enterprise or having their enterprise grow. In Denmark, the purpose of these events is to promote entrepreneurial culture, and for this reason they are aimed at all entrepreneurs - from prospective entrepreneurs to high-growth startups. In 2010, 7.5 million people attended the 37,000 events held in 104 countries all over the world. In Denmark, 12,000 people attended 140 events all over the country.

In addition, The Foundation for Entrepreneurship was established in 2010 to further promote Denmark's entrepreneurial culture. The purpose of The Foundation for Entrepreneurship is to unify national efforts for entrepreneurship education. Under the slogan "From ABC to PhD", the Foundation works to increase the number of students and educators who take part in entrepreneurial activities. The instruction provided at various educational levels should be progressively built up through the educational system. In primary and secondary school, the focus should be on stimulating a desire to create something new, whereas the closer the students come to completing their education, teaching of specific entrepreneurial skills should increase. The Foundation for Entrepreneurship is supported by a strong inter-ministerial partnership.

In recent years, Denmark has made a concerted effort to build up a public sector business support system to ensure that entrepreneurs are not tossed around by the system, but rather that they get the advice they need for moving forward the very first time they contact the system. Denmark's public business support system for entrepreneurs is based on a partnership idea and involves players from the public and private sectors to provide the best possible assistance to entrepreneurs. The municipalities are the public authorities charged with overall responsibility in Denmark for the public sector's local and regional business development centres. "No wrong door" is a guiding principle of Denmark's public business support system. All entrepreneurship guides - regardless of target group - must point the way as quickly as possible to the most appropriate advice, irrespective of whether this is offered by the public or private sector.

Five Regional Business Development Centres (Vaeksthuse) were established in 2007 as hubs for a cohesive public business support system. They provide problem clarification and individual growth charting for enterprises with growth potential. The charting

process leads to a growth plan for the enterprise and possibly a referral to relevant schemes in the private or public sector that can offer unique skills in the areas where the enterprise is having difficulty. In addition, the Regional Business Development Centres manage a wide range of the Government's entrepreneurial subsidy and grant schemes, e.g. the "capital coach scheme" ("kapitalcoach"), "board partnership" ("bestyrelsespartnerskabet") and "Early Warning", as well as a number of regional programmes.

To further assist entrepreneurs in navigating the public business support system, a website - vaekstguiden.dk - has been developed in close collaboration with sector business organizations. Vaekstguiden (growth guide) provides a general overview of all public sector offers aimed at generating growth and development in enterprises. In two minutes, entrepreneurs can find subsidy schemes and consulting offers via this guide to help them on their way, or they can find offers concerning clarification processes at either their local business development centre or a Regional Business Development Centre (Vaeksthus).

Finally, the creation of a web-based tool "rådgiverbørsen" (exchange of consultants) has been realized as to ease the match between growth seeking entrepreneurs and private service providers. Here, private sector consultants can set up a profile so that entrepreneurs can search for a consultant to perform specific tasks. In return, it is also possible for entrepreneurs to upload jobs to the exchange for which consultants can submit bids.

Concluding remarks

Denmark has experienced a long period with relatively high startup rates. However, the level of gazelles is low and young firms do not grow sufficiently. There is an enhanced focus on capacity building among entrepreneurs, but there might still be room for further improvement. It might be useful to identify ways in which the surrounding set of resources available for growth entrepreneurs (the ecosystem) could contribute more to capacity building in young firms, including the important role of highly-skilled and experienced people like serial entrepreneurs and "dealmakers".

Country specific findings

- Finland¹⁹

Highlights

- Finnish gazelles are few in number but grow faster and become larger than their Nordic peers
- Finland defines the global frontier in the policy area of creation and diffusion of knowledge
- Finland remains weak in the area of entrepreneurial capabilities but has improved the most in the area of entrepreneurial culture
- Publicly supported Vigo Accelerators, i.e. early stage investing and support to companies run by experienced entrepreneurs, are among the promising new policy initiatives in Finland

Introduction

Growth entrepreneurship enjoys a high political status in Finland. All Finnish governments in the 2000s (and even before) have had growth entrepreneurship among their half a dozen or so key policy items. Furthermore, after the merger of the Ministry of Labour and the Ministry of Trade and Industry into one organization, the Ministry of Employment and the Economy (MEE) has coordinated and conducted most relevant policy aspects in the domain of growth entrepreneurship since 1st of January 2008.

MEE's mission in this domain was outlined as one of the ten key measures in the current version of the National Innovation Strategy: "Redefining the roles and offerings of various public operators regarding growth entrepreneurship to form a clear (new) entity operating with entrepreneur and investor orientation."²⁰ An international evaluation

¹⁹ Petri Rouvinen and Mika Pajarinen.

²⁰ Aho et al., 2008. Proposal for Finland's National Innovation Strategy; and Government's Communication on Finland's National Innovation Strategy to the Parliament.

of the innovation system echoed this by calling for a re-organization of activities in nurturing and supporting new ventures.²¹ While some minor aspects of the evaluators' proposal have been implemented, institutional boundaries remain by and large intact. However, much has happened within the existing structures and several new instruments have been developed.

Growth entrepreneurship performance

Finland represents a paradox. The country has excellent pre-conditions for growth entrepreneurship. Yet in terms of performance, as far as the share of gazelles is concerned, Finland is a middling Nordic country. Sweden, that in many important ways is quite similar to Finland, seems to be doing much better when it comes to the absolute number or to the relative share of gazelles.

Table 4: Summary of Finnish Growth Entrepreneurship Performance

Gazelle rate	Number of gazelles	Average jobs created by gazelles	Share of gazelles > 50 employees at the end of growth period
0.56%	92	83	48%

Source: NGER own calculations.

On the bright side, it seems that the Finnish gazelles grow faster and become larger than their Nordic peers. Indeed, the total employment impact of gazelles is particularly skewed in Finland. For example, the top few percent of the Finnish gazelles account for a full third of the total employment impact.²²

Finland nurtured 92 gazelles in 2006–2009, whereas both Norway and Sweden were able to support over twice as many. The gazelle birth rate is 0.56% in Finland and 0.70% in Sweden. In Finland nearly half (48%) of the gazelles employed over fifty persons at the end of the observation period; in Sweden this was a clearly smaller share (25%). On average a Finnish gazelle increased its employment by 83 persons in three years, which is twice as much as the corresponding Swedish figure. In total, the 92 gazelles increased employment by 7,617 persons in three years.

Three-fourths of the Finnish gazelles are in services, equally in more and less knowledge-intensive ones. Gazelles in general manufacturing (12%), and higher-tech manufacturing in particular (7%), are more highly represented in Finland than in other Nordic countries.

²¹ Veugelers et al., 28.10.2009. Evaluation of the Finnish National Innovation System.

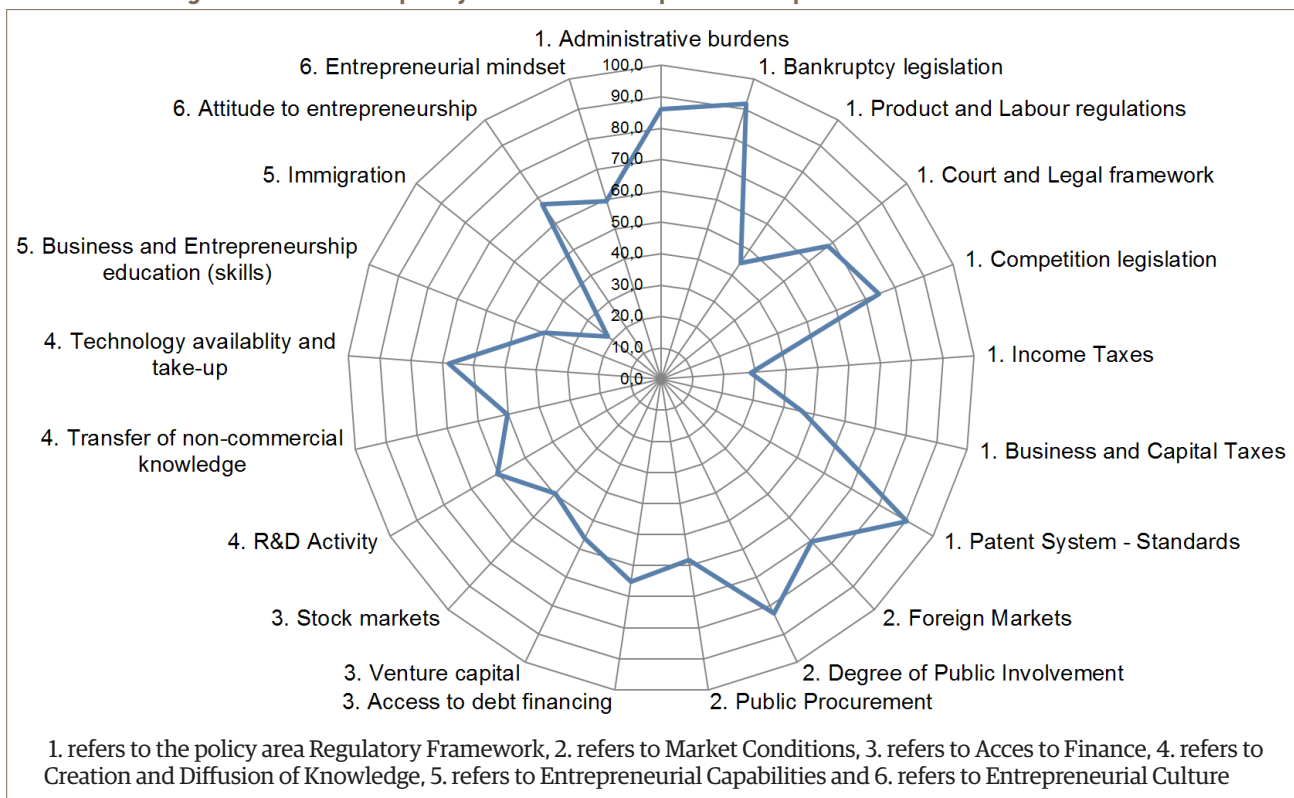
²² The “top few percent” refers to the gazelles that increase their employment by over 500 persons in 3 years.

Framework conditions

Finland has the best overall framework conditions for growth entrepreneurship among the Nordic countries.

Across the six main policy domains, Finland defines the global frontier in the policy area of creation and diffusion of knowledge. Finland's main weaknesses are in the area of entrepreneurial capabilities (cf. Figure 14).

Figure 14: The sub-policy areas for Entrepreneurship in Finland in 2012



Source: NGER own calculations.

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

In the last five years, Finland has improved its relative position in most main policy domains. The most noticeable jump has taken place in the area of entrepreneurial culture, in which Finland has developed from one of the worst to one of the best performing countries.

The six main policy domains are split into over twenty sub-indices. This finer level of aggregation reveals that Finland is a leading country in the area of patent system – standards and in the area of R&D activity. As all the Nordic countries, Finland scores low in taxation measures. Besides these, Finland ranks quite low in both the areas of immigration, and business and entrepreneurship education.

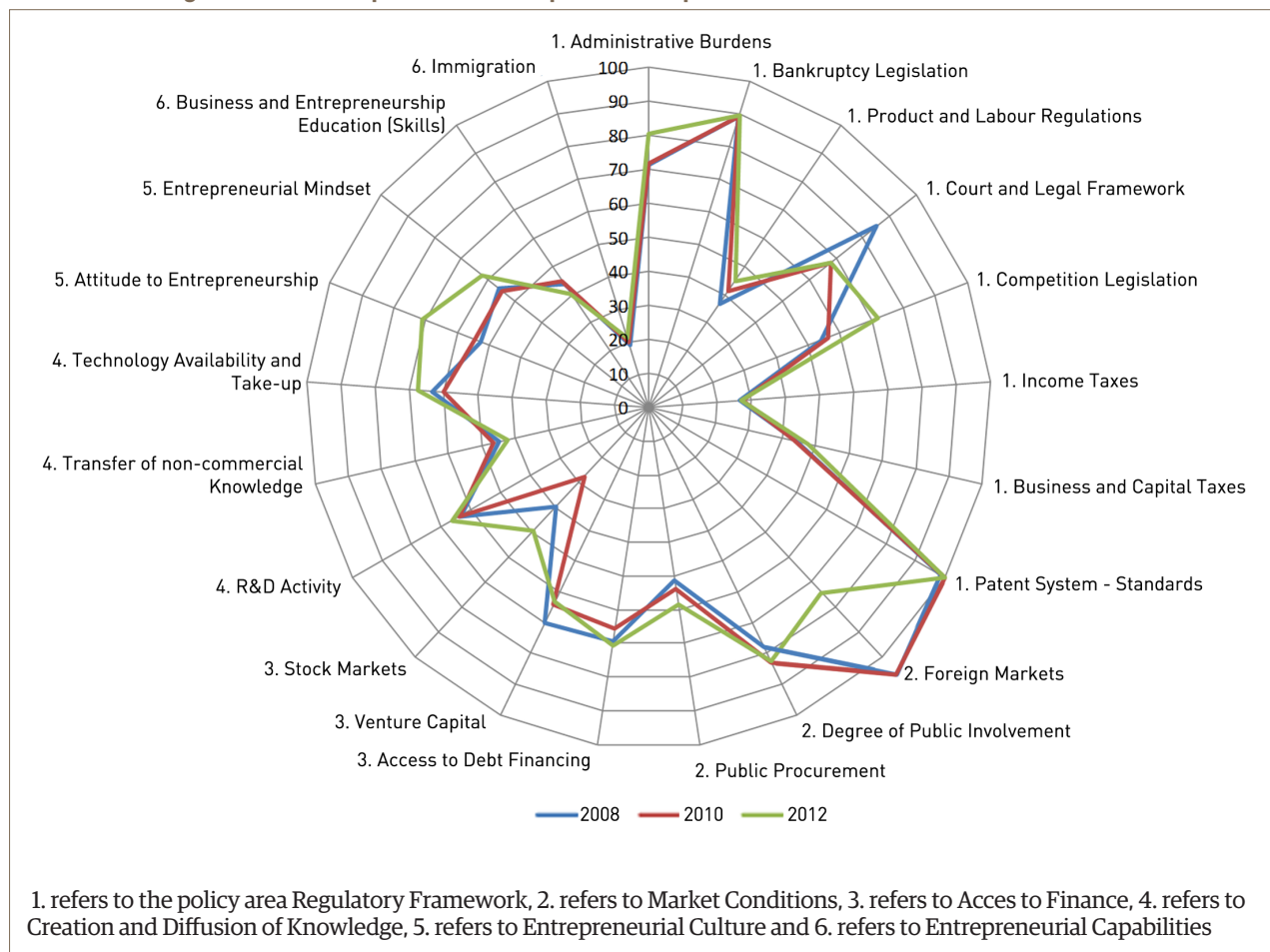
In the last five years, Finland's biggest improvement across the sub-indices is in the area of attitude to entrepreneurship. There are also considerable improvements in the areas of product and labour regulations as well as entrepreneurial mindset.

Development in the framework conditions over the period 2008- 2012

Finland is the only Nordic country where capital conditions have improved in the recent years. The indicators used are somewhat delayed, so the full impact of the financial crisis may not be included in the figures. Finland has had a decline in the venture market, but it is more than offset by some progress in other capital opportunities. In the knowledge area, Finland maintains its position as the Nordic country with the best conditions.

Finland is the Nordic country that has improved the most in entrepreneurial culture, and measured by these survey indicators, Finland is well on its way to an entrepreneurial culture which can be compared with the U.S.

Entrepreneurial capacity is difficult to measure. In this study, a GEM survey indicator of an individual's own perception of competence and skill to start a business is used. Furthermore, indicators of immigration including immigrants with higher education are used. According to these indicators, Finland has not significantly improved its entrepreneurial capacity. Finland is on par with other Nordic countries, and there is a long way to go to reach the levels of the U.S.

Figure 15: Development in entrepreneurship framework conditions 2008-2012

Source: NGER own calculations.

Note: In the applied standardization method for calculating changes is the best value in 2012 set to 100. If a framework condition in previous years is better the value will exceed 100.

Recent policy initiatives

In the last few years the overall emphasis of enterprise policy in Finland has shifted from incumbents to startups. The government and its agencies have assumed active roles in promoting risky new businesses and their global expansion. In the coming years, taxation is about to become a more actively employed tool of enterprise policy.

Arguably the most important change in entrepreneurship policy has gone almost unnoticed, even in Finland. Tekes, the Finnish Funding Agency for Technology and Innovation, largely executes innovation policy. Annually Tekes supports innovative efforta with some 600 million euros. With a major overhaul of its strategy a few years back, Tekes shifted its emphasis towards new ventures. As a part of this process, it

now has a keen interest in radical/disruptive and non-technical innovation as well as internationalization. One manifestation of the new strategy is a program for Young Innovative Companies, which offers a million euros per qualifying enterprise to support preliminary phases of international growth.

Tekes and five other relevant public bodies participate in a recently introduced Growth Track service, which aims to provide a one-stop-shop for companies seeking quick growth and internationalization. Each company entering the service is assigned a civil servant probing and coordinating public services the company might need. The number of companies participating in the program will reach 150 by the end of 2012. A related Team Finland concept packages public internationalization support both separately and in coordination with the Growth Track service.

The most ambitious and innovative of the recent policy measures is the establishment of the Vigo Accelerator program by MEE in 2009. The current nine Vigos are private companies run by experienced entrepreneurs. They provide contacts, expertise, and funding (some one-third of which comes from public sources) for high-quality and internationally-focused growth companies. The aim of the program is to ripen promising companies for international venture funding. In the first two years of operation, the Vigo portfolio companies raised some 70 million euros in funding. MEE estimates that by the end of 2015 portfolio companies should have attracted some 200 million euros of private funding.

Some exciting changes have taken place in the Finnish university system. New University Inventions Act was enacted in January 2007. It gave universities the rights to inventions conceived within its domain. While it weakened the position of the inventors, it also gave the universities new incentives for pursuing their "third mission" in the form of nurturing startups commercializing intellectual property at their disposal. Furthermore, since 1st of January 2010, Finnish universities have been either independent corporations under public law or foundations under private law, which has given them both more scope and better incentives for promoting entrepreneurship and startups. In particular, recently formed Aalto University (a merger of three old universities) has taken these matters at heart. It has more than a dozen interesting initiatives primary under two main umbrellas – Aalto Entrepreneurship Society (AES, students' grassroots activity) and Aalto Center for Entrepreneurship (ACE). AES has become a highly visible cheerleader for the cause. ACE offers innovation, commercialization, and startup services primarily for Aalto University researchers, students, and other stakeholders. Besides offering services that are similar to tech transfer offices in many American universities, ACE is able to independently provide a few rounds of funding for promising startups.

The Government budget proposal for 2013 includes two tax incentives aimed at growth-seeking companies. Provided that the remaining legislative issues are resolved, both

of them should be introduced at the beginning of 2013. The Tax Incentive for Private Investors targets business angels investing equity in SMEs. The incentive provides a possibility to postpone paying capital gains taxes as long as those gains are re-invested in qualifying companies. Since this primarily leads to tax deferral, the incentive is not expected to have fiscal consequences in the long run. The R&D Tax Credit for SMEs is likely to be a deduction from corporate income taxes tied to the wage costs of R&D personnel in Finland. This incentive is estimated to have a fiscal cost of up 200 million euros in the first year of operation. Presumably the R&D tax incentive supplements rather than replaces the current R&D subsidies.

Two further new policy instruments are currently under consideration. The first concerns asymmetric returns in venture capital funds. The idea is that a public investor could cap its required rate of return to some pre-defined level (e.g., 8%), the excess of which would be distributed among the private investors in the fund. The second is an IPR Box, which would provide a lower corporate tax rate on revenues coming from intellectual property rights (IPRs).

Concluding remarks

Finland has the best overall environment for growth entrepreneurship among the Nordic countries. Its growth entrepreneurship performance, however, leaves something to be desired. There is, however, a silver lining: Finnish gazelles grow faster and become bigger than their Nordic peers.

Historically attitudes and culture in Finland have led to modest growth ambitions. Precisely here the country has made its greatest improvements in the past few years. Arguably this marked change is not yet fully reflected in the available performance data.

Being a growth entrepreneur is now the career of choice for many university students, who would not have even considered it just a few years ago. This is attributable to both local and global changes. Paid employment is much less readily available for recent graduates and, due to the highly volatile global operating environment, it seems much less secure than before. Furthermore, an increasing number of students feel that established corporations do not reflect their values, which they can better cherish by establishing a startup.

Finland is currently in the middle of a unique and painful social experiment. In the course of 2012–2013 Nokia, and to a lesser extent some other established companies in the Finnish ICT sector, will release some ten thousand highly skilled individuals to the local labor market. Nokia has been very active in supporting the entrepreneurial efforts of those that leave the company. Depending on the case, it may offer to pay the individual's

wage in excess of one year, even if the work continues at a startup. Additionally it may provide tens of thousands of euros per company in direct support and loan guarantees. It may donate or sell patents and other forms of intellectual property to startups with plans to exploit them. MEE and other public organizations also have measures that are directly targeted at former Nokia employees. By the end of 2012, they will have established some three hundred new companies.

Entrepreneurs establishing growth-seeking startups, with similarly minded intrapreneurs in established organizations, may be seen as the link between the generation of new ideas and their broader societal impacts. If that link is missing, investments in new knowledge do not bear fruit. In the past, weakness in this link may be one of the reasons for the relative underperformance of the Finnish innovation system. With the ongoing boom in growth entrepreneurship and several new policy measures, there is every reason to believe that Finland will be able to nurture both more and better gazelles in the not-too-distant future.

Country specific findings

- Iceland²³

Highlights

- Iceland created 6 gazelles during the economic crisis with 230 new jobs
- Export industry in Iceland has gained due to the weak currency (krona)
- Entrepreneurs' access to funding is very limited in Iceland
- New tax incentives in Iceland are expected to stimulate innovation

Introduction

The policy environment in Iceland has changed in the aftermath of the economic crisis that occurred in the fall of 2008. On the 1st of September 2012, a final step was taken in merging the ministries responsible for industry and economy into The Ministry of Industries and Innovation. Another important element in the policy development is that funding for research-driven innovation was increased in terms of allocating funds to relevant support schemes. Quite extensive measures were established in order to stimulate startups.

The body responsible for formulation of policy in that area is the Technology Board of the Science and Technology Policy Council (STPC). The main institution operating in that area is Imprá at the Innovation Centre of Iceland (ICI) - a one-stop-shop that assists entrepreneurs in company startup, growth and management. ICI operates as an incubation centre and provides, information service, workshops and courses for SMEs. Other relevant organisations are the Icelandic Tourist Board and Matis food and biotech research company, both of which operate within the two fastest growing industries.

The Icelandic Centre for Research, Rannis, operates the main public competitive funds and strategic research programmes in Iceland. This includes the two principal funding

²³ Thorvald Finnbjörnsson

instruments for research and technical development: the Icelandic Research Fund and the Technology Development Fund. The latter fund grants support to new business ideas of fast growing companies. Rannis also has the task of designating company projects as innovative, based on the application process, and leading to a tax deduction (or pay out), for all industry branches. This is an incentive scheme initiated in 2010. Important organisations working with entrepreneurial development outside of the capital area are the Regional Development Agencies that e.g. operate regional growth agreements, including cluster activities.

Growth entrepreneurship performance

Iceland has 6 gazelles from a total group of 67 high-growth entrepreneurial firms. Only one of those gazelle companies has more than 50 employees, and no gazelle company reached 100 employees (cf. table 5). The gazelles are spread in different industries where three belong to less knowledge intensive services, one to more knowledge-intensive services and two to lower technology manufacturing. The gazelle reaching 50 employees belongs to one of the less knowledge-intensive services.

Table 5: Summary of Icelandic Growth Entrepreneurship Performance

Gazelle rate	Number of gazelles	Average jobs created by gazelles	Share of gazelles > 50 employees at the end of growth period
0,33%	6	22	17%

Source: NGER own calculations.

The share of gazelles in Iceland is 0,33% which is among the lowest rates in the Nordic countries, while Norway ranks highest with the rate of 0,87%.

The NGER study uses 2009 as a reference year. This was the year when the economy in Iceland decreased by some 8% after many years of high economic growth. The number of new startups decreased in 2009 compared to the years before, but has increased since then. In the study period, Iceland produced six gazelles which created about 230 new jobs. Out of these about 130 jobs were created during the three-year period prior to the reference year.

Based on per capita comparison, Iceland has fewer gazelles than Norway and Sweden but a little more than Denmark and Finland. Iceland has a higher percentage of gazelles in the lower technology intensive manufacturing sector than all the other Nordic countries.

Framework conditions

The framework conditions benchmarked for the years characterised by the economic crises in Iceland, puts Iceland in 7th place in 2012 in the ranking of 36 OECD countries. Finland is the only Nordic country ahead of Iceland in this comparison. Comparing the six policy areas to the OECD countries, Iceland seems to be doing relatively well in some of the areas, less so in others.

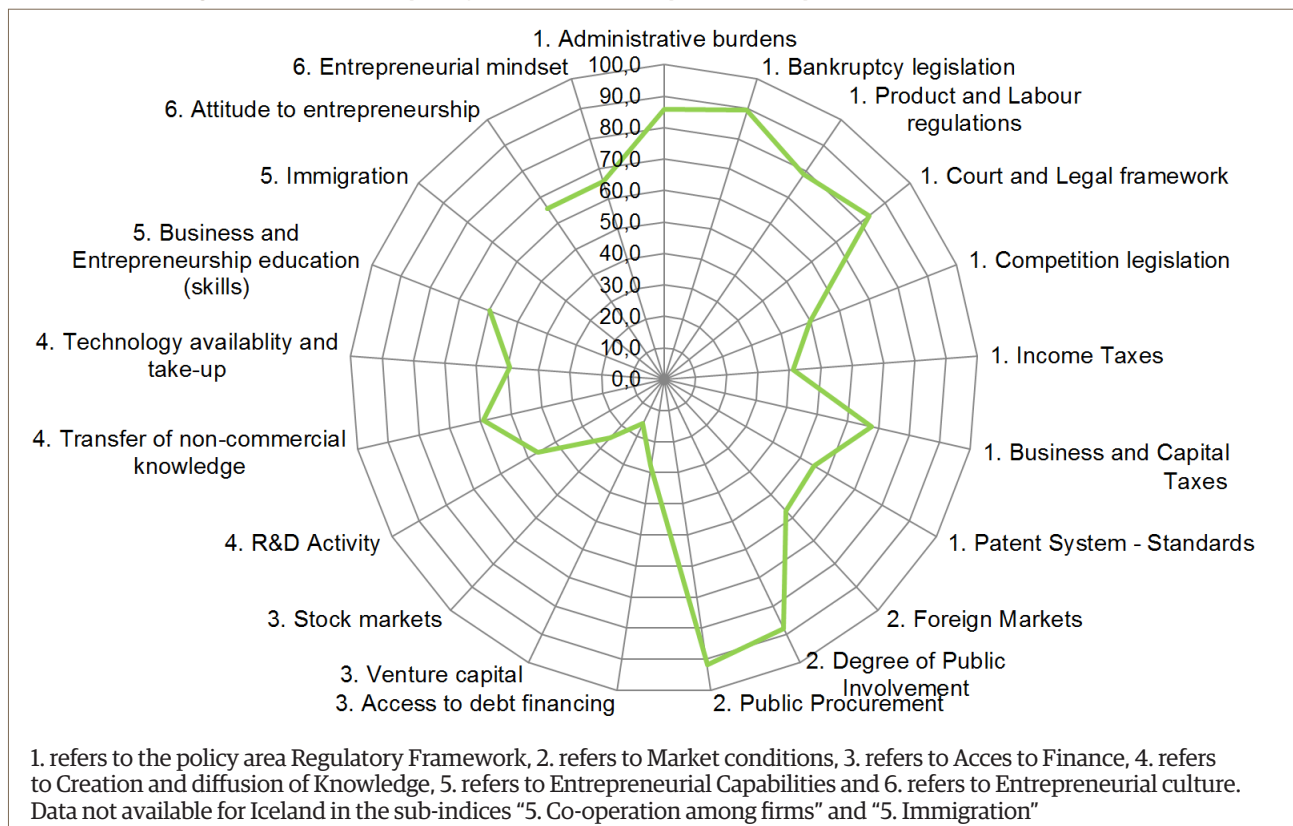
In particular, Iceland seems to be doing well regarding regulatory framework. Market conditions seem to be improving, while access to financing is somewhat weaker. Creation and diffusion of knowledge has decreased, weakening the rank of Iceland from 6th place to 14th (a result which is hard to understand), but other entrepreneurial indicators have not changed significantly.

The sub-indices behind the main policy areas do not indicate major changes in recent years. Bankruptcy legislation seems to have improved while patents, standards and degree of public involvement and public procurement have lowered in comparison.

As a follow up of the economic crisis the main policy emphasis has been in the area of encouraging startups. Somewhat less attention has been on encouraging growth or for improvement of general framework conditions. It should however be noted that the Government has tried to avoid cutting down the main funding supporting innovative R&D, and has introduced measures to increase innovation activities. But growth companies are not always a priority when designing measures for innovation and high-tech activities.

Companies in the lower knowledge intensive branches seem to have grown during the measuring period. These branches have not been subject to a large part of the public support to companies in the country. It should be pointed out that the export industries have been in a favorable position due to a weakening currency since 2009.

The framework conditions for the gazelles and the economy in general can be considered as favorable. The regulatory framework seems to be beneficial for business operations. Business environment and working conditions are rather positive. Market conditions have improved, but companies' access to finance has weakened quite a lot (cf. Figure 16).

Figure 16: The sub-policy areas for Entrepreneurship in Iceland in 2012

Source: NGER own calculations.

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

Development in the framework conditions over the period 2008-2012

The economic crisis in Iceland has also affected the conditions for entrepreneurs, in which almost all the policy areas and the overall index show decline.

Iceland is the only Nordic country that experienced deterioration regarding regulation. Whereas other Nordic countries have improved their competition rules, Iceland has increased the barriers to entry services. Furthermore, the income tax and taxation of dividends have increased and the patent system deteriorated.

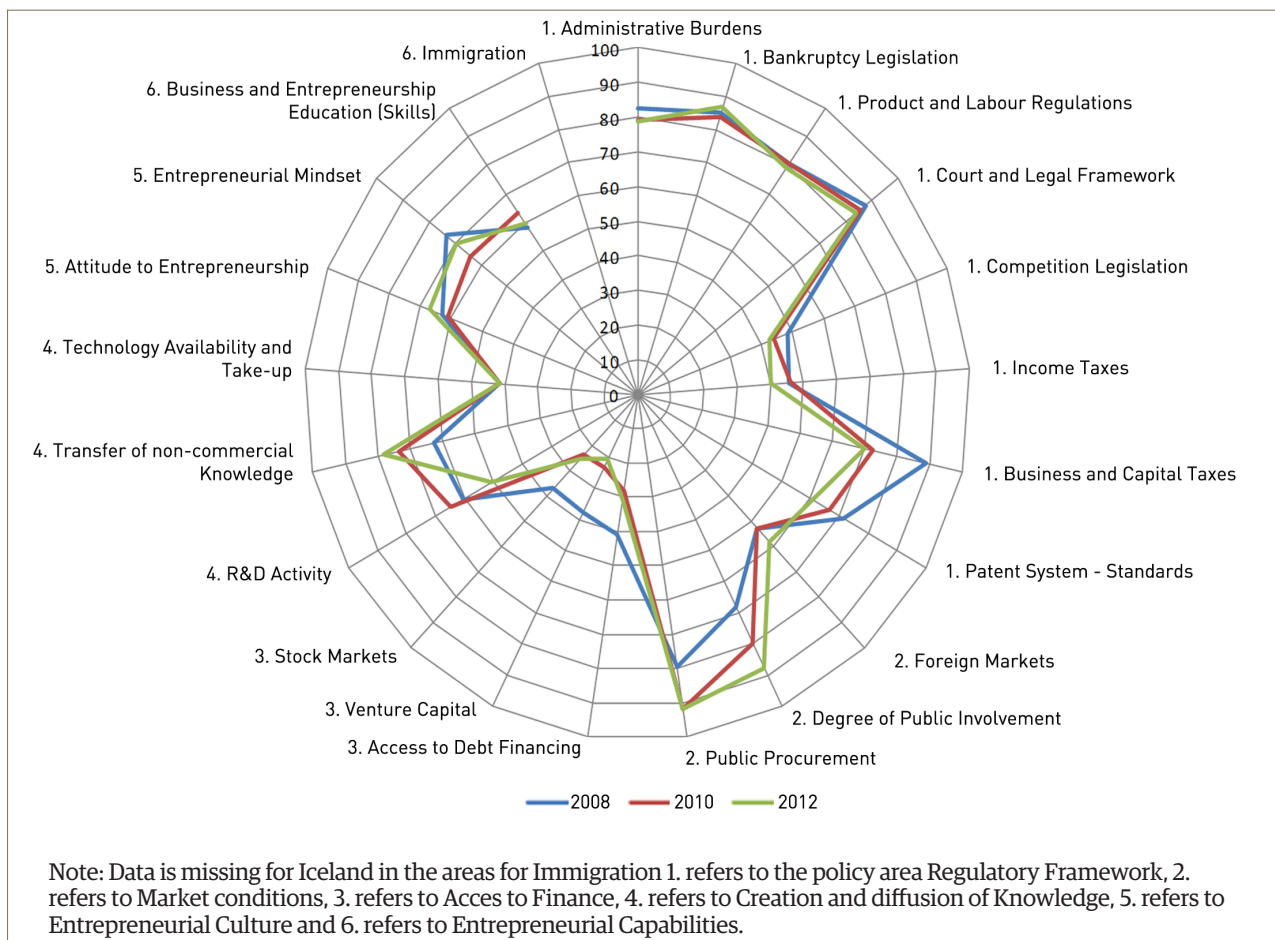
Devaluation of the Icelandic currency krona during the economic crisis has led to more favourable market conditions. The result for the export industry has been higher turnover, however, costs of operations have increased. Furthermore, Iceland has lowered

the use of control and command regulation which is translated into an improvement in the policy area reflecting degree of public involvement. Likewise, delay of payments by public authorities has decreased which improves the market conditions.

In the area of finance, Iceland has experienced the largest decline, which is due to the economic crisis.

Iceland is the only Nordic country that hasn't had any development in entrepreneurial culture over the period. However, Iceland has experienced improvement in entrepreneurial capabilities.

Figure 17: Development in entrepreneurship framework conditions 2008-2012



Source: NGER own calculations.

Note: In the applied standardization method for calculating changes is the best value in 2012 set to 100. If a framework condition in previous years is better the value will exceed 100.

Recent policy initiatives

The Government of Iceland has introduced the budget proposition for 2013 where considerable increase is proposed to the Technology Development Fund – the main instrument for supporting research-based innovation within companies. The available funds for grants will double to a total of 3,4 M€ for 2013. In 2009, the Government passed a new law geared towards innovative firms and regarding the tax incentive scheme. This means that every company performing research and development should get an income tax reduction, or if they do not pay income tax they will obtain a payment from the state budget. This scheme entered into force in 2010 with discounts or payments amounting approximately up to 3 million €. This amount is expected to reach almost 7 million € in 2013.

The present policy of the STPC *Building on Solid Foundations*²⁴ Science and Technology Policy for Iceland 2010 – 2012, states that entrepreneurs shall have all the same benefits as other organisations whether they are public or private. In the policy nothing is explicitly stated about growth needs of entrepreneurial companies. The Science and Technology Policy for 2013 to 2015 has four main objectives in the following fields: 1) human resources, 2) measurement of quality and performance, 3) finance of science and innovation, and 4) simplification and efficient system of science and innovation.

In 2012, the government published a programme called: *Iceland 2020 – Governmental Policy Statement for the Economy and Community*²⁵. The objective of the programme states that “Iceland aims to become a dynamic society capable of protecting its welfare in a manner that is sustainable and serves all members of the community by the year 2020”. There is no specific discussion on entrepreneurs in this programme, but more general statements are included under the social objectives of the programme.²⁶

The implementation of the programme is under way and it is expected that the *Industry policy* of the programme will address more specifically the conditions and expectations of entrepreneurs.

In 2012, the Government issued the *Investment Plan for Iceland 2013-2015 – New Emphases on Employment*²⁷ where increased investment is planned in several public fields. Available funds directed to research and research-based innovation are doubled.

24 Building on solid foundations. Science and Technology Policy for Iceland 2010 – 2012. http://www.vt.is/files/S&T%20policy%202010-2012_302180683.pdf

25 Iceland 2020 – governmental policy statement for the economy and community <http://eng.forsaetisraduneyti.is/media/2020/iceland2020.pdf>

26 That 4% of the GDP shall be allocated to research, development and innovation. The investment by the private sector shall be 70% against a 30% contribution from the public sector through contributions to competitive funds and research programmes. That by 2020, Iceland will be in the top 10 nations on the E-government development index and E-participation Index measured by the United Nations. That by 2020, the high-tech industry will account for 10% of the GDP and 15% of the value of exports.

27 The Investment plan of the Icelandic Government (Fjárfestingaáætlunríkisstjórnarinnar) 2013 – 2015. <http://www.forsaetisraduneyti.is/media/frettir1/fjarfestingaaaetlun.pdf>. <http://eng.forsaetisraduneyti.is/news-and-articles/nr/7180>

Emphasis is placed on specific industries such as tourism, creative industries, and the green economy.

The objective of the *Investment Plan for Iceland 2013-2015* is to strengthen economic growth and diversity in the economy. This plan is a part of the recovery plan launched in the wake of the economic collapse and is designed to support the economic recovery that is already underway.

The Government of Iceland has defended the environment of entrepreneurs by creating favorable possibilities for new startups and by encouraging research and innovation in the economy. This has paved the way for modifying the support system towards inspiring enterprise growth.

In a recent publication from McKinsey Scandinavia, *Charting a Growth Path for Iceland*²⁸ the authors state that: "The international sector offers unharnessed opportunities for growth. Because of the historical strength of resource-based industries, Iceland has had limited dependence on exports of knowledge or manufactured goods up to this point". The possibilities of growing entrepreneurial firms should be taking the international markets into consideration in their operations. The opportunities might be in industries supplying the well-established resource-based industries.

The report discusses the lack of skilled personnel as a constraint for Icelandic industry growth. It will take some time to repair the situation. This means that the education system and the industry could join forces in defining the needs for future skills in Icelandic industry.

Concluding remarks

In the aftermath of the economic crisis, the government and the support system of entrepreneurs and innovation has emphasized startups of entrepreneurial firms. Individuals have been encouraged to start their own enterprise and materialize their business ideas. The focus could now be modified to include growth of startups.

The programmes put forward by the government, such as the *2020 Programme* and the *Investment Plan*, are interesting and important inputs to the development of the Icelandic economy. The same is true for policies emphasizing knowledge creation and diffusion, in terms of the competitive R&D and innovation funds.

The results of the NGER study show that Iceland is in a fairly good position in comparison to other Nordic countries. It is noticeable that the gazelle firms in Iceland are not

²⁸ McKinsey Scandinavia 2012, *Charting a Growth Path for Iceland*. http://www.mckinsey.com/locations/Copenhagen/our_work/How_We_Work/~media/Images/Page_Images/Offices/Copenhagen/ICELAND_Report_2012.ashx

necessarily in higher technology industries, so the emphasis on the development of the economy could be put forward to a broad range of companies. The framework conditions are very important for the development of industries, and it is essential to align them to reach the best possible level.

The size of the local economy and market does limit the growth potential, so it is absolutely crucial to aim for international markets. Because of the limits, there are indications that very few Icelandic companies become large within 10 to 15 years from their startup. This calls for support methods and the framework conditions which take into consideration the challenges of growth in a small economy.

Country specific findings

- Norway²⁹

Highlights

- Norway has more gazelles than any other Nordic country
- Access to bank loans is very conducive in Norway compared to other OECD countries
- However, Norway has one of the highest wealth tax burdens in the OECD
- Massive efforts to reduce administrative burdens, aiming at the total cost reduction of 10 billion NOK (1,4 billion EUR) by 2015, are considered as one the main recent policy initiatives

Introduction

Norway has experienced strong economic growth over a long period of time. Nevertheless, the need for economic renewal is a major concern for policy. Despite the significant structural change during the last decades, the oil and gas sector is still responsible for a large share of wealth creation and is the dominant driver of growth. Developing new sources of growth by promoting young, fast growing companies is therefore important in order to prepare for “life after oil”.

Entrepreneurship policy in Norway is primarily the responsibility of the Ministry of Trade and Industry, and the Ministry also coordinates the Government’s innovation policy. The Ministry of Local Government and Regional Development has a major role in promoting entrepreneurship with a regional perspective. When it comes to the framework conditions, the Ministry of Finance, the Ministry of Labor and the Ministry of Education and Research are also important players. On the operational level, most funding and instruments are concentrated around three agencies; 1) Innovation

²⁹ Espen Solberg and Tore Sandven.

Norway, which is responsible for loans, grants and advice for business and regional development, 2) The Research Council of Norway, which is responsible for most R&D related instruments and 3) SIVA, the Industrial development Cooperation, which aims at strong regional and industrial clusters through infrastructure, investment and knowledge networks and instruments.

Growth entrepreneurship performance

As previously demonstrated, the share of gazelles in the period 2006-2009 was higher in Norway than in other Nordic countries, and Norway is only second to Finland when it comes to employment growth by gazelles. Although few gazelles manage to upscale considerably, the performance data indicates a significant improvement since the Nordic Entrepreneurship Monitor 2010, according to which Norway was a low performer in comparison to its Nordic neighbors.

Table 6: Summary of Norwegian Growth Entrepreneurship Performance

Gazelle rate	Number of gazelles	Average jobs created by gazelles	Share of gazelles > 50 employees at the end of growth period
0.87%	214	50	38%

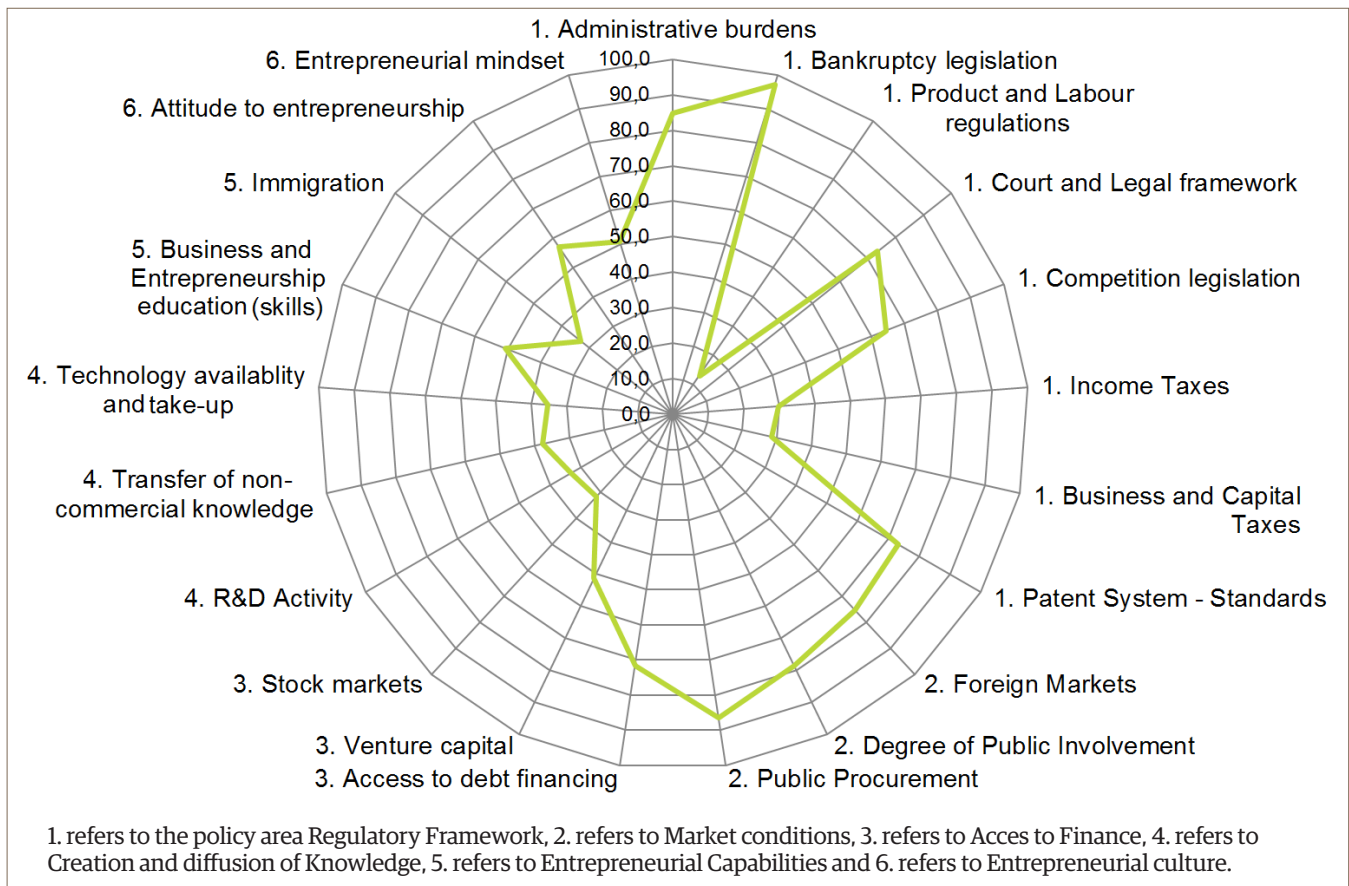
Source: NGER own calculations.

The distribution of gazelles is unevenly spread amongst the main industry sectors in Norway. As in all the other Nordic countries, the vast majority of gazelles are found within the service sectors. However, the relative importance of the service sector for gazelles is not as pronounced as in Denmark.

Compared to the other Nordic countries, Norway stands out with a high number of gazelles in primary production. This is largely due to the fact that the sector includes the oil and gas industry as well as enterprises within aquaculture production. Both are important and fast growing areas in the Norwegian economy. Roughly a half of the gazelles in the primary production are enterprises in these two sub-sectors.

Framework conditions

According to the benchmark model used in this report, framework conditions for entrepreneurship in Norway are not above the average level. Norway is ranked 13th among the OECD -countries which is behind all the other Nordic countries.

Figure 18: The sub-policy areas for Entrepreneurship in Norway in 2012

Source: NGER own calculations.

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

Access to finance is relatively good in Norway. Only Finland offers better overall finance conditions among the Nordic countries. Norway's strongholds in this area relate to the access to loans and the country credit rating. The Government has also established a number of funds for startup companies over the past few years. However, long-term and high-risk private capital is scarce. In addition, many public grant schemes and funds are oriented towards rural areas, while entrepreneurship activity is more concentrated around the urban areas. This apparent mismatch represents a challenge for the Norwegian system.

Norway can also offer rather favorable conditions in terms of regulatory framework, however, the picture is mixed within this main policy area. For instance, bankruptcy

legislation in Norway is ranked the best among all the OECD countries, that reduces the costs of failure for entrepreneurs. On the other hand, labor regulations are relatively rigid and the tax burden is quite high, even in the Nordic context. Rigid labor regulations is not necessarily a drawback, as many consider this as a core element of the Nordic welfare model. The Norwegian wealth tax is, however, considered one of the highest among the OECD countries, and this is a much debated issue in Norway. In its recent budget proposal for 2013, the Government proposes a slight reduction in the wealth tax. In general, however, tax cuts and softer labor regulations are not high on the agenda of the current Government.

Instead, the Government has had a particular focus on reducing administrative burdens for firms. Norway is ranked 10th across the OECD countries by this indicator, which is behind all the other Nordic countries. The Government recently launched initiatives to cut red tape, simplify official forms and reduce the reporting needs. The ambition is the total cost reduction for Norwegian companies of 10 billion NOK (1,4 billion EUR) by 2015. The Government estimates that total cost savings for firms so far amount up to 3 billion NOK.

The area where Norway is lagging most behind other Nordic countries is undoubtedly within the production and diffusion of knowledge. This is mainly due to a relatively low share of R&D and patenting activity by Norwegian enterprises. For instance, Norway ranks 21st among the OECD countries in terms of business R&D spending. To a large extent, this can be explained by the Norwegian industry structure, which is characterized by high activity in low R&D intensive industries, such as oil and gas. A number of measures have been introduced in order to increase R&D spending in Norwegian enterprises, including a relatively generous R&D tax incentive scheme. Despite these efforts, R&D in the Norwegian business sector seems to stagnate around 0,8 per cent of GDP.

Norway has a relatively low share of self-employed in total population. Several actions have been taken in order to improve the culture for entrepreneurship in general, and among women in particular. Although few young people seem to head for a career as self-employed, the general image of entrepreneurship has improved remarkably over the last five years, in these terms raising Norway from 20th place in 2007 to 6th place in 2012. It is also worth noticing that the Norwegians appear seeing great opportunities in entrepreneurship, but at the same time they are among those who report the highest fear of failure. This leaves the general impression that policy initiatives have succeeded in improving the image of entrepreneurship, but not yet to a full extent in encouraging one to become an entrepreneur.

Norway has also improved its score in terms of entrepreneurial capabilities. Particularly noteworthy in this area is the growing inflow of foreign labor. Norway is next to New Zealand among all the OECD countries in attracting foreign labor. It also appears that

Norway is among the countries which receive most foreigners with higher education. Only five countries have a higher share of immigrants with higher education. How to integrate and exploit this additional labor force is both a challenge and a great opportunity for Norway. Hence, the issue of so called “knowledge immigration” has recently been brought up on the agenda in Norway.

Development in the framework conditions over the period 2008-2012

Norway has improved the regulatory conditions, in particular, due to stronger competition rules in the areas that reduce the barriers to entry in the network and service sectors. However, Norway has the lowest improvement in regulations out of the Nordic countries, apart from Iceland where the development has been negative.

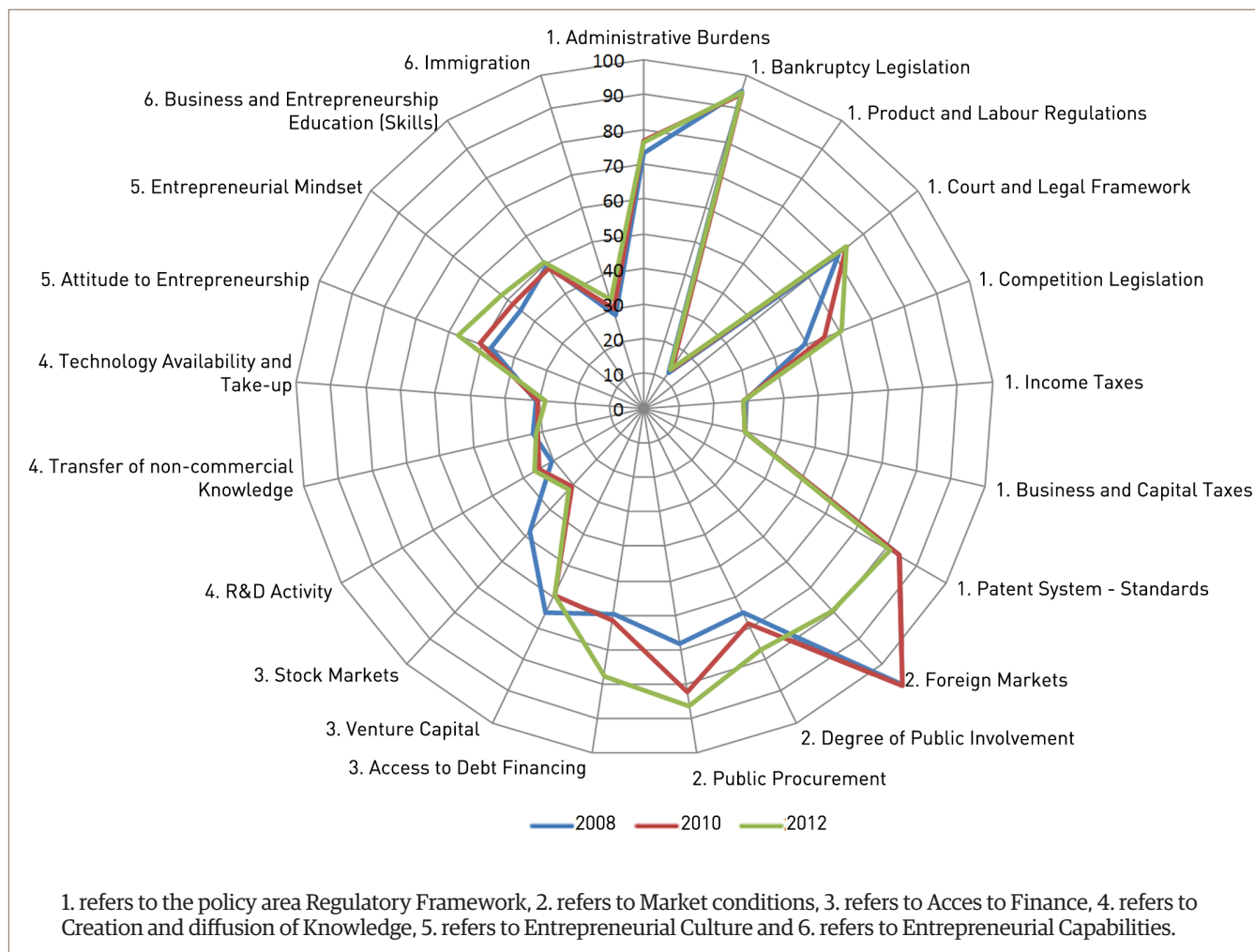
However, Norway has deteriorated the least in market conditions. Although Norway has experienced deterioration in foreign market due to higher freight rates, some of the deterioration has been offset by positive development in two other areas; degree of public involvement, and public procurement. The indicators regarding command and control regulations and the average delay in payments by public authorities have been improved.

In the access to finance Norway and Finland are the only Nordic countries that have experienced an improvement. In the case of Norway the improvement is due to a lower interest rate and fewer barriers for foreign direct investments (FDI). Some of this improvement is offset by deterioration in the stock market.

As for the knowledge area, Norway has not improved significantly. However, the slight improvement is caused by additional R&D funding.

Entrepreneurial culture has improved significantly over the examination period in Norway, but there is still a way up to Finland as a Nordic peer and the U.S. In terms of the sub-indicators, the attitude towards entrepreneurs has improved in Norway, especially regarding the indicators concerning image and status of entrepreneurs. Also the composite indicator reflecting mindset has improved due to the preference of becoming self-employed, risk tolerance and perceived opportunities.

As for the entrepreneurial capabilities Norway has improved the most of the Nordic countries. This is mainly caused by immigration, however, not including those with higher education.

Figure 19: Development in entrepreneurship framework conditions 2008-2012

Source: NGER own calculations.

Note: In the applied standardization method for calculating changes is the best value in 2012 set to 100. If a framework condition in previous years is better the value will exceed 100.

Recent policy initiatives

Entrepreneurship has received increased political attention. A number of initiatives have been introduced since the first Government entrepreneurship strategy in 2004. So far, most policy instruments in this area have focused on removing barriers to entrepreneurship and nurturing an entrepreneurial culture.

Merging narrow, sector specific instruments into broader, sector neutral instruments has been a deliberate strategy of Government over the recent 5-10 years. Hence, broad

measures such as the R&D tax deduction scheme and programmes for user driven innovation are among the most powerful tools for growth entrepreneurship and for innovation policy in general. In the recent years an increasing share of funding and instruments have been focusing on green innovations and green technologies.

In 2012, the Government announced the establishment of six new funds for increasing seed capital supply to startup companies with growth potential. The total capital is supposed to reach 3 billion NOK (410 million EUR), with a 50/50 share between public and private sources.

In response to the financial crisis, startup grants to companies with growth potential were substantially increased, but have now been considerably reduced, following a general phasing out of the measures. In its budget proposal for 2013 the Government introduced increase in funding for startup grants, with a special emphasis on companies at an early stage (less than 3 years old). The expansion concerns grants on the national level, thus avoiding the risk of mismatch with funding and entrepreneurship in regionally oriented grants.

Reducing administrative burdens has a high priority in Norway. One of the concrete actions is that audit requirement for companies with annual revenues of less than 5 million NOK (700 000 EUR) was abolished in 2012. This change is expected to reduce the administrative burdens for up to 140 000 companies. The capital threshold for starting a limited company has also been reduced from 100 000 to 30 000 NOK (4 000 EUR).

In addition, the so-called "Altinn" electronic portal will be strengthened and further developed in order to allow easier and more effective reporting procedures for companies. The 2013 budget proposal includes an increase of 100 million NOK to further development of the Altinn portal.

A new "Invest in Norway" office will be established, following an initiative launched by the Government in 2012.

Innovation Norway has started to develop a dedicated "High-Growth Programme", where selected companies will receive special support and guidance through different phases of their business cycle.

Concluding remarks

Norway stands out as the Nordic country with the highest firm birth rate, the highest share of gazelles as well as the highest share of high-growth companies. This represents

a considerable improvement compared to previous Nordic comparisons. However, there is reason to be cautious as to whether this trend is persistent, or if it just reflects a favorable economic cycle.

Furthermore, it remains a challenge to continue the growth of new companies. Norwegian firms are considerably outperformed by Finnish firms in terms of upscaling the growth. Hence, there is a rationale and grounds to pursue the efforts for improving the framework conditions for entrepreneurship.

Country specific findings

- Sweden³⁰

Highlights

- The Swedish gazelles created more than 8000 jobs in the period of 2006-2009
- Sweden has abolished the bequest and wealth taxes
- Rigid labour market legislation is considered the utmost biggest challenge
- Of the most recent policy initiatives, the massive tax cuts to improve the tax incentives to start and run enterprises and to accept job offers are crucial.

Introduction

Entrepreneurship policy is developed within The Ministry of Enterprise, Energy and Communications (Näringsdepartementet). The Ministry collaborates with other ministries to improve the general conditions for entrepreneurship. The Ministry supervises several 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 Sweden's Innovation Agency, Vinnova, which is responsible for innovation policy, the Swedish Agency for Economic and Regional Growth, Tillväxtverket, which carries out policies targeted at startups and development of firms, and ALMI Företagspartner AB, which provides financing and business counseling for growth in small and medium sized enterprises. The Swedish Agency for Growth Policy Analysis (Tillväxtanalys - Myndigheten för tillväxtpolitiska utvärderingar och analyser) carries out analysis and evaluations of the policy programmes and other measures.

30 Falkenhall, Björn, Johansson, Dan and Gabrielsson, Elin

Growth entrepreneurship performance

Table 7: Summary of Swedish Growth Entrepreneurship Performance

Gazelle rate	Number of gazelles	Average jobs created by gazelles	Share of gazelles > 50 employees at the end of growth period
0.70%	206	41	25%

Source: NGER own calculations.

The share of gazelles is 0.70 percent, which is the second highest share (after Norway) among the Nordic countries. Sweden reported to have 206 gazelles, of which 51 had more than 50 employees, 25 more than 100 and 2 more than 500. In total, they created a bit more than 8 000 new jobs during the examined three-year period 2006-2009.

There are gazelles in all the industries, but the distribution is highly skewed. Four fifths of all gazelles are active in service industries, about 5 percent in manufacturing and another ten percent in construction. The remaining gazelles are active in electricity, gas, water, waste, sewage and primary production. There are more gazelles in more knowledge-intensive service industries than in less knowledge-intensive service industries. In manufacturing, there are more low-tech than high-tech gazelles. Most gazelles (more than 40 percent) are found in more knowledge-intensive services. The results of gazelles being present in all the industries – the vast majority within service sectors and high-tech not being overrepresented – are in concurrence with the previous findings.³¹

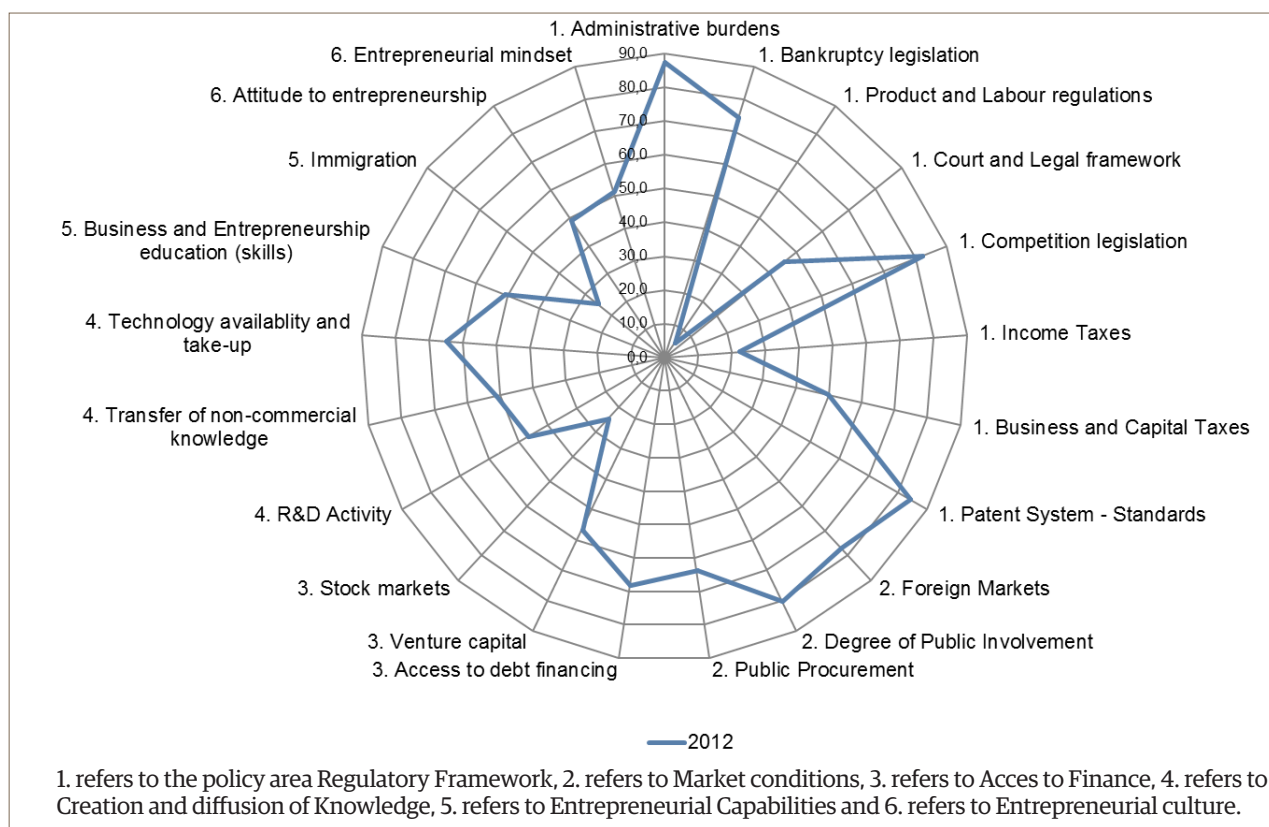
Framework conditions

A number of major economic reforms that have further significantly improved the entrepreneurial environment have been carried out in Sweden over the last decades: financial markets have been deregulated; price stability has been introduced as the main goal of economic policy; a number of state-owned enterprises have been sold or partially sold; network industries with a state monopoly like domestic railroads, airways, electricity, postal services, and telecommunications, but also the pharmacy sector have been deregulated; welfare markets previously closed for private entrepreneurship such as elderly care, schooling and healthcare have been opened up; private for-profit employment agencies have been legalized; wealth and inheritance taxes have been abolished; and the tax burden has decreased with nearly 10 percentage points.

³¹ Henrekson, Magnus and Johansson, Dan (2010). "Gazelles as Job Creators – A Survey and Interpretation of the Evidence." *Small Business Economics*, 35(2): 227–244.

Sweden is ranked 12th among the OECD countries in the overall index of entrepreneurship framework conditions. Looking across the six policy areas and comparing the relative strengths of Sweden to the other OECD countries, three policy areas (market conditions, creation and diffusion of knowledge, and access to finance) contribute to Sweden's position (cf. Figure 20).

Figure 20: The sub-policy areas for Entrepreneurship in Sweden in 2012



Source: NGER own calculations.

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

Sweden is an open economy with relatively few barriers to export and import - providing beneficial settings for globalization and international trade. Yet, there is potential for improving market conditions. Sweden is ranked 4th among the Nordic countries, only surpassing Finland. The broad involvement of government enterprises and investment in economic life related to the sub-policy area of degree of public involvement lowers the rank of Sweden. The Swedish central and local government employ about one third

of the labor force. In addition, the government procurement could be improved, and work is under way in this area.

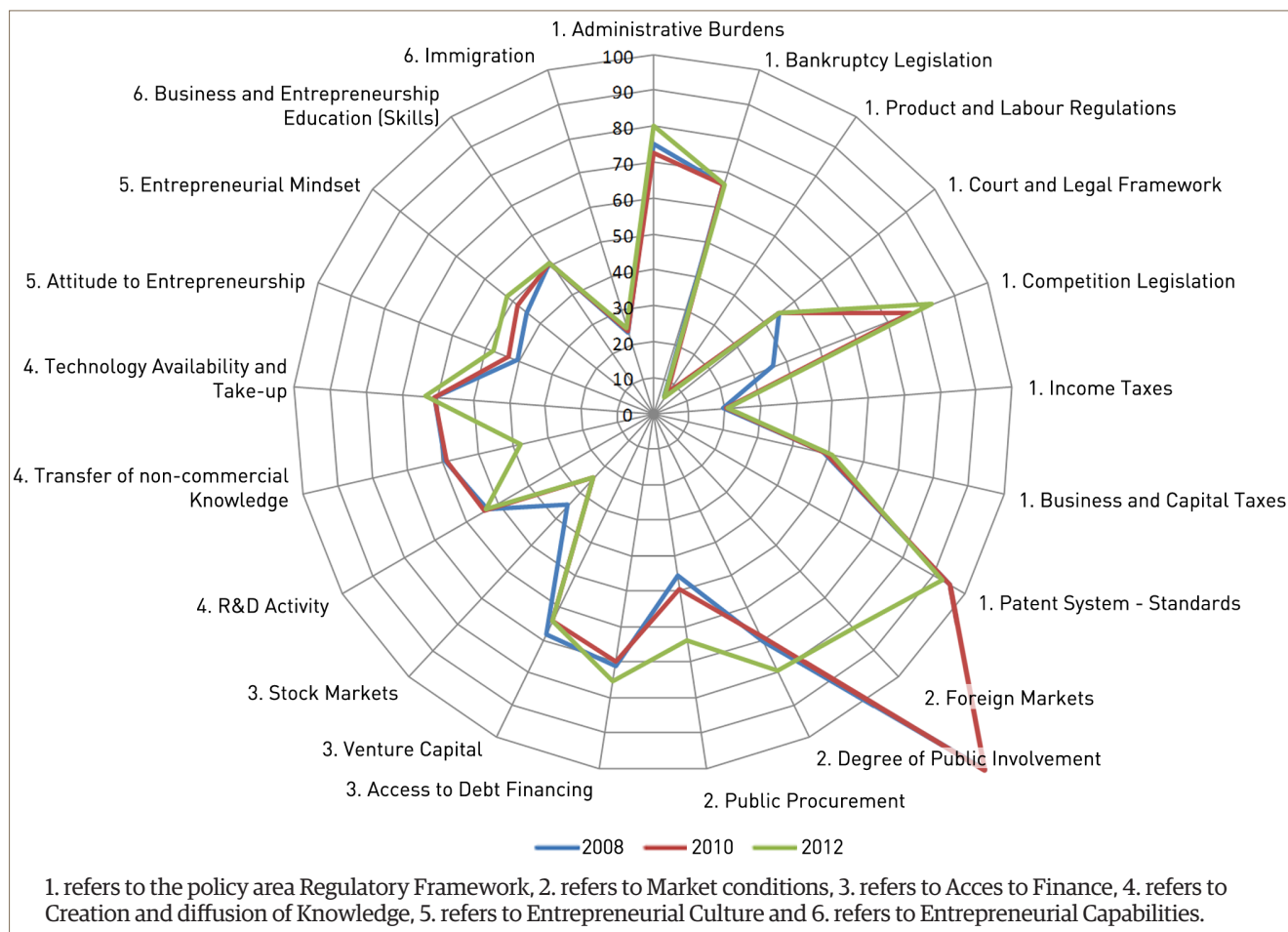
Sweden ranks 3rd among the Nordic countries in terms of access to finance, surpassed by Finland and Norway. In particular, Sweden performs well regarding access to debt finance and venture capital. Sweden also has a high overall ranking when it comes to the creation and diffusion of knowledge. Sweden is ranked 5th among the OECD countries and 3rd among the Nordic countries.

Sweden reports a low overall rank regarding the regulatory framework, entrepreneurial capabilities and entrepreneurial culture. The modest performance in regulatory framework has its background in the low ranking in the sub policy areas product and labour market regulations (ranked 31st), income taxes (ranked 29th) and business and capital taxes (ranked 23rd).

The low rank in entrepreneurial capabilities partly has its background in immigration (ranked 19th), which in turn is driven by low inflows of foreign labor and by low self-employment among immigrants. Entrepreneurship is often not considered a good career choice; successful entrepreneurship does not give high social status; and preferences for self-employment are not high - leading to a relatively low rank regarding attitude to entrepreneurship and entrepreneurial mindset. This explains the low rank in entrepreneurial culture.

Development in the framework conditions over the period 2008-2012

Sweden has improved its overall rank by 3 spots (from 15th to 12th) over the last few years. The largest improvement is found within entrepreneurial culture, where the rank has increased from 26 to 13. Both sub-policy areas of attitude to entrepreneurship and entrepreneurial mindset contribute - the latter most - and are driven by a strong improvement in perceived opportunities. The Swedish enterprises' perception of access to debt financing and availability of venture capital has improved, causing Sweden to rank higher in access to financing. Sweden has made some progress regarding the business conditions for entrepreneurship - on business regulation. This applies to lower administrative burdens and stronger competition law. Entrepreneurial capacity has also progressed. The labor market regulations, on the other hand, have deteriorated compared to the other OECD countries.

Figure 21: Development in Entrepreneurship framework conditions 2008-2012

Source: NGER own calculations.

Note: In the applied standardization method for calculating changes is the best value in 2012 set to 100. If a framework condition in previous years is better the value will exceed 100.

Recent policy initiatives

There has been a general shift in policy formulation from traditional SME-policy towards more entrepreneurship-oriented policy making. The ambition to strengthen Sweden's entrepreneurship performance is not translated into a specific target for the number of startups or gazelle firms. The ambition is to make it easier and more rewarding to run businesses by creating a world-class business environment in Sweden. The main strategy to achieve this is to improve the general framework conditions for entrepreneurship and firm growth.

The ministry has set out specific programs for promoting entrepreneurship, which include initiatives to improve entrepreneurship in the health care and creative industries. There has also been an extensive programme to promote women's entrepreneurship in Sweden. Furthermore, in 2009 the Swedish government presented a strategy for entrepreneurship in the field of education to promote entrepreneurial attitudes and skills. By 2010 the government had introduced 172 new or ongoing policy initiatives to improve the business climate (Näringsdepartementet 2010).³² The work with cutting red tape has high priority and continues.

Steps have been taken to implement the new national strategy for innovation (Den nationella innovationsstrategin), with the purpose of encouraging employment and economic growth by improving the climate for innovation. Two of the largest public providers of early stage capital (Innovationsbron AB and Almi Företagspartner) will be merged with the intention to create a more efficient organization – providing guidance and capital for entrepreneurs in early phases of business development. The national strategy involves actions for developing Swedish tourism and using procurement as a tool for encouraging innovations³³.

The government has focused on improving the tax incentives to start and run enterprises and to accept job offers. A cornerstone in this policy is the tax credit for taxes paid on earned income (skattereduktion för arbetsinkomster, the so called jobbskatteavdrag), which was introduced in four steps between 2007 and 2010. In 2007, a tax reduction for household services (the so called RUT-avdrag) was introduced which created a new market, in particular for female and immigrant entrepreneurs. A year later, a tax reduction for house repairs and maintenance (the so called ROT-avdrag) followed. The VAT for restaurant services has been reduced from 25 to 12 percent in 2012. The government is to propose that the corporate income tax will be decreased by 4.3 percentage points from 26.3 to 22 percent from January 2013. If approved by the Parliament, Swedish corporate income tax will be below the OECD and EU average.

Moreover, there is an ongoing governmental inquiry on capital taxation (företagsskattekommittén). A partial report (Skatteincitament för riskkapital) was submitted in January 2012. As suggested in the report, the Government proposes a tax deduction for investments in smaller growth companies (investaravdrag).

32 Näringsdepartementet (2010): Växtkraft, 172 insatser och områden som främjar jobb och företagsamhet i hela landet. Stockholm: Näringsdepartementet.

33 Braunerhjelm, Pontus, Eklund, Klas and Henrekson, Magnus (2012). Ett ramverk för innovationspolitiken. Hur göra Sverige mer entreprenöriellt? Stockholm: Samhällsförlaget.

Concluding remarks

A number of fundamental reforms have been undertaken by the Swedish policy makers over the last decades that have profoundly improved the grounds for high-impact entrepreneurship and gazelles. Among these, are for instance opening up of product markets previously closed for private entrepreneurship, such as health care, elderly care and schooling, and the tax reduction for household services. These deregulations can be expected to have fuelled the number of gazelles.

Sweden also diverges in a few policy areas, which can be expected to have a negative impact on high-growth entrepreneurship: entrepreneurial culture and entrepreneurial capabilities rank low; income taxes, business and capital taxes are high; and labor market regulation is rigid.

There is most certainly a dependency between different policy areas. For instance, lower business and capital taxes will improve the regulatory framework conditions, and - at the same time - the improved incentives for entrepreneurship will probably make it more attractive to become self-employed and entrepreneurship will be regarded as a good career choice. In a study of business startups among the whole science and technology labor force in Sweden, it is reported that employees and students often prefer unemployment and further education to starting a business of their own, if facing unemployment.³⁴ A major explanation is that many are unwilling to forgo a large part of their social security benefits for uncertain and highly taxed entrepreneurial incomes. It should be observed that small tax cuts can have large incentive effects, and the most harmful taxes only generate small tax revenues. Research indicates, for example, that the increased incentives to work, that would result from an abolishment of the state income tax on labor, could virtually be large enough to outweigh the lost tax revenues.³⁵ These findings suggest that there is a potential for encouraging entrepreneurship and firm growth by additional reforms.

³⁴ Delmar, Frédéric, Karl Wennberg, Johan Wiklund and Karin Sjöberg (2005), "Self-Employment Among the Swedish Science and Technology Labor Force: The Evolution of Firms Between 1990 and 2000." Report A2005:001. Östersund: Swedish Institute for Growth Policy Studies.

³⁵ Sørensen Birch, Peter (2010). Swedish Tax Policy: Recent Trends and Future Challenges. Report to the Expert Group on Public Economics 2010: 4. Stockholm: Fritzes.

Benchmarking entrepreneurship ecosystems

Introduction

Based on the findings of the study, entrepreneurial capabilities appear relatively weak in the Nordic countries compared with the peer countries. To provide further input on how to improve this policy area, the significance of the entrepreneurship ecosystems is discussed in the following.

Entrepreneurship ecosystems - or rather entrepreneurship infrastructure - were introduced in the Nordic Entrepreneurship Monitor in 2010. At that time, the role of entrepreneurship infrastructure was discussed, emphasizing that much of the entrepreneurship infrastructure in the Nordic countries was aimed at starting new firms, although some new initiatives targeting young growth firms had been introduced. However, it was not possible to quantify and compare the strengths of the entrepreneurship infrastructures, nor characterize the dynamics of those infrastructures that had not turned out successfully.

Since then, more work has been carried out to enhance the understanding of entrepreneurship ecosystems, and in particular trying to develop new data that enables a benchmark of different entrepreneurship ecosystems.

In the following, and for the first time, an international benchmark of ecosystems is presented in order to provide fact-based input to the discussion of Nordic entrepreneurial capabilities and entrepreneurship ecosystems.

As the benchmark analysis of entrepreneurship ecosystems is a pioneer study, it only includes data from some Nordic capitals (Copenhagen and Stockholm). However, as highlighted in the policy recommendations, more work should be carried out in the future to enhance the data on the ecosystems, striving to include data from all the Nordic countries as well as from other ecosystems around the world.

Benchmarking entrepreneurship ecosystems

To grow and succeed, a young company needs to obtain access to a number of vital resources such as capital, customers, markets, human capital, know-how, etc. To obtain any of these resources, the company must approach and link to specialized resources such as people, companies and institutions.

The specialized and highly qualified resources such as investors, service providers, established companies, knowledge institutions, experienced serial entrepreneurs and “dealmakers”, offer entrepreneurs support within a variety of areas and are referred to as entrepreneurship ecosystems.

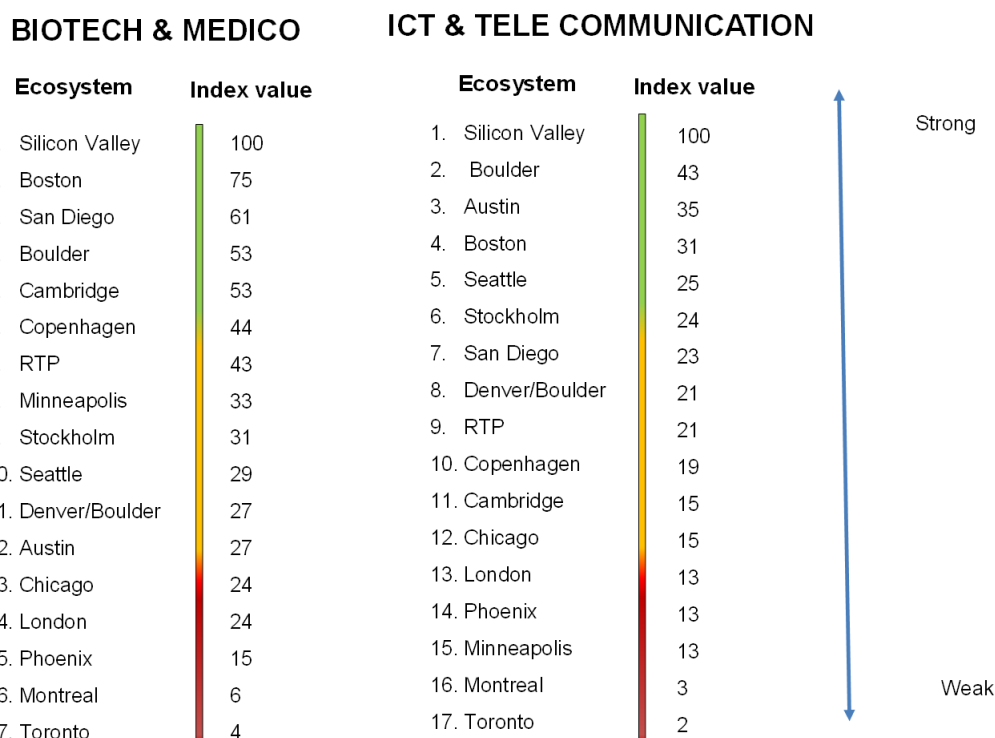
So far, it has not been possible to benchmark entrepreneurship ecosystems across regions due to non-existing internationally-comparable data. Anecdotes about the success in certain regions combined with some regional data for venture capital have been the most useful elements when comparing the strengths of ecosystems.

The Nordic Growth Entrepreneurship Review highlights new findings that quantify and benchmark ecosystems in what is called an ‘entrepreneurship ecosystem index’. The ecosystem index consists of regional data for critical elements in ecosystems including: venture capital (venture capital indicator), concentration of established businesses (LQ indicator), service providers and knowledge institutions (patent indicator) and experienced business people (dealmaker indicator). The reason that regional data is used rather than national data is that entrepreneurship ecosystems are regional and local entities.

Moreover, the data in the ecosystem index is sector-based. The reason for this is that entrepreneurship ecosystems tend to be concentrated around one sector as most venture capitalists preferably invest in certain sectors. Yet some of the actors and resources in the ecosystem – such as service providers – might be involved in many sectors at the same time. In that way, entrepreneurship ecosystems are somewhat similar and linked to clusters due to the emphasis on sectoral concentrations.

The entrepreneurship ecosystem index includes a variety of metropolises from Europe and the USA (cf. Figure 22).³⁶

³⁶ During the course of the Entrepreneurship Ecosystem project, the project team visited a number of the metropolises, both strong and weak ecosystems, as to understand the various mechanisms. See: www.foragroup.dk

Figure 22: Benchmarking entrepreneurial ecosystems

Source: Danish Business Authority by Hansen and Lempel, 2012 (forthcoming).

Based on the indicators, the ecosystem index shows that the strength of entrepreneurship ecosystems ranges widely between the cities in the analysis from very weak to very strong. Well-known entrepreneurship ecosystems such as Silicon Valley and Boston have some of the highest scores in the ecosystem index within Biotech/Medico and ICT/Tele Communication. Other US ecosystems such as Boulder (Colorado) and Austin (Texas) also score relatively high. The two Nordic metropolises in the study (Copenhagen and Stockholm) only score half or 1/4 compared to the best-performing ecosystems, indicating some untapped potential for strengthening the ecosystems in these two cities i.e. fostering more collaboration between the ecosystem operators.

Although the findings are limited in terms of the regions and cities included, the middle to low score of the Nordic ecosystems might explain the lack of Nordic gazelles that really grow and become “born-big firms”. Therefore, it might be the case that the majority of young Nordic firms do not grow significantly due to the lack of strong sector-based entrepreneurship ecosystems, in which resources are mobilized and actors collaborate intensively.

The study of entrepreneurship ecosystems also shows that strong ecosystems are not located everywhere in the USA. In fact, a number of the US regions such as Chicago and Phoenix are ranked low in the entrepreneurship ecosystem index.

If this is the case, it is necessary to consider how to strengthen the entrepreneurship ecosystems in the Nordic region, and shape a common vision about what forms successful young growth firms, and how the ecosystem should collaborate to facilitate their growth.

Some key actors in strong ecosystems

If the Nordic entrepreneurs are challenged by not having sufficient capabilities to turn the high number of startups into a high number of successful growth firms, a surrounding system of highly qualified resources could compensate for and facilitate the development of the entrepreneurial capabilities.

As mentioned, well-functioning entrepreneurship ecosystems consist of a complementary set of resources including venture capitalists and investors, large established firms, knowledge institutions and service providers (see also Box 2).

The strength of the ecosystem depends on the actors' capabilities to identify and sufficiently assist young potential growth firms through intense collaboration. They mutually benefit by creating value, but the value is only created if they collaborate with each other.

Box 2: Some key actors in strong ecosystems

Based on field studies in several successful and not-successful entrepreneurship ecosystems, the critical resources in strong ecosystems are identified as:

- **Qualified investors**

Access to venture capital is crucial in strong entrepreneurship ecosystems. Investors such as venture capitalists and business angels primarily invest capital in young potential high-growth companies, but they also help young high-growth firms build management teams and help recruit talent from outside the local ecosystem. Investors' networks inside the ecosystem as well as to other ecosystems are of extremely high value for the young firms as they benefit from it through market access, contacts to partners and potential customers.

- **Open and collaborative flagship firms**

The local presence of strong established firms with an open-minded and collaborative culture is essential to a well-functioning entrepreneurship ecosystem. The established firms can create value in the ecosystem in several ways. Firstly, established companies operate as lighthouses and are regarded as role models for entrepreneurs in the ecosystem. They show that it is possible to be successful on the basis of the local ecosystem resources. Secondly, they contribute to the development of local talent (engineers, CEO, CFOs etc.) in the ecosystem and develop potential new growth companies by creating an open culture of spin-offs. The established industry has an important task of training new graduates from universities to become and think like businessmen. Later, these competencies are exploited by e.g. startup business. Established firms also act as innovation partners, suppliers, customers, and provide exit opportunities for young growth companies. A growth company without a track record can "borrow" the credibility of recognized industry by establishing strategic alliances and innovative work with them. Successful established companies can also put the local ecosystem on the world map. By their mere presence in the local ecosystem they signal to other actors that it is possible to successfully grow a business, which will attract more talent, business and capital to the ecosystem.

- **Collaborative knowledge institutions**

Collaborative and open-minded knowledge institutions provide the local ecosystem with high-class research on which new growth firms can be formed. They provide highly trained and specialized manpower for both startups and the established industry. In addition, through education they create a culture around growing young firms, and also train and educate local service providers (such as lawyers) to become oriented towards entrepreneurial growth. Knowledge institutions also form spin-outs which are often high-tech, research-based firms grounded in new technologies.

- **Service providers**

The young high-growth firms need various types of services provided by e.g. lawyers, accountants, recruitment agencies, mentors, business consultants, etc. For young companies, service providers play a key role by assisting the firms overcome some early and critical hurdles. For instance, in Silicon Valley, the various ecosystem actors generally think that entrepreneurs need to focus on their core strengths to succeed. Often it is therefore recommended that all the other important business needs are outsourced to service providers. The service providers help develop the growth firms, prepare them legally for external investors such as venture capitalists, and generally make them investor-ready. Service providers have a number of business models for their engagement in the young, potentially high-growth firms. The general understanding is that advisors invest a lot of time in the beginning that is not billed, in order to build relationships with the young firms and potential clients. Fundamentally, the service providers are attracted by winning opportunities and seek the successful ecosystems themselves.

- **Serial entrepreneurs and dealmakers**

In strong ecosystems such as Silicon Valley, Boston and Austin, serial entrepreneurs and dealmakers play a unique role and are regarded as the essential “glue” in the ecosystem. To identify and access the right resources, young growth firms must approach and relate to a number of people, firms and institutions. It requires certain relevant networks and managerial capacity to navigate successfully around the ecosystem. Specialized and experienced business people can assist entrepreneurs to navigate in the system. They introduce growth firms to the right resources and people, help to make useful deals and connections between entrepreneurs, investors, advisors etc. They help entrepreneurs build the social capital while also providing strategic and managerial advice to guide the potential high-growth firm in the right direction.

The concept of dealmakers was initially introduced in a study of regional entrepreneurship networks in 12 US regions by Feldman and Zoller (2010). They show how entrepreneurial networks have hierarchies and how some actors are more important to entrepreneurial success than others. Particularly, they show that the number of experienced business people (dealmakers) in regions such as Silicon Valley and Boston is highly associated with the success of new ventures. Therefore, it is not about how many individuals you have access to through your own network, but how and to whom you can access to key growth-entrepreneurial resources within the ecosystem and how centrally connected *they* are.

Building blocks in strong entrepreneurship ecosystems

Certain regional pockets seem to have created successful conditions for fostering significant growth in young firms. But most ecosystems are still struggling to identify ways for enhancing the growth performance in entrepreneurial firms.

According to the entrepreneurship ecosystem study³⁷, the strength and quality of ecosystems for young high-growth firms are determined by the following three building blocks.

Building Block 1: Critical mass of co-located actors in entrepreneurship ecosystems

As previously stated, strong ecosystems for young high-growth firms consist of a critical mass of the ecosystem actors including investors, established firms, knowledge institutions and service providers. A single ecosystem actor has no significant value working alone in the ecosystem; a certain level and mass of the actors is required within the same region and ecosystem.

Building Block 2: Dense network and collaboration between the ecosystem actors

The second building block in strong ecosystems is the network and collaboration between the ecosystem actors. The mere presence of the ecosystem actors is not sufficient, but strong ecosystems have a dense network and bonds between the specialized actors feeding off and providing each other with interesting business proposals and helping with the development of the high-potential firms. The network and trustful relationships between the actors are critical for the success of the ecosystem.

The bonding actors, “dealmakers”, are crucial in strong ecosystems to connect the young high-potential firms to the right resources. The firms need access to various services, customers, markets, talents and other in order to succeed. On top of this, strategic thinking around all these aspects is required to create a successful growth venture. The young firms can involve experienced, skilled people, “dealmakers”, in their Board of Directors to assist and guide them through and to help in connecting the firm with the ecosystem.

Besides the entrepreneurs themselves, who still might lack the abilities needed, the “dealmakers” have the strongest motivation and capabilities to connect the firm with the venture capitalists and to realize the firm’s growth potential. The rationale would be their position at Board of Directors or in another key position.

³⁷ See “Understanding Business Ecosystems”, Napier, 2012 for the Danish Business Authority (forthcoming).

Another type of facilitators in strong ecosystems are the accelerator programmes such as Techstars, Start-up Weekend and Capital Factory, or organizations such as CONNECT. The accelerator programmes are often managed by experienced entrepreneurs, and their role is to fuel the growth in young firms over a limited period of time. They also have a strong motivation to link to and collaborate with other actors in the ecosystem such as investors, mentors, established firms and so on. They get venture capitalists to become actively involved in the ecosystem by enhancing the quality of the deal flow. Finally, the accelerators create a market for service providers by demanding actively various services.

Building Block 3: Successful entrepreneurs re-investing their experience and capital back into the local ecosystem

The third building block is that successful entrepreneurs and serial entrepreneurs remain active in the strong ecosystem. Good ecosystems support the development of so-called early winners i.e. known young successful entrepreneurial firms that have grown in size and wealth and represent a particular ecosystem. Examples of such blockbuster companies could be Dell Computers from Austin in Texas, SAS Institute from Research Triangle Park in North Carolina or Amazon or Starbucks out of Seattle.

The single most important thing when creating strong ecosystems would be that the entrepreneurs succeeding with an early winner firm remain active in the ecosystem and help create growth in new young high-potential firms, by re-investing their profit and experience back into the ecosystem as investor, mentor or other. The successful entrepreneurs have experienced growing a young firm of their own, thus it is this unique insight that is valuable for the development of other young firms and for the development of strong ecosystems.

For instance, in North Carolina, the ecosystem facilitated the creation of SAS Institute and RedHat, two very successful firms. However, the entrepreneurs left the region taking with them their experience and profits.

This was somewhat opposite in Austin, Boulder and Seattle. Here the successful entrepreneurs have been re-investing back in to the society and the local ecosystem for high-growth firms. In Chicago, the local blockbuster and successful company Groupon seems to change the attitudes in the ecosystem which otherwise is not particularly strong. The entrepreneurs behind the Groupon had been offered an exit and a large sum of money but they refused and stayed in Chicago to build their company and to be actively involved in fuelling the local ecosystem. Previously, the ecosystem actors largely preferred established firms to young growth ventures, but have opened their eyes also for local entrepreneurial opportunities.

Strong ecosystems are built around a common vision

In strong ecosystems, there is a common vision and understanding among the various ecosystem operators/resources of what characterizes promising young growth-firms and what it requires to turn them into large successful global firms in a relatively short time period. It is the ecosystem that supplies growth-firms with the resources and capabilities they need, and thus helps to provide and develop the lacking managerial talent of young firms.

In well-functioning ecosystems, the various ecosystem operators/resources collaborate as parts of the same value chain which creates young growth firms. Instead of seeing each other as competitors, the actors feed off and create value for each other.

Both national and regional policymakers could enhance growth entrepreneurship by realizing and strengthening the “dealmaker” potential. In the Nordic countries, many publicly supported facilitators take the role as network fertilizers in order to improve collaboration among new firms and established ecosystem operators such as accelerator programmes and incubators.

The “dealmaker” approach suggests a focus on facilitating regional and sector-based ecosystems for young growth-firms. However, merely directing entrepreneurs to formal networks could lack the vital function that “dealmakers” provide to the firms (speeding up the learning process and incorporating the ecosystem resources into the firm).

From this perspective, regional growth initiatives should identify and engage those private individuals in their region who have the potential to fulfill the role of “dealmakers”. Special attention should be paid to experienced serial entrepreneurs, serial investors, and potentially also serial intrapreneurs. In some cases, this could also include inviting successful serial entrepreneurs from abroad.

Relevant policy initiatives

In 2011 in the USA, President Obama launched a new alliance called Startup America Partnership with the aim of forming a private/public partnership that should work to foster growth of young firms and ecosystems outside the well-known regional growth pockets such as Silicon Valley.

The initiative is named Startup America Partnership although the focus is on creating growth in young firms. The use and meaning of startups is different in the USA and Europe. While startups automatically refer to young growth firms in the USA, it is mainly understood as new firms in Europe. This difference is worth noting when trying to understand the initiative (cf. Box 3).

Box 3: Startup America Partnership and ecosystems

"America's Top Entrepreneurs and Business Leaders Form New Alliance"

Launched at the White House in January 2011, the Startup America Partnership is an independent alliance of top entrepreneurs, investors, corporations, universities, foundations, and other leaders, joining together to grow the entrepreneurial ecosystems that support innovative, high-growth U.S. startups.

As a national organization, the Startup America Partnership is dedicated to helping Startup Champions to create strong startup ecosystems in every state, strengthening their local startup networks and engaging with young companies to help them grow organically in their hometown.

The Startup America Partnership supports a national network of startup communities dedicated to advancing the success of American startups. Hundreds of passionate founders, entrepreneurial leaders, investors, mentors and executives, Startup Champions, are working together to strengthen their local communities and help young companies grow.

The Startup America Partnership has already mobilized more than \$1 billion in private-sector commitments to provide products, services, mentorship and funding to scale and grow 100,000 U.S. startups over the next three years.

The list of private firms and foundations supporting the initiative is immense. Google, LinkedIn, Intel, Cisco, Dell, HP, American Airlines and many more are committed to support young growth firms with various kinds of support such as mentoring, competitions and capital.

Read more: <http://www.s.co/>

A similar type of initiative has been introduced in UK, and is called StartUp Britain. The campaign was founded by eight entrepreneurs and launched in 2011 by the Prime Minister, and funded by private-sector sponsors such as AXA, Dell, Intel, Intuit, Magento Go and PayPal.

In the recent years, there has been a significant shift in attitudes towards entrepreneurship in many countries. However, the perception is based on a narrow conception of entrepreneurship as consisting primarily of the starting up of an enterprise. This is reflected in the dramatic proliferation of "Startup" programs: Startup America, Startup Chile, Startup Russia, Startup Britain, Startup Weekend, and many others. There is hardly a self-respecting country or city that is lacking an initiative named as "Startup".

This positioning of entrepreneurship as a “startup” phenomenon has a number of serious flaws. Firstly, it seems that the most difficult and significant task of an entrepreneur is launching his or her venture. Secondly, the names of the programmes indicate that the more startups, the more successful the program is.

Both of these positions are doubtful. Extraordinary value creation cannot occur without growth, and entrepreneurial growth has numerous challenges which are more difficult than simply starting a venture. In fact, it should not be surprising that an over-proliferation of startups creates a significant strain on the local entrepreneurship ecosystem to providing the resources for growth (knowhow of the entrepreneurs themselves, the presence of sufficient quantities and quality of talent, access to smart risk capital, and even access to customers and markets).³⁸

Although the above mentioned startup initiatives largely focus on addressing the growth obstacles (building and strengthening entrepreneurship ecosystems outside the traditional growth pockets like Silicon Valley), they also signal that supporting startups is necessary.

Yet, the Nordic countries should consider introducing a similar type of initiative, Nordic Growth Entrepreneurship Partnership, across the Nordic region, however, ensuring that the focus of the partnership is on fostering and strengthening growth in young Nordic firms. The partnership should rely on and involve key entrepreneurship ecosystem actors across the Nordic countries and it could be launched at the political level paving the way for the creation of a strong Nordic entrepreneurship ecosystem.

38 Daniel Isenberg, *Worthless Impossible and Stupid: How Contrarian Entrepreneurs Create and Capture Extraordinary Value*. Harvard Business Press, forthcoming [2013].

Venture capital in the Nordic countries

Introduction

Venture capitalists (VCs) are financiers providing equity and expertise to startups. A seasoned VC has assumed various roles in dozens and sometimes in excess of one hundred startups. It is this experience and related connections that makes a VC valuable to a startup. VCs' immediate and long-term incentives are tied to the returns they can generate to the capital they manage.

VC investing has three stages: fund-raising, investing/managing, and exiting. The life-cycle of VCs' engagement in target firms - from the first investment to the last exit - is typically 3-10 years. From the outset VCs look for an exit, i.e., for ending their ownership in target companies. Exits mostly happen by selling the target company, typically to an incumbent firm. The more lucrative but less common exit channel is a public listing (an initial public offering, IPO). The lack of good exit opportunities is arguably the "Achilles heel" of the Nordic VC cycle, particularly in the current economic environment.³⁹

It is vitally important to have national success stories in the domain of growth entrepreneurship. VCs are one ingredient in nurturing these stories. Contrary to popular misconceptions, however, venture capital is neither synonymous with growth entrepreneurship, nor is it a general solution for the financial needs of new ventures. Venture capital refers to a very specialized niche of the financial market and typically represents a small percentage of investments in all the startups in a given economy. VCs are a good "spice" in an otherwise well-functioning financial environment.

In the following, a more detailed analysis of VC markets is carried out comparing EVCA data for 2007-2011 across the Nordic countries in order to better understand the VC

³⁹ According to the European Venture Capital Association, in 2007-2011 Denmark and Finland each had just one IPO, Norway had seven, and Sweden had eight. In all Nordic countries there have been efforts to ease the listing of new ventures by lowering the requirements for accounting and reporting standards (e.g., the First North Helsinki list at the Nasdaq OMX Helsinki stock exchange). These efforts are, however, a double-edged sword: public listing signals quality assurance to investors, and losing this signaling value makes future IPOs less attractive.

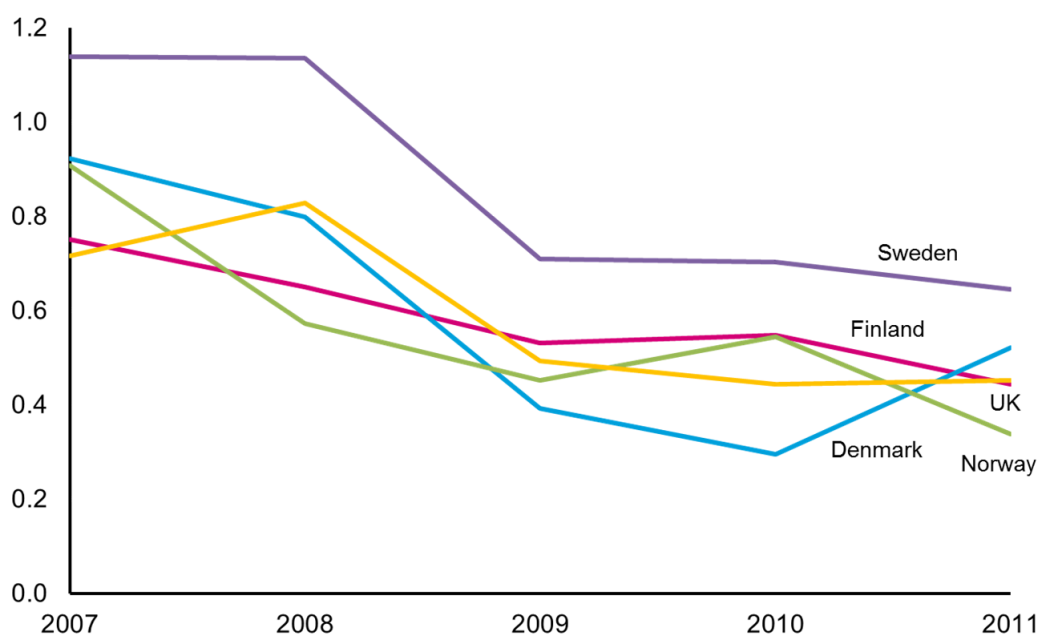
markets in the Nordic region. Unfortunately, the availability of venture capital data for Iceland is limited, and Iceland is therefore not fully included in the analysis.

The size of venture capital markets

Venture capital includes risk capital investment in three stages depending on the maturity of the young growth firm. Venture capital investment includes investment in the following stages: seed, startup and later stage venture capital (or expansion).

When comparing levels of venture capital across the Nordic countries, Sweden comes out as the Nordic country with the absolute strongest venture capital market, while the other Nordic investment levels seem more comparable with each other and with UK (cf. Figure 23).

Figure 23: Venture capital investment as per mil of GDP



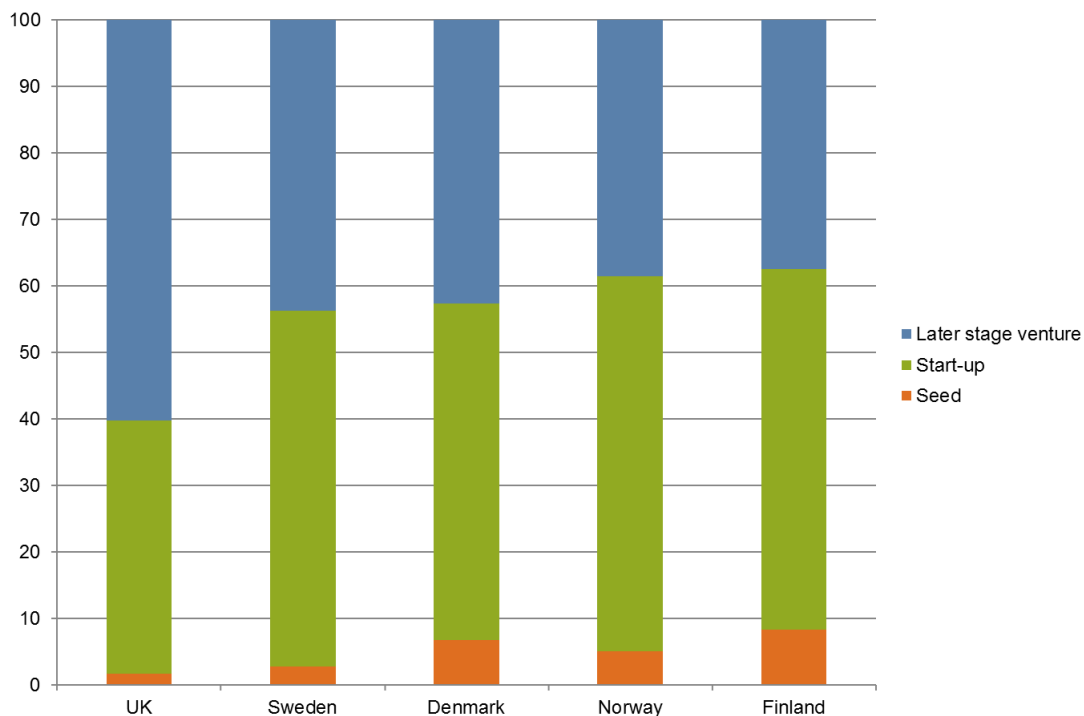
Source: EVCA 2012. Notes: Investments - Market statistics (by country of portfolio company).

On average in 2007-2011, venture capital investors in Sweden invested nearly 0.09% of GDP in early stage firms, while this figure was nearly 0.06% in the other Nordic countries. When comparing volumes, bank lending is substantially more than 50% of GDP in all Nordic countries. The recent financial crisis has affected the volumes of VC investments in all Nordic countries. There seems to be some recovery in the case of Denmark; in other Nordic countries VC activity has been in downward trend even in the most recent years.

Venture capital for expanding and growing firms

Availability of venture capital varies across the stages of firm development and across markets. While no clear ratio between the early and later stage venture capital exists, some equilibrium between the two is required. When comparing investment across stages and across the Nordic countries and UK, it appears that UK clearly devotes more of its venture capital to firms in expansion stages compared to the Nordic countries (cf. Figure 24).

Figure 24: Stage focus in venture capital investments, average 2007-2011



Source: EVCA 2012. Notes: Investments - Market statistics (by country of portfolio company).

In the UK, nearly 60% of venture capital investment is made in young firms that are expanding, while this is only around 40% in the Nordic countries. On the other hand, the Nordic countries generally invest a larger share of the venture capital in very early stages of a firm's development. However, Sweden and Denmark have a slightly larger share of investment in expansion stage firms compared to Norway and Finland.

These findings confirm the findings in the NGER framework analysis highlighting that the level of expansion capital is low in the Nordic region compared to certain peer countries such as the UK. However, limited possibilities for expansion capital could have a negative impact on access to early stage financing, too. If money invested at the seed stage is in risk of being lost as the portfolio firms cannot grow through follow-on

funding, investors will also be more cautious to engage in early stage investment. Hence, if growth firms cannot raise money at expansion stages, this limitation could create a vicious cycle. If firms cannot raise sufficient expansion capital in their national market, they are forced to expand abroad in other markets. For many reasons this can be useful for the firms as they access networks, markets and capabilities elsewhere. But it could also lead to the Nordic countries missing out on promising opportunities, which might lead to growth and employment in the Nordic region.

As discussed, the reason that expansion capital is relatively limited in the Nordic countries could be due to the lack of strong management teams that have the entrepreneurial capabilities to turn a new startup in to a global success. Therefore, the development of a more sound Nordic market for expansion capital should be addressed in conjunction with strengthening entrepreneurial capabilities through stronger ecosystems for young growth firms.

The role of public sector in venture capital markets

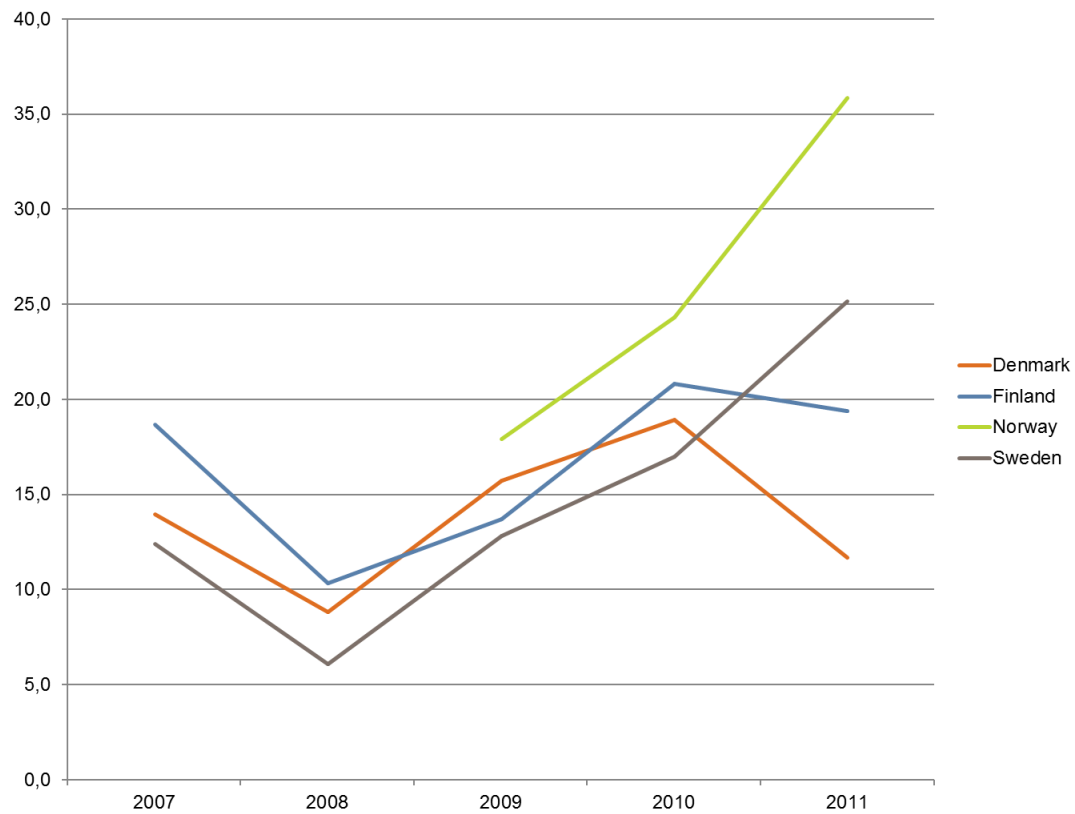
Generally, there has been a tradition in the Nordic countries as with other European countries, that the public sector plays a role in the venture capital market. The same has been in the case in Israel and the USA, although the public sector has privatized its funds in Israel, and only provide funds-of-funds capital in the USA (at federal level).

The rationale behind the public intervention in venture market is to encourage the private sector to become more active in investing.

Governments can do a lot to encourage the supply of private venture capital to certain high-risk companies in early stages, and Nordic governments are taking an active role here. They are more or less involved in direct investments, although their strategy of being involved directly or more indirectly through fund-of-funds varies. The varying strategies will be more or less successful depending on the maturity of the private venture capital markets. Provided that VC funding indeed spills over ample (local) benefits outside the target firms, government involvement in VC markets may be a good use of tax payers' money.

Looking across the Nordic countries in 2007-2011, the role of the public sector has increased since the financial crisis in 2008 (cf. Figure 25). In Norway and Sweden government engagement in the VC market has increased strongly even in the most recent years, whereas in Denmark and Finland the growth in the public sector share has been slowing down or declined.

Figure 25: The role of the public sector, public sector share of total investment, 2007-2011



Source: EVCA 2012. Notes: Investments - Market statistics (by country of portfolio company).

The level of public involvement across the Nordic countries varies. In 2011, around 12% of all venture capital investment was publicly financed, while it was more than 35% in Norway.

Nordic policy recommendations

The Nordic Growth Entrepreneurship Review (NGER) has identified the major challenges Nordic growth entrepreneurship is facing - not enough Nordic gazelles grow and become large firms, and the low ranking on access to expansion finance and entrepreneurial capabilities in the Nordic countries.

Based on these challenges, a number of Nordic policy recommendations are proposed for further work in the area.

Knowledge-oriented recommendations

In order to stimulate growth entrepreneurship and improve entrepreneurs' capabilities to upscale their businesses, more factual and policy-relevant knowledge is needed about growth entrepreneurs and their operating environment in the Nordic countries. Consequently, the following recommendations are made:

1. Develop more nuanced, internationally-comparable data on startups

The Nordic countries have many startups, but startups vary a great deal. More nuanced data on startups, including aspects such as internationalization and exports, regional breakdown and different types of startups (for instance, spin-outs and startups by serial entrepreneurs), should be developed. This work should be coordinated with the work done at the OECD, and the Nordic region could function as a pilot region for the study.

2. Develop better understanding of serial entrepreneurs

Serial entrepreneurs are crucial players in strong ecosystems, and they help build capacity in entrepreneurial growth firms. However, there is very little knowledge about serial entrepreneurs across the Nordic countries. A separate benchmark study of Nordic serial entrepreneurs could be conducted, to examine, for instance, the

number of serial entrepreneurs in the Nordic countries, the sectors in which they are active, whether they stay in the Nordic countries and remain active as entrepreneurs/mentors/investors, and what happens after their exit.

3. Develop new internationally comparable performance data and indicators reflecting activities of firms that are 'born big'

The Nordic countries have very few young growth firms that become large players. Our understanding of the ability to upscale firms and to create global winners needs to be improved. Performance data should emphasize company size across the region and companies' global activities, and should include Nordic and international benchmarks. The work should be coordinated with relevant OECD working groups, and could potentially result in proposals for new indicators. The Nordic region could serve as a test bed for such new indicators.

4. Improve the understanding of entrepreneurship ecosystems

Strong ecosystems complement and improve the capabilities of growth-seeking entrepreneurs, and help to produce higher-quality growth firms that are better equipped to attract private venture capital investments. Some initial work has been carried out to improve the understanding of entrepreneurship ecosystems, including a first benchmarking of ecosystems. However, greater understanding of ecosystems is needed and they need to be benchmarked across more regions. A policy-relevant benchmark study of selected Nordic entrepreneurship ecosystems is recommended, comparing them against some of the world's best entrepreneurship ecosystems. Moreover, a policy-relevant benchmark study should be made of the entrepreneurial and outreach activities of leading universities in the Nordic region and the rest of the world.

5. Create a diagnostic tool for growth entrepreneurship

There is a need to investigate in more detail which specific policy areas lead to more growth entrepreneurship. Therefore, one recommendation is a project to initiate and develop a more detailed understanding of which framework conditions and policy areas influence growth entrepreneurship and upscaling of young firms, both positively and negatively, possibly including new policy areas such as "ecosystem" indicators in the model. Creating and incorporating two more policy areas in the model, one for "taxes" and another for "welfare services", could also be considered. Developing indicators for entrepreneurial capabilities would also be useful.

Action-oriented recommendations

Acquiring new and useful policy-relevant knowledge takes time and, in the meantime, policymakers need to react to current findings. Several action-oriented policy recommendations are made, as follows:

1. Establish a Nordic Growth Entrepreneurship Partnership with strong involvement of the private sector

Based on the most recent policy experiences from the USA and UK, initiation of a private/public high-level Nordic Growth Entrepreneurship Partnership is proposed, involving large Nordic companies and business executives, successful serial entrepreneurs, high-level policymakers, leading universities, investors and Nordic foundations/funds. The purpose would be to create a common vision and dialogue among the Nordic ecosystem operators on how to strengthen entrepreneurial capabilities and how to foster growth in Nordic enterprises. The vision of the Nordic Growth Entrepreneurship Partnership should be formulated jointly by the partners, and should address the need to create more rapid growth in young firms in the Nordic region. The partners should commit and mobilize resources that are dedicated to growth activities in young firms, for example by providing mentorship, advice, financing, etc. to young Nordic growth firms. They should also arrange various forms of competitions based on growth. The role of large public institutions in the Nordic entrepreneurial ecosystem could also be examined, in terms of their possible engagement and support in developing growth entrepreneurship. The Nordic Growth Entrepreneurship Partnership should lay the foundation for a strong Nordic entrepreneurship ecosystem, familiar in and outside the Nordic region. Sector-specific sub-groups could be considered, reflecting Nordic strongholds such as cleantech, biotech, IT and telecom.

2. Form an Entrepreneurship Ecosystem Forum

As a first step towards a Nordic Growth Entrepreneurship Partnership, a proposal is to consider an Entrepreneurship Ecosystem Forum, involving both private and public ecosystem operators and policymakers, to stimulate debate on how to strengthen the Nordic ecosystem and to develop a road map for the Nordic Growth Entrepreneurship Partnership. Such a Forum could be incorporated into the ongoing Lighthouse project on Entrepreneurship.

3. Evaluate and compare public growth initiatives across the Nordic countries

One proposal is to establish a Nordic working group for growth entrepreneurship, with the aim of gathering information and knowledge, and evaluating outcomes of the public growth entrepreneurship programmes and initiatives, e.g. accelerators and other growth schemes. This work should consider how the programmes contribute, or could potentially contribute, to the formation of a stronger ecosystem. Some initial steps have already been taken within the ongoing Lighthouse project on Entrepreneurship, and the work should be strengthened by, for instance, focusing more systematically on evaluation aspects.

4. Engage universities across the Nordic countries in the entrepreneurship ecosystems

Collaborative universities are critical elements in strong entrepreneurial ecosystems. The creation of world-class innovation and entrepreneurship centres at Nordic universities should be encouraged further. One of the main purposes of the entrepreneurship centres would be to encourage the universities to become stronger partners in the growth entrepreneurship ecosystem, and to engage decisively in outreach activities.



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The Nordic Growth Entrepreneurship Review 2012

Final report

The objective of the Nordic Growth Entrepreneurship Review is to feed new policy relevant and fact based information and analysis of Nordic growth entrepreneurship into the 'Nordic Knowledge Centre for Entrepreneurship'. The NGER aims to provide policymakers across the Nordic countries with a better understanding of growth entrepreneurship performance and challenges in the Nordic region. These objectives are achieved by comparing the latest available data and some new indicators for growth entrepreneurship performance and framework conditions. Furthermore, certain policy recommendations are made to address the Nordic challenges in these areas.

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We stimulate innovation, remove barriers and build relations through Nordic cooperation

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