



NATIONAL AGENCY FOR ENTERPRISE AND CONSTRUCTION



Entrepreneurship Index 2006

– Entrepreneurship Conditions in Denmark

November 2006

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Foreword

Entrepreneurs make an invaluable contribution to the Danish economy. In particular, this applies to growth entrepreneurs that rapidly create new jobs and impressive revenues. Hence, it is the goal of the Danish Government that by 2015 Denmark is among the countries with the highest start up rates of high-growth enterprises.

The recent agreement on distribution of funds from the globalisation pool will contribute to a further strengthening of the framework conditions for emerging enterprises with a significant growth potential.

The Entrepreneurship Index is a valuable tool in securing that focus is directed towards areas in need of attention. The Index provides an overview of the frameworks conducive to emerging companies. For example, this applies to entrepreneurs' access to financing and counselling, corporate taxation, entrepreneurship education and restart possibilities. The Index shows how Denmark compares to the world's entrepreneurial elite in a wide range of areas.

This year, the Entrepreneurship Index introduces two theme chapters. One deals with the area of bankruptcy and how framework conditions for distressed companies can be improved. The second theme chapter focuses on the entrepreneur's access to guidance and counselling. Among other things, the chapter shows a strong need for a stronger counselling of potential growth entrepreneurs and a more diversified entrepreneurship infrastructure that focuses on both start up and growth. This is one of the reasons that the Danish Government has built a number of regional growth houses to strengthen the counselling of potential growth entrepreneurs and contribute to the further development of the private entrepreneurship infrastructure.

The analysis presented in this year's index shows that although there is still room for improvement things are going in the right direction in terms of meeting the Government's ambitious goals in the entrepreneurial area.

Bendt Bendtsen
Minister of Economic and Business Affairs

November 2006

1 Denmark's Entrepreneurial Challenges

Entrepreneurs create innovations by developing new product, production methods and technologies. Furthermore, entrepreneurs contribute to a sharpened level of competition by challenging existing enterprises in the market. Various data show that today as much as 17 percent of total productivity growth can be attributed to enterprise replacement (Ministry of Economic and Business Affairs, 2004).

A second important goal of the Danish Government in the area of entrepreneurship is to propel Denmark to the European elite in terms of new firm creation. In Denmark between 14 000 and 16 000 enterprises are being started every year, and Danish start-up rates are comparable to the world's entrepreneurial elite. Emerging enterprises are vital to the Danish economy and create as many as 26 000 new job in the start-up year (National Agency for Enterprise and Construction, 2006). This conclusion has been presented in previous editions of the Entrepreneurship Index, but it has nonetheless been subject to some debate. Some argue that Denmark still trails the United States in terms of start-up activity. Hence, the National Agency for Enterprise and Construction, working with the OECD and Statistics Denmark, has developed a new approach for measuring and comparing start-up rates across countries. The new method confirms that, when looking at the total stock of companies, Danish start-up rates are comparable to those of the United States, the entrepreneurial "role model" for many people.

However, the key challenge for Denmark is that the majority of new enterprises fail to enter a healthy growth trajectory. This is worrying as growth entrepreneurs are particularly important to productivity gains and economic growth. Analyses show that productivity among growth entrepreneurs is 30 to 40 percent higher than the average of the total stock of companies. Thus, a doubling in the number of growth entrepreneurs would increase output by approximately 10 billion DKK (The Ministry of Economic and Business Affairs, 2005).

It is necessary to improve framework conditions if any attempt to increase the share of growth entrepreneurs is to be successful. Although things are going in the right direction, Denmark still trails the top-performing countries in terms of the quality of its framework

conditions. Denmark is closing the gap vis-à-vis the top-performers, and, if framework conditions continue to improve at the current pace, the quality of the Danish framework conditions should be among the world's elite by the year 2010. However, this requires a continued effort at improving the framework conditions.

The 2006 Index points to four areas in particular need of improvement: entrepreneurship education, access to professional counselling, bankruptcy legislation and personal income taxes.

There is often a considerable time lag before any improvement in framework conditions materialises into better performances. Hence, it is vital to initiate a sustained effort in order to improve conditions.

The Government has already implemented a range of improvements, and additional measures have been initiated under the auspices of the Globalisation Fund¹. Future Entrepreneurship Indices will monitor the extent to which these initiatives materialise into improved framework conditions and better performances.

1.1 Report outline

The 2006 Entrepreneurship Index covers a significant amount of data, quantitative comparisons, qualitative case studies and concrete proposals for new initiatives.

Chapter 2 details country entrepreneurship performances in terms of start-up rates and new firm growth. The United States, Korea, Canada and Ireland are the top-performing countries, and Denmark's performance is matched against the top-4.

The United States, Korea, Canada and Ireland also lead in the ranking of the quality of framework conditions. The quality of Denmark's framework conditions are rated in Chapter 3 against those of the top-4 countries. The comparison shows that Denmark is at a level with the top performers in some of the areas, while other areas are in need of policy attention. Chapter 3 provides a complete overview of entrepreneurship initiatives implemented by the Danish Government since its election in 2001.

1 This fund is used to carry out the Globalisation Council's Globalisation Strategy, entitled "Progress, Innovation and Social Cohesion", which contains a total of 350 concrete initiatives.

A simple conclusion would be for Denmark to focus its attention on those areas with the largest gaps vis-à-vis the best performing countries. However, the Entrepreneurship Index offers in Chapter 4 a supplemental in-depth analysis that offers a clearer picture of the critical framework conditions for growth entrepreneurs.

The 2006 Entrepreneurship Index also presents two qualitative theme chapters on bankruptcy and entrepreneurship infrastructure, detailing possible improvements in these two critical areas.

The thematic chapter (5) on bankruptcy shows how the Danish system copes with enterprises that experience financial problems or enterprises that are declared bankrupt. The Danish approach is compared to other countries in order to illustrate lessons for Denmark in two specific areas: early warning systems that draw authorities' attention to the early stages of a company's financial collapse, and reconstruction of companies both inside and outside the formal legal system.

The entrepreneurship infrastructure is a collective term describing the scope and quality of stakeholders that provide entrepreneurs or new enterprises with access to skills and knowledge. This thematic chapter (6) employs a similar method to the section on bankruptcy; i.e. based on international comparisons. The conclusion is that Denmark should strengthen the advisory services provided for growth entrepreneurs, which may be facilitated through the emerging "growth houses" and a general strengthening of the private advisory market.

2 Entrepreneurship Activity

In Denmark, between 14 000 and 16 000 enterprises are being started every year. However, only 2 000 new enterprises have a potential for growth and of those the majority fail to enter a healthy growth pattern. The majority of new enterprises continue as one man businesses or go out of business. Only around 40 percent of all start-ups are still in business after 5 years.

New enterprises and growth entrepreneurs have a significant impact on growth and job creation. As much as 17 percent of total productivity growth can be attributed to enterprise replacement, and new enterprises create as many as 26 500 jobs in Denmark during the start-up year (National Agency for Enterprise and Construction, 2006). Estimates show that doubling the number of growth entrepreneurs would increase output by approximately 10 billion DKK, representing a 0.8 percent increase in GDP (Ministry of Economic and Business Affairs, 2005).

Entrepreneurs also have a significant impact on a country's ROI (return on investment) from research and development (Acs, Audretsch, Braunerhjelm and Carlsson, 2005). Entrepreneurs are able to quickly and effectively transfer knowledge from university research into commercial products. The return resulting from an increase in research grants will therefore depend on the level of entrepreneurial activity and the development of framework conditions conducive to the longer term survival of growth entrepreneurs.

It is the intention of the Danish Government to increase Danish wealth, through inter alia stronger entrepreneurship activity. Hence, the Government has set two goals for the level of entrepreneurship activity:

- By 2010, Denmark should be part of the European entrepreneurial elite in terms of start-up activity;
- By 2015, Denmark should have the highest share of growth entrepreneurs.

Chapter 2 details the level of entrepreneurship activity in Denmark compared to other OECD countries. The chapter shows that Danish start-up rates are at a level with the "old" EU countries and leading OECD countries. While this conclusion is in line with previous analyses,

this year's conclusion is supported by new data that more accurately measures start-up activity across OECD countries.

Hence, Denmark already meets the Government's first goal; consequently, new political initiatives should not specifically target start-up rates but should continue to support Denmark's already strong position vis-à-vis other leading countries.

The analyses also show that the share of high growth enterprises is 2 to 3 times higher in the United States. While available data is far from perfect, this year's analysis has improved over last year's; and the 2006 Index takes into account, among other things, the variations in industry structures and economic trends. Denmark has gained some ground on the top performing countries, yet the gap remains considerable. Thus, political initiatives should be designed to increase the number of growth entrepreneurs in order to fulfil the Government's second goal.

2.1 Comparing start-up activity

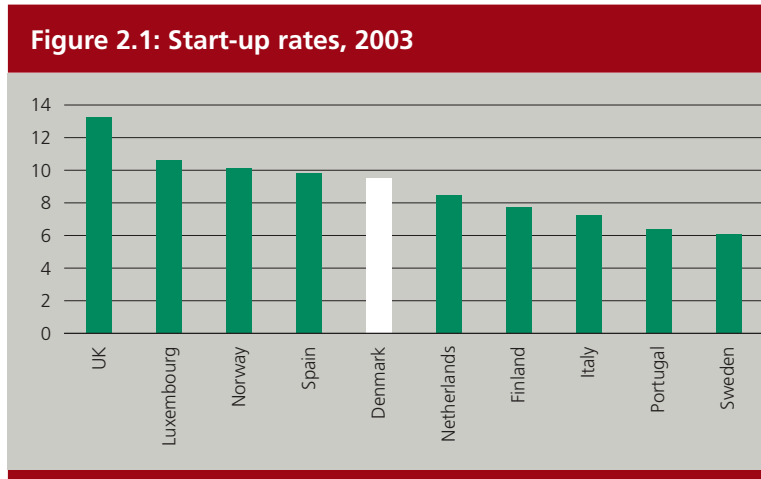
Healthy start-up rates and a significant number of successful high growth enterprises are essential if Denmark is to claim a place among the world's entrepreneurial elite.

Since entrepreneurship is characterised as a process rather than an isolated event, entrepreneurship activity can be measured in a variety of ways. Depending on the purpose of the analysis, various definitions may be applied. Focus may be on the time leading up to the start of an enterprise, in which case one could measure the desire to start an enterprise among the general public. The analysis may be targeted at the first stages of the entrepreneurial process; in this case, one would measure start-up rates. Finally, if one measures that contribution of new enterprises to job creation, the share of high growth enterprises would be identified.

Making a company grow is a complicated endeavour, and there is no implicit correlation between start-up rates and the number of high growth enterprises. Studies show that the share of high growth enterprises remains significantly higher in the United States compared to Denmark and other EU countries (Appendix 1 and Hoffmann, 2006), which is most likely explained by superior U.S. framework conditions for growth entrepreneurs (see Chapter 3).

Start-up rates

The ability to create new enterprises is most commonly measured by *actual start-up rates*, which are compiled by Eurostat on behalf of a number of EU countries. For every 100 enterprises, 10 new enterprises are being started every year (Figure 2.1). Danish start-up rates are better than those in the Netherlands, Finland and Sweden. Denmark is positioned in the top-half of the ranking alongside Luxembourg, Norway and Spain, but trailing the United Kingdom, which posts the highest start-up rate in Europe (13.2. percent).



Source: Eurostat's Business Demography and author's calculations based on data from Statistics Denmark.

An OECD study points to a smaller variation in start-up rates when accounting for differences in industry structures. A regression analysis that accounts for variations in start-up rates across industry sectors and variations in market trends shows that Denmark posts some of the highest start-up rates among the nine EU countries covered in the analysis (Brandt, 2004).

There has been much discussion on the possibility of including the United States in cross country comparisons. Consequently, working closely with the OECD, FORA has taken the initiative to launch a comprehensive project for measuring start-up rates (Vale, 2006). In line with the outcome of the analysis, a new start-up indicator for Denmark has been calculated, which allows for a straight forward comparison with US and Canadian data (Exhibit 2.1).

Exhibit 2.1: Constructing comparable start-up rates

The new indicator measures the number of “new employers” as a share of the total number of employers in companies with at least one employee. In other words, the indicator shows the number of start-ups with at least one employee or start-ups that hire their first employee in any given year. Thus, the indicator excludes small hobby-like enterprises. This method is already used in the United States and Canada.

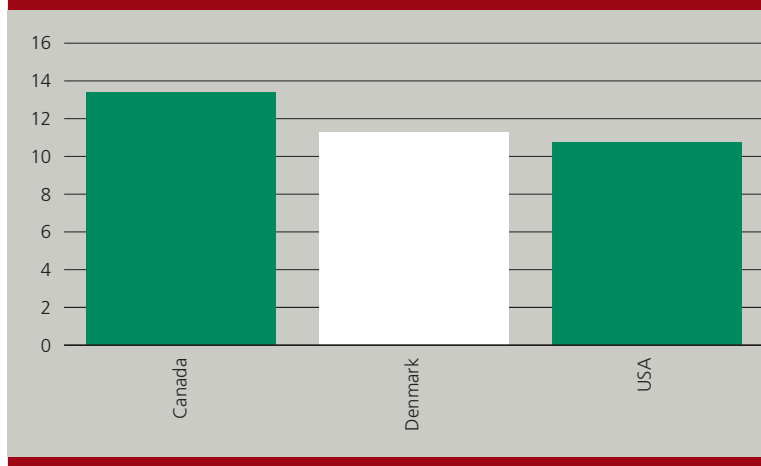
The number of companies with at least one employee being started in 2003 was 4 300. The number of companies that had no employees in 2002 and which hired at least one employee in 2003 was 7 200. Altogether there were 11 500 new employers in 2003, which then should be compared with the number of Danish companies with at least one employee in 2003. This constitutes a start-up rate of 13.2 (Bøegh-Nielsen, 2006).

The new Danish indicator is built on data for Eurostat’s Business Demography Project, which implies that other interested countries may build such an indicator. This would make it possible to compare European and US start-up rates. It is quite likely that this method may be used by additional OECD countries as a large number of countries have a formal registration requirement when the first individual is employed as this triggers a range of employer requirements.

Eurostat start-up rates only cover selected EU countries. Hence, the 2006 Index and several other entrepreneurship analyses use the so-called Total Entrepreneurship Activity (TEA) Index for international comparisons. The TEA Index is compiled by the GEM Consortium. The TEA Index is founded on a survey and measures the share of the population being involved in the start-up of a business or running a newly-established business. However, there is some discrepancy between the TEA Index and the “new employer” indicator. Hence, the 2006 Index is exclusively built on Eurostat start-up rates. They are considered to be very reliable as they are built on national business records that cover all national companies. The TEA Index is analysed in detail in Appendix 2 as are the consequences of leaving out the TEA Index.

The new, albeit provisional, indicator shows a minor discrepancy between the Danish and the US start-up rates. The Danish start-up rate is calculated at 13.2 percent. This is somewhat higher than the Eurostat estimate of Denmark at approximately 10 percent (Figure 2.1). Denmark is ranked lower than Canada (13.4) but higher than the United States (10.8 percent) (Figure 2.2). Similar analyses of Finnish and UK data confirm that European start-up rates are at a level with U.S. start-up rates.

Figure 2.2: New employers, 2002 and 2003



Source: Statistics Canada, Boegh-Nielsen (2006) and the US Small Business Administration.

The conclusion on start-up rates is therefore clear. Denmark does meet the Government's overall goal in that Danish start-up rates currently match those of the other EU countries. At the same time, the new data confirms that Denmark matches the level of the United States.

However, the question then remains: of the 14 000 to 16 000 enterprises being started every year, what is the share of companies with a healthy growth trajectory? A large share of the new enterprises were probably founded on business plans that would not allow for significant growth, but what is the share of potential high growth enterprises – 10, 100, 1000 or 10 000?

There is no solid estimate of the number of potential Danish growth entrepreneurs. Still, the 2006 Index offers a qualified estimate based on two indicators that indirectly measure the number of potential growth entrepreneurs:

- Companies with exports in their first year of business indicate some level of potential. In 2003, approximately 1 000 new enterprises were exporting in their first year of operation. However, the figure underestimates the true number of potential growth entrepreneurs as some non-exporting entrepreneurs will also see substantial growth. This constitutes then a lower limit for the number of growth entrepreneurs.

- Some industries offer larger growth opportunities than others. A range of globally-oriented industries can be identified, i.e. companies that serve customers outside their domestic market (Copenhagen Economics, 2005). In 2003, approximately 3 500 companies were started within the globally-oriented industries. As not all of the 3 500 companies have a potential for growth, the number should be regarded as an upper limit for the number of growth entrepreneurs.

Hence, the number of potential growth entrepreneurs is somewhere between 1 000 and 3 500. A conservative estimate of 2 000 growth entrepreneurs seems prudent. Future Entrepreneurship Indices will deal with this issue in further detail and will attempt to present a well-founded estimate of the number of growth entrepreneurs.

Growth entrepreneurs

The term “growth entrepreneur” is frequently used, but no universal definition of the term exists. First of all, industries and sectors have different growth patterns. A number of service industries will see employment growth, while information technology (IT) companies may grow revenues without having to employ additional people. Secondly, no internationally comparable data exists for companies with less than 15 employees. At the same time, a myriad of detailed data is available for all company sizes.

This chapter applies a definition of growth entrepreneurs that allows for cross country comparisons in 17 countries (Exhibit 2.2). The definition covers growth in employment or growth in revenue. The data originates from Bureau Van Dijk, a company specialised in collecting large amounts of data (Appendix 1). Since data is collected from commercial databases and not from national statistical offices, data should be treated with some caution. Working with the OECD, Denmark has launched an extensive development project to construct improved data for growth entrepreneurs. The goal is that data on growth entrepreneurs will be based exclusively on data from national statistical offices by 2008.

Exhibit 2.2: Indicators for measuring new firm growth

New firm growth is measured by applying two growth indicators:

First, growth is measured by the share of new enterprises with revenue growth from 2002 to 2004 above 60 percent. The indicator is based on new enterprises launched from 1998 through 2002, with at least 15 years' work for one person in 2002 and which were still in business in 2004.

Second, growth is measured by the share of new enterprises with employee growth from 2002 to 2004 above 60 percent. The indicator is based on new enterprises launched from 1998 through 2002, with at least 15 years' work for one person in 2002 and which were still in business in 2004.

While some problems (e.g. some companies may be registered more than once, one man business may have been omitted, and company updates are done on an irregular basis) exist, there is no clear idea of the extent or way to measure the size of these problems. Nevertheless, comprehensive tests of growth data have been carried out. The documentation is available at www.foranet.dk.

In terms of revenue, Ireland, Korea and the United States have the highest number of growth entrepreneurs. The Nordic countries trail the top-3 considerably and post almost identical shares (Figure 2.3).

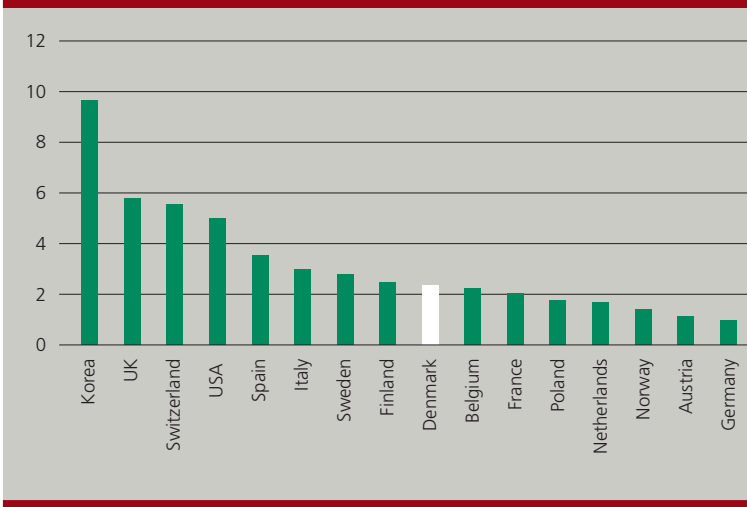
Figure 2.3: Share of growth enterprises (growth in revenue), 2004



Source: Hoffmann and Junge (2006).

When looking at employment growth among growth entrepreneurs, Korea and the United States are ranked in the top-4. No data is available for Ireland. Switzerland claims a place among the top-performing countries. Denmark trails the top performers by some margin and is ranked alongside Sweden and Finland (Figure 2.4).

Figure 2.4: Share of growth enterprises (growth in employees), 2004



Source: Hoffmann and Junge (2006).

The conclusion derived from the discussion above is clear; the share of growth-entrepreneurs is significantly higher in the United States compared to Denmark and the rest of Europe. Further testing of data shows that country rankings remain practically unchanged when accounting for industry structures and country-specific trends, though country variations are significantly lower. Hence, the United States does not have four times as many growth entrepreneurs as Denmark as shown in Figures 2.3 and 2.4. In all likelihood, the ratio is somewhere between 2:1 and 3:1 (Hoffmann, 2006; Hoffmann and Junge, 2006).

2.2 Entrepreneurship performance – summary

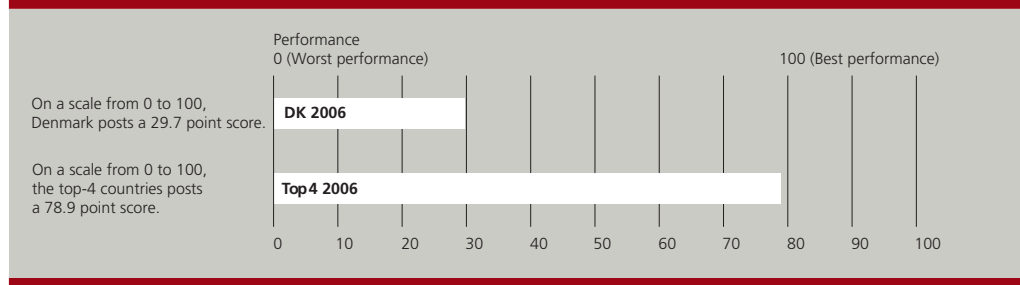
This chapter highlights three indicators for measuring entrepreneurship performances, i.e. start-up rates, employee growth, and revenue growth. Some countries perform well in terms of start-up rates (Canada), while others (Korea, the United States, and Ireland) post impressive scores of growth entrepreneurs. A collective assessment should address both start-up rates and growth entrepreneurs.

In the 2005 Entrepreneurship Index, Canada, Korea and the United States were selected as leading entrepreneurship countries. Ireland was a potential candidate; though the poor quality of Irish data made it difficult to make any solid conclusion. The quality of Irish data has improved in this year's update and the results clearly shows that Ireland should be included among the top performers. A simple average of the indicators shows that Canada, Ireland, Korea and the United States post the highest values, followed closely by the United Kingdom, which has made a giant leap in the 2006 Index. A robustness analysis shows similar results when applying different weights.

Below, the Danish performance and framework conditions are compared to Canada, Ireland, Korea and the United States ("the top-4"). In some sections, Denmark is compared to the European elite (the UK and Ireland) as the two countries significantly outperform the rest of Europe.

When comparing Denmark's collective entrepreneurship performance to the top-4 in terms of start-up rates and growth entrepreneurs, Denmark is ranked significantly below the top-4. On a scale from 0 to 100, Denmark trails by 49 points.

Figure 2.5: Denmark vis-à-vis the top-4 – Entrepreneurship performance



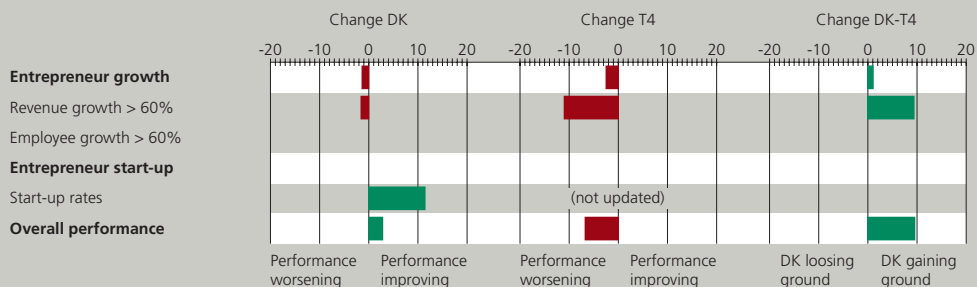
Note: Country scores on actual start-up rates, employee growth, and revenue growth have been normalised on a scale from 0 to 100. For each indicator, the best-performing country has been assigned the value 100, and the worst performing country has been assigned the value 0. Country entrepreneurship performance is calculated by taking a simple average of the country's score in each of the three indicators. The value of the top-4 countries is calculated as the simple average of their collective scores.

Source: Authors' calculations.

2.3 Developments in the Danish performance vis-à-vis the top-4

The gap between Denmark and the top-performing countries has narrowed marginally compared to the 2005 Index. In 2005, Denmark trailed by 53 points. When decomposing the three indicators, the analysis shows that Denmark's progress is the result of a higher start-up rate, while the data shows a minor deterioration in the values for growth entrepreneurs (Figure 2.6); similar developments can be seen among the top-4.

Figure 2.6: Changes in Denmark's performance



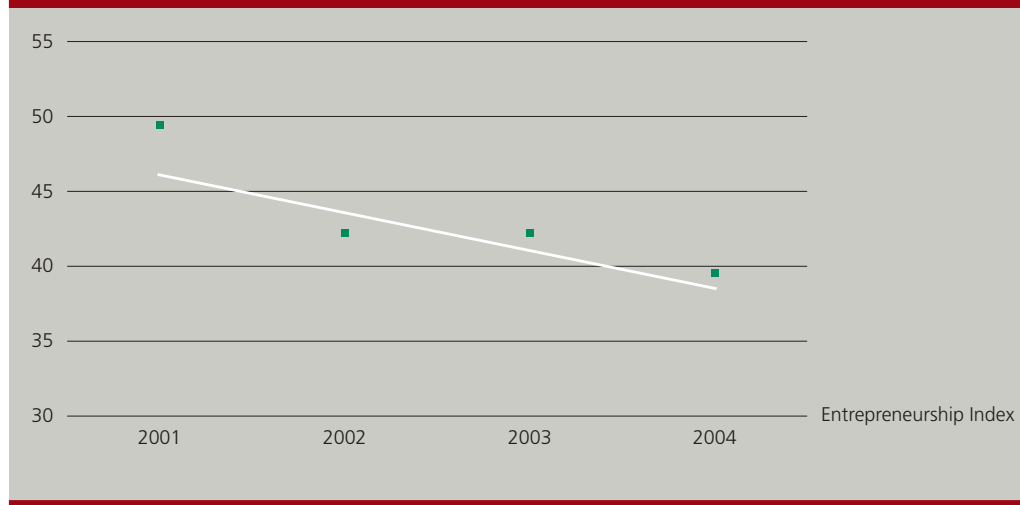
Note: The figure highlights developments in individual policy areas (green bars = improvements, red bars = deteriorations). Individual indicators are normalised on a scale from 0 to 100. In doing so, differences between Denmark and the top-4 are comparable across the three indicators. The four indicators are assigned equal weights (1/4). The normalisation approach allows for adding up individual areas thereby providing the reader with a composite view of Denmark's performance vis-à-vis the top-4 (lower hand bar).

Source: Authors' calculations.

One should keep in mind that multiple factors affect a country's entrepreneurial activity. For example, market trends play a significant role. Hence, developments should be treated with some caution.

The gap between Denmark and the top-4 has narrowed by 10 points since the launch of the first Index in 2003. There is a strong trend pointing to continued improvement; however, a longer time period is necessary to draw any solid conclusions as to whether Denmark will meet the Government's 2015 goal (Figure 2.7).

Figure 2.7: Changes in distance between Denmark and the top-4



Note: The Indices have been normalised. The highest value across the four year period is given the value 100, and the lowest value is given the score 0. Hence, values are not comparable to those presented in Figure 2.6.

Source: Authors' calculations derived from the National Agency for Enterprise and Construction (2004, 2005A) and FORA (2003).

3 Entrepreneurship Framework Conditions

Country entrepreneurship performance is closely tied to the quality of framework conditions in facilitating the entrepreneurship activity. Framework conditions cover a wide range of areas; regulation, legislation, cultural influence, individual skills, and ambition. Improvements in the Danish framework conditions are necessary to fulfil the Government's goals in the area of entrepreneurship.

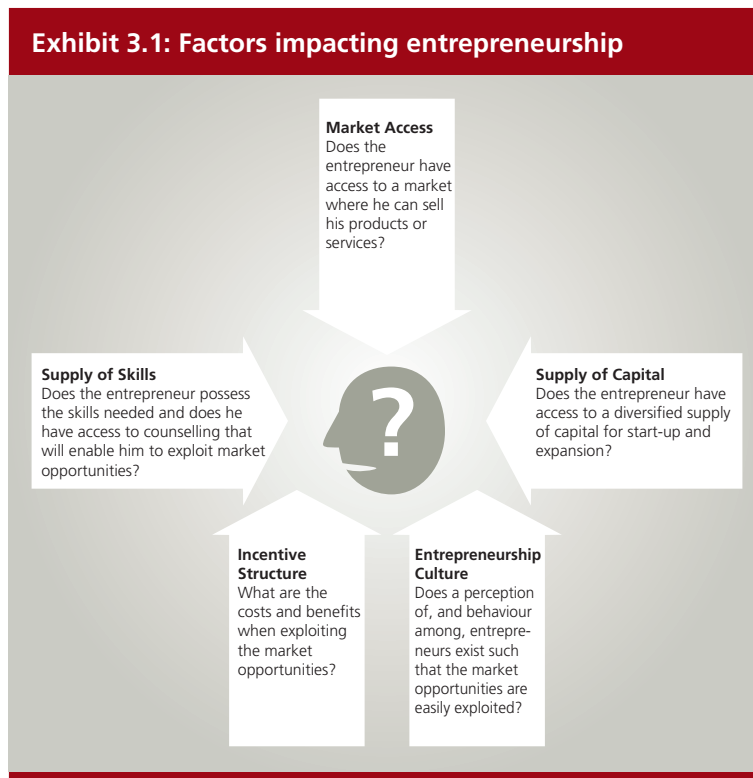
Chapter 2 demonstrated that, in terms of start-up rates, Denmark meets the Government's goal, while the goal for growth entrepreneurs remains unfulfilled. Therefore, Chapter 3 will focus on the "growth entrepreneur" framework conditions comparing Denmark to the top-performing countries in all policy areas that influence the number of growth entrepreneurs and identifying the most important policy areas.

The 2006 Entrepreneurship Index shows that Denmark has improved its entrepreneurship framework conditions. Although developments may be more precisely assessed over a longer period of time, the 2004 and 2005 Indices suggest that things are going in the right direction. If improvements in Denmark and in the top-4 countries continue at their current pace, the Danish framework conditions will be at a level with the top-performers by 2010. At the same time, the 2006 Index shows only minor improvements, and the gap vis-à-vis the top-performing countries is still considerable in key areas.

The identification of relevant framework conditions is a continuous process. Advances in research and best practice experience help facilitate improvements in the identification of key policy areas. Compared to the 2005 Index, this year's analysis has been further developed and slightly revised. FORA invited three renowned entrepreneurship scholars – David Audretsch, Anders Lündstrøm and David Storey – to evaluate the 2005 Index. In general, the Index was given high remarks; however, the three scholars put forward a number of suggestions that have been incorporated in the 2006 Index.

3.1 Five factors and 29 policy areas that have an impact on entrepreneurship

Entrepreneurship framework conditions are comprised by a series of factors that have a direct impact on the start-up and subsequent enterprise growth. Significant international efforts have been dedicated to the identification of the key factors conducive to entrepreneurship. Working closely with the OECD, Denmark has spear-headed this effort (Davis, 2006). The National Agency for Enterprise and Construction (FORA) has identified five key factors: market demand, supply of capital, supply of skills, incentives and culture (Exhibit 3.1).



For further documentation see: Hoffmann (2007); Gabr and Hoffmann (2006).

Each of the five factors is comprised of a number of policy areas believed to have an impact on these factors and therefore entrepreneurship. A careful examination of entrepreneurial policies in the top performing countries combined with a theoretical run-down of the correlation between policy and entrepreneurship has materialised into 29 policy areas (Figure 3.1). The list should be considered as a work in progress. The emergence of new indicators may allow for a more

detailed breakdown of policy areas and may allow for a more detailed analysis. Correspondingly, new knowledge may lead to the inclusion of new policy areas.

Figure 3.1: Policy areas applied in measuring framework conditions

Composite Measure for Framework Conditions				
Market Access	Supply of Capital	Supply of Skills	Incentives (Motivation)	Culture
Access Barriers	Loan Capital	Traditional Business Education	Income Tax	Cultural and Social Norms
Access to International Markets	Wealth and Bequest Tax	Ent. Education	Corporate Tax	Targeted Initiatives
New Knowledge Transfer	Venture Capital	Restart Possibilities	Administrative Burdens - Start-up	Introducing Ent. In Primary Edu.
Private Demand	Stock Markets	Ent. Infrastructure (Public)	Administrative Burdens - Operation	Communication on "heroes"/ "awards"
Public Demand	Capital Tax	Ent. Infrastructure (Private)	Labour Market Regulation	
Testing Facilities	Business Angels		Bankruptcy Legislation	
			Financial Incentives	
			Social and Health Insurance	

Note: Indicators marked in light green is covered by at least one quality-approved indicator that allows for international comparisons. Red policy areas are not covered by internationally comparable or quality-approved indicators. A discussion of individual policy areas is found in Gabr and Hoffmann (2006).

A multi-faceted and comprehensive picture of each of the policy areas requires a large number of indicators. Presently 19 of the 29 policy areas are covered by internationally comparable indicators. Denmark has taken the initiative to continue building and refining these internationally comparable indicators. Working closely with the OECD, Denmark has been involved particularly in the further development of the policy areas of restart opportunities and bankruptcy (Chapter 6). Furthermore, Denmark has participated in the collection of indicators

for policies and activities that promote entrepreneurship in basic and secondary education across OECD countries (OECD, 2006A).

A total of 58 indicators are applied in measuring country framework conditions. This year has seen the addition of 8 new indicators, while 9 have been discontinued (Exhibit 3.2). An overview of policy areas, indicators and sources can be found at www.foranet.dk.

Exhibit 3.2: Revised indicators in the 2006 Entrepreneurship Index

Additional indicators have been added to four policy areas, and the area of administrative burdens has been broken down into two areas: start-up and operation.

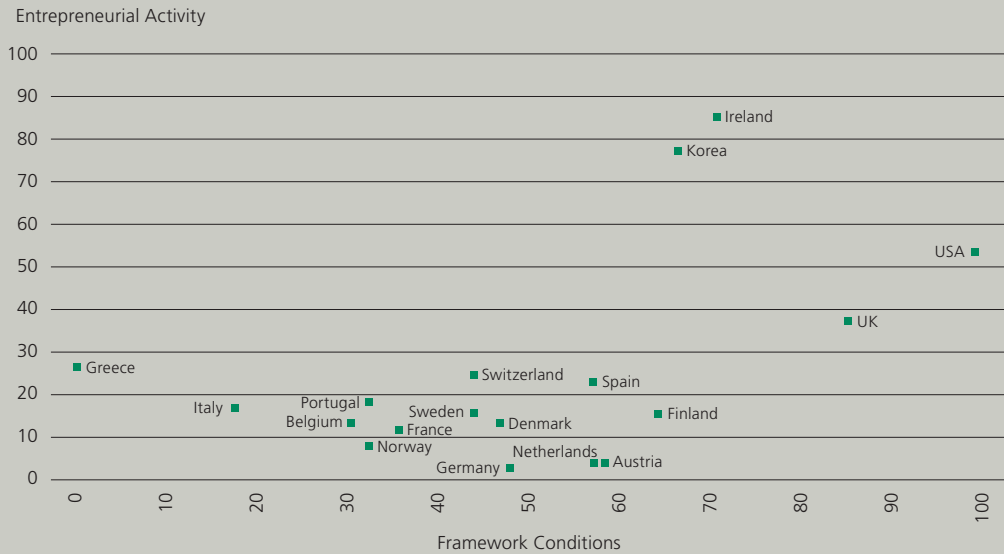
Nine indicators have been discontinued in this year's Index due to the emergence of improved indicators, accuracy issues or the fact that some indicators had become obsolete. For example, the indicator "technology co-operation between companies" in the policy area "new knowledge transfer" has been abolished as it fails to measure accurately the policy area. Hence, the policy area is now only measured by the indicator for "co-operation between universities and businesses".

One indicator in the area of access to foreign markets has been abolished as some criticism was put forward following the presentation of the 2005 Index indicating that "Share of entrepreneurs with exports" is not a framework condition but rather a performance measure. Consequently, import and export burdens have been added to the 2006 Index. Denmark trailed the top performers when applying the old indicator, but outperforms the top-4 when applying the new indicator.

3.2 A healthy correlation between framework conditions and growth entrepreneurs

A simple average of the 58 indicators shows a healthy correlation, with an average of the two indicators for growth entrepreneurs as identified in Chapter 2. The correlation suggests that framework conditions have a significant impact on country performances (Figure 3.2). Improved framework conditions will lead to better performances, but there is a time lag before such improvements materialise. This makes it impossible to show a strong correlation. At the same time, the lack of available data makes it impossible to measure all relevant areas conducive to growth entrepreneurs.

Figure 3.2: Correlation between performance and framework conditions



Note: Values have been normalised on a scale from 0 to 100, where the best performing country is given the value 100, and the worst performing country is given the value 0. R^2 is 0.22. If accounting for differences in market trends and industry structures across countries, R^2 is twice as high. Hoffman (2006) provides further insight into the technicalities of this analysis.

Source: Authors' calculations.

Ireland, Korea, the United States and the United Kingdom stand out and post significantly higher growth in entrepreneurial activity and superior framework conditions. The positive correlation is closely tied to these four countries. Except for Ireland and the United Kingdom, it is difficult to draw any clear-cut conclusions as to the presence of country variations across Europe as such variations are limited and random. Ireland posts the highest level of entrepreneurial activity in Europe and is ranked first in terms of performance. The United Kingdom has the best framework conditions and is ranked second in terms of performance.

This year's focus is on growth entrepreneurs as opposed to the focus on both start-up and economic growth presented in previous versions of the Index. However, as was the case in 2004 and 2005, there is a correlation between framework conditions and entrepreneurial activity.

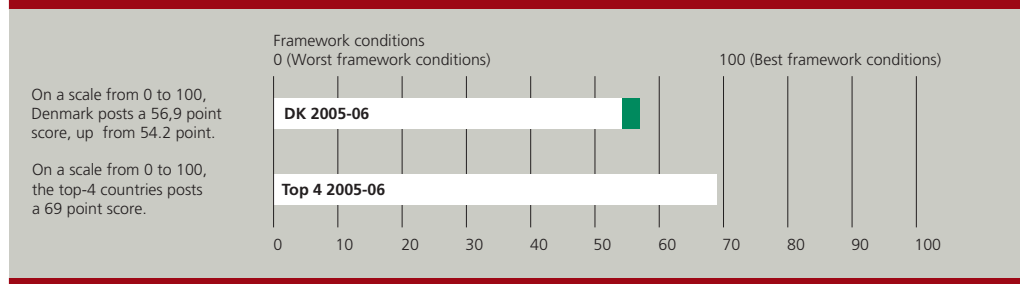
The lack of time series for several indicators makes it impossible to show a causal connection between high quality framework conditions and a high level of entrepreneurial activity. However, the assumption is supported by a range of company-level policy area studies (Hoffmann, 2007).

3.3 While Denmark still trails the top-performers, the gap is narrowing

If Denmark is to claim a place among the world's entrepreneurial elite by 2015 – in terms of new enterprise growth – the quality of the Danish framework conditions should, at a minimum, be at a level with the entrepreneurial elite by 2010. No consensus exists in determining the time lag of individual policy areas. The 2004 Index offered the assessment that the time lag for the majority of framework conditions is around 5 years.

By monitoring Danish framework conditions every year, one can see developments over time. The abundance of initiatives targeted towards improving framework conditions has slowly but steadily moved Denmark up the ranking (Figure 3.3). Denmark has narrowed the gap by one-fifth over last year. On a scale from 0 to 100, Denmark posts a score of 56.9 points, up from 54.2 last year, while the top-4 countries remain collectively at 69 points. Consequently, Denmark is moving in the right direction.

Figure 3.3: Denmark vis-à-vis the top-4 – Framework conditions



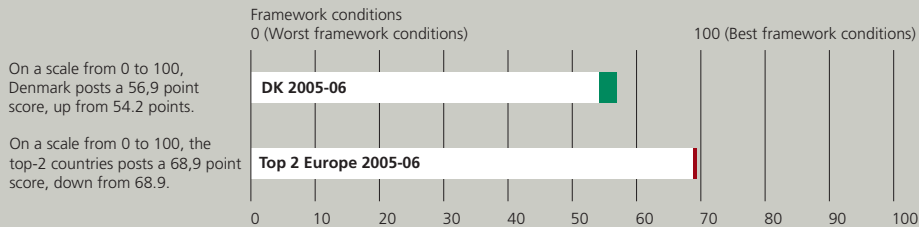
Note: Country scores on the 58 indicators have been normalised on a scale from 0 to 100. For each indicator the best performing country has been assigned the value 100, and the worst performing country has been given the value 0. Composite framework condition scores are calculated as the average of country scores for the 19 quantifiable policy areas. The value of individual policy areas are derived as the simple average of the indicators measuring the area. The value of the top-4 is derived as the simple average of their collective scores. For comparison purposes, the 2005 values for the 58 indicators are recalculated in this year's index.

Source: Authors' calculations.

Denmark's ranking vis-à-vis the top-performing countries is relatively stable to changes in weights. A robustness analysis shows that, even with changed weights, Denmark does not claim a place among the top performing countries. However, Denmark does belong to the top-10 (Appendix 3).

When looking exclusively at the European countries, a similar development can be seen as Denmark is gaining ground vis-à-vis the leading entrepreneurial nations (Figure 3.4). The number of elite entrepreneurial countries in Europe has been narrowed from three to two countries, Ireland and the United Kingdom. Both countries have been highly successful in strengthening their framework conditions and outperform to a considerable extent all other European countries.

Figure 3.4: Denmark vis-à-vis the top-2 in Europe – Framework conditions



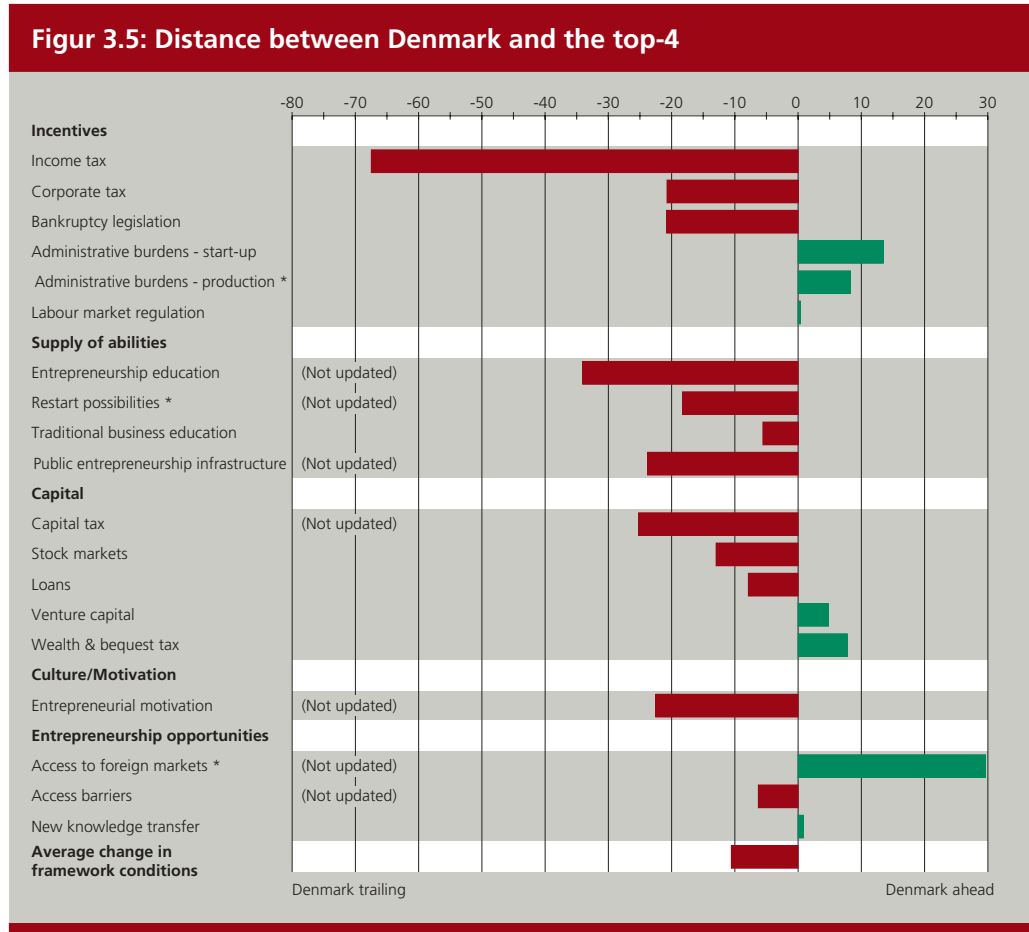
Source: Authors' calculations.

A comparison of the quality of Danish framework conditions against those of the top performing countries indicates that Denmark's framework conditions will match those of the top performers by 2010. However, this projection does not account for new initiatives among the top performers. In the event that the top-performers intensify their efforts in a new and more effective manner, and if Denmark continues at its present pace, then Denmark will not be able to match the top performers by 2010. At the same time, the Index highlights a number of key areas where the gap between Denmark and the top-4 is considerable (section 3.4).

Close monitoring and co-operation with the leading entrepreneurial countries are deemed necessary if Denmark is to catch up successfully.

3.4 Denmark's position in each of the policy areas vis-à-vis the top-4 countries

The distance between Denmark and the top-4 is explained by poor data in 12 of the 19 quantifiable policy areas.



Note: The light green bars show Denmark ahead of the top-4, red bars indicate that Denmark is trailing behind. For comparison purposes, individual policy areas are normalised on a scale from 0 to 100. The bar at the bottom of the figure shows the weighted sum of green and red bars.

The parenthesis (“not updated”) implies that more than 50 percent of the indicators for the policy area in question have not been updated. An asterisk indicates that at least one new indicator has been added to the policy area in question.

Last year, Denmark was ranked against the top-3. In this year's Index, Denmark is ranked against the top-4 as Ireland has joined the United States, Korea and Canada at the top of the ranking. This does not affect the gap between Denmark and the leading countries except for in the areas entrepreneurship culture and restart possibilities, where the gaps have narrowed marginally.

Source: Authors' calculations.

On the other hand, Denmark belongs to the entrepreneurial elite in the following areas: administrative burdens (start-up and operation), wealth and bequest tax, early stage venture capital and access to international markets.

In line with the 2004 Index, this year's Index confirms Denmark's strong performance in the areas of administrative burdens and wealth and bequest taxes. There are no significant costs and only a limited number of administrative procedures when starting and operating a business in Denmark. The wealth tax has been phased out, and bequest taxes, in particular bequest taxes tied to the closest relatives, are lenient.

Denmark's strong performance in venture capital is explained by a strong record in availability of early stage venture capital. The Danish market for expansion venture capital remains limited. At the same time, the venture markets in Korea and the United States have come to a complete halt, which in turn lowers the relative distance between Denmark and top performers. In the area of access to foreign markets, Denmark is ranked among the world's elite. There are no significant costs or administrative burdens when importing and exporting.

Denmark is at a level with the leading countries in two policy areas – labour market regulation and new knowledge transfer. In Denmark and in the leading countries, there is a long-standing tradition for flexible labour markets compared to the more stringent labour markets in Central and Southern Europe. Likewise, Denmark remains competitive when it comes to how business managers assess the scope of collaboration between local universities and businesses.

Denmark trails the top performing countries in the areas of personal income tax, capital tax, corporate tax, entrepreneurship education, entrepreneurship infrastructure, bankruptcy legislation, restart possibilities and stock markets.

Personal income tax levels in the United States, Canada and Korea are among the lowest in the OECD, as opposed to Denmark where both average and top marginal tax rates are high. In the area of capital taxation, the taxation of dividends, stock dividends and the short-term taxation of capital gains are higher in Denmark compared to the top-4. Finally, the corporate taxation of small and medium-sized enterprises (SMEs) is higher in Denmark; however, the gap vis-à-vis the top four is smaller than the gap in personal income tax. Corporate taxation may not be critical to an emerging enterprise in the early stages of development, but to growth entrepreneurs corporate taxation has a significant impact on net profits.

Entrepreneurship education is a relatively new focus area in Denmark. Until now, entrepreneurship has not played a significant role in the educational system. It has not been possible to update this policy indicator, which lead us to conclude that Denmark continues to trail the top performing countries.

The public entrepreneurship infrastructure, i.e. the supply of government stakeholders that directly or indirectly provide advisory services and new knowledge to entrepreneurs and emerging companies, is an area in need of attention. The indicator has not been updated and recent initiatives have not been included in the analysis.

The entrepreneurship infrastructure also encompasses a professional market where qualified counselling is supplied by professional stakeholders. It is not yet possible to measure the market for professional services.

In terms of entrepreneurship culture, Denmark trails the top performers in two areas: the extent to which national culture is supportive of entrepreneurial risk-taking, and people's general perception of entrepreneurs. The two indicators have not been updated in the 2006 Index.

The costs and time associated with closing a business are significantly higher in Denmark. Recent changes to the bankruptcy legislation (2005) have improved debt rescheduling for the honest entrepreneur. Furthermore, the debt discharge period is lowered from 5 to 3 years. Restart possibilities are closely linked to bankruptcy legislation. Restart possibilities is another area in need of attention. Danish entrepreneurs facing financial problems may experience difficulties in getting the help they need to restructure their business. Chapter 6 presents an in-depth analysis of this policy area.

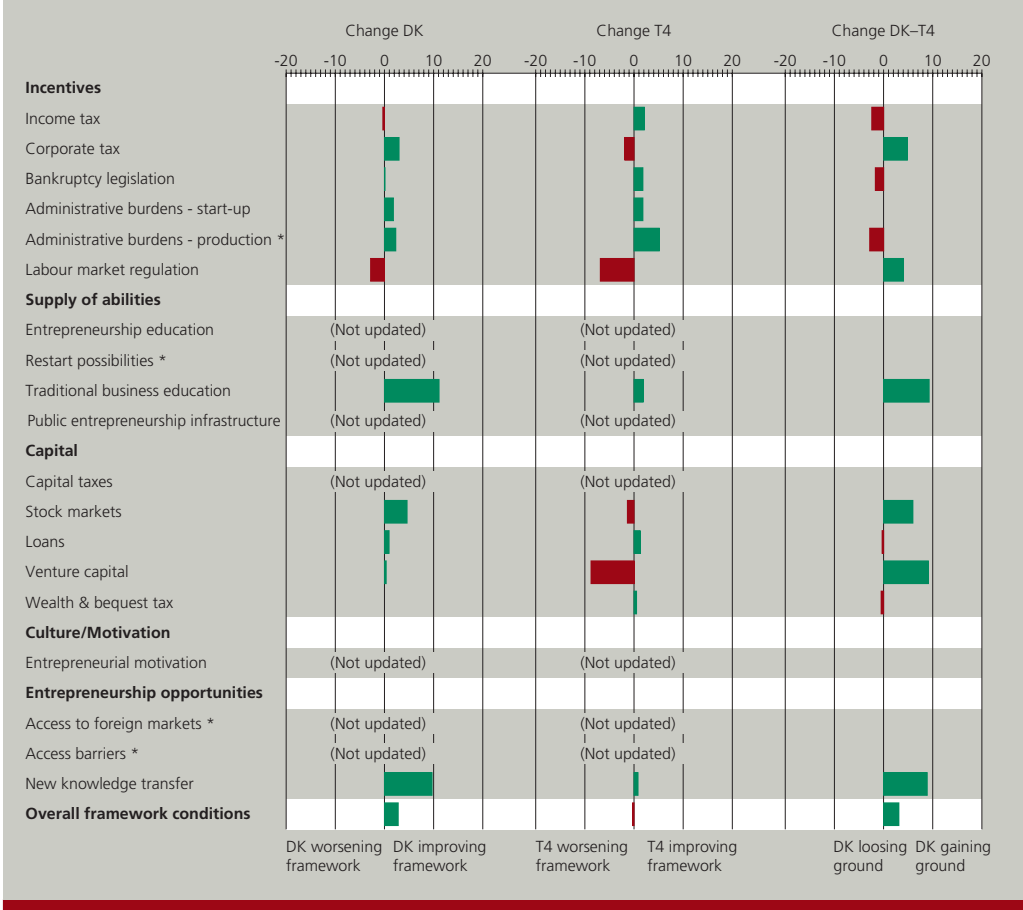
Finally, Denmark trails the top performers in terms of stock market size. In particular, this applies to the capitalisation of the secondary stock market and the number of newly listed companies. The primary stock market is in better shape although Denmark still trails the top performers.

3.5 Development in individual policy areas

In this section, developments in individual policy areas are analysed in further detail. This is supplemented by a qualitative assessment of the current effort in the area of entrepreneurship.

Denmark has shown improvements in nine areas (Figure 3.6). Two policy areas have seen deterioration. A significant number of policy areas in need of attention have not been updated and are therefore not included in this year's analysis. Hence, year-to-year variation should be treated with some caution.

Figure 3.6: Changes in Denmark's framework conditions



Note: The figure shows developments in individual policy areas. The green bar shows improvement, the red bar shows deterioration. Individual policy areas have been normalised on a scale from 0 to 100 for comparison purposes. The bar at the far left side shows Denmark's development in all policy area. The middle bar shows developments across the top-4, and the bar on the right hand side illustrates Denmark's position vis-à-vis the top-4.

The parenthesis ("not updated") implies that more than 50 percent of the indicators for the policy area in question have not been updated. An asterisk indicate that at least one new indicator has been added to the policy area in question.

Source: Authors' calculations.

Changes in the Danish framework conditions are primarily explained by the implementation of political initiatives. The Ministry of Economic and Business Affairs have put forward five action plans designed to strengthen the business environment for entrepreneurship: "The Competitive Power Package" (January 2002), "Action Plan for Entrepreneurs" (January 2003), "A Society with Room for the Free Initiative" (October 2003), "Action Plan on Venture Capital" (January 2005), and

“Agreement on coining of the Globalisation Fund” (November 2006). Other ministries have also implemented initiatives targeting entrepreneurs.

The connection between various government initiatives and subsequent developments in individual indicator is rarely as simple as 1:1. Improved framework conditions will materialise into better performance, but there is a time lag before such improvements can be registered. This would apply to entrepreneurship education, whereas a cut in personal income tax will have a direct impact on the underlying indicator.

Six policy areas have seen significant improvements as compared to the 2005 Index: corporate tax, administrative burdens (start-up and operation), stock markets, traditional business education, and new knowledge transfer.

The corporate taxation has been lowered from 30 to 28 percent. At the same time, Canada has lowered the tax discount for small businesses, which explains the marginal decline among the top-4.

Denmark has reduced the number of administrative burdens. This is an area that has attracted a great deal of focus from the Danish Government. Thus, a wide range of initiatives have been implemented, including the monitoring of and measuring the extent of such burdens, creating more lenient requirements for small companies, simplifying regulation, etc. On average, the top-4 countries still outperform Denmark. Korea has made significant progress, while developments in the other top performers resemble that of Denmark. Still, Korea trails the leading countries considerably.

Denmark has seen improvements in the area of stock markets, which in turn is explained by a larger turnover of newly listed companies in 2005. In 2005, six new companies were listed (three in 2004). At the same time, stock market liquidity improved in 2005. The number of newly listed companies is not directly affected by political initiatives; however, the increase in turnover may be accredited to the launch of the integrated Nordic stock market. Analyses show that tighter integration of stock markets will lead to a higher turnover (Ministry of Economic and Business Affairs, 2006). No significant developments are apparent in the leading entrepreneurship countries; hence, Denmark has narrowed the gap vis-à-vis the top-4.

Improvements in the areas of traditional business education and new knowledge transfer should not be over interpreted. The policy areas are covered by surveys, and some variation should be expected. The underlying indicators need to be refined if any solid conclusion is to be drawn.

Denmark's ranking in the venture capital market remains unchanged, whereas the top-4 has seen significant deterioration. The 2004 Index concluded that Denmark had succeeded in establishing a seed capital market that could match the leading countries. The more prolific role of the Danish Growth Fund is the primary reason behind this development. The latest data shows that the Danish early stage venture market is among to the world's best, whereas the expansion stage market is in need of attention.

In the area of labour market regulation, Denmark has seen a marginal decline. However, this should not be over interpreted and may be merely a result of a technical adjustment. A similar adjustment has been carried out among the top-4, which means that Denmark has gained ground on the top-4.

Danish income taxes remain unchanged, while personal taxes have been lowered in Canada. Hence, the gap vis-à-vis the top-4 has widened. In 2004, the Danish Government lowered personal income taxes by raising the threshold for paying the medium tax bracket, and a 2.5 percent job allowance was also implemented.

A few areas where improvements were expected have not been updated. In Chapter 6, current activities in bankruptcy legislation and restart possibilities are described and analysed in further detail. The activities are expected to have an impact on the policy area in a few years time. The coining of the Globalisation Fund includes a number of activities targeted at the public entrepreneurship infrastructure including the launch of regional "growth houses" that are expected to materialise into improved framework conditions. The initiatives are described in further detail in Chapter 5.

Furthermore, an update of the indicator for entrepreneurship education will undoubtedly show improvement in the future. For example IDEA and the Øresund Entrepreneurship Academy are initiatives designed to improve the integration of entrepreneurship in higher education.

The Danish entrepreneurship culture will benefit from the launch of the Independence Fund – Young Enterprise. This fund will support and promote the independence and entrepreneurial culture through education material and various entrepreneurship games.

In addition to the initiatives mentioned above, the Government has initiated and planned a series of efforts that will promote entrepreneurship. Future updates of the Index will highlight the extent to which these initiatives will have lead to improved framework conditions.

4 Importance of Policy Areas in Supporting Growth Entrepreneurs

Some policy areas are more important to entrepreneurial activity than others. The previous chapter shows that Denmark performs well in a number of policy areas, but it also showed that Denmark trails behind the top performing countries in several policy areas. Hence, this chapter attempts to assess the importance of the various policy areas and their effect on entrepreneurial activity.

In line with the conclusion from last year's Index, personal income tax, entrepreneurship education, restart possibilities and entrepreneurship infrastructure are key areas to increase successfully the number of growth entrepreneurs. In addition to those areas, this year's analysis identifies corporate tax and culture as being important to growth entrepreneurs.

However, this does not imply that Denmark should simply cut-and-paste political initiatives from the leading entrepreneurial countries. A political prioritisation requires careful deliberation. This chapter discusses some additional issues that should be part of the discussion when prioritising the policy areas. A cost-benefit analysis should be carried out to decipher the potential effects of the various initiatives on the Danish economy.

Two of the identified areas – entrepreneurship infrastructure and bankruptcy legislation – have been selected for further analysis in Chapters 5 and 6.

4.1 Identifying the most important areas

Denmark may decide to give high priority to the areas with the largest gaps vis-à-vis the top performing countries (Chapter 3) or to the most important areas for growth entrepreneurs. One of the key strengths of the Entrepreneurship Index is that both performance and framework conditions are measured. Hence, the Index allows for identifying the most important policy areas.

No universal method exists to measure the relative importance of a policy area. To secure that the outcome is robust, the analysis put forward in this chapter covers a range of additional issues.

The chapter applies two conditions in order to break down the policy areas into four categories. First, a significant correlation between policy areas and entrepreneurial activity would indicate that the policy area in question is important. Secondly, if the top performing countries have particularly strong framework conditions in certain policy areas, then it is likely that those policy areas are important to growth entrepreneurs (Exhibit 4.1).

Exhibit 4.1: Constructing Table 4.1

Two criteria are applied when categorising the policy areas:

First, a significant correlation between policy areas and “growth entrepreneur” indicators would indicate that the policy area in question is critical to performance. Policy areas with a significant correlation (5 percent level) are assumed to be highly critical. Last year, the correlation between policy areas and the composite measure for start-up and growth was examined in detail. This year’s analysis confirms that Denmark’s challenge is primarily in growing the share of growth entrepreneurs. Hence, the policy areas are only correlated with growth indicators.

Secondly, policy areas that are given high priority across the top-4 countries are assumed to be important to growth. Policy areas are assumed to be highly important when the average value for the top-4 is higher than the average for all framework conditions.

4.2 Selecting key policy areas

Chapter 3 highlighted 19 policy areas (Figure 3.5) that impact entrepreneurial activity. Six of those are significantly correlated with the indicators for the share of growth entrepreneurs: entrepreneurship education, restart possibilities, income tax, corporate tax, entrepreneurship culture and public entrepreneurship infrastructure. These areas are also given high priority by the top performing countries, which in turn would indicate that the areas are critical to promote growth entrepreneurs (Table 4.1). Four areas – bankruptcy legislation, labour market regulation, access barriers and venture capital) are given high priority but are not significant correlated with performances. Thus, these areas are not perceived as being critically important to growth entrepreneurs.

In six of the identified areas, Denmark trails considerably behind the leading countries (Table 4.1.). The situation looks slightly better in the four areas that are given high priority. Denmark is at a level with the leading countries in labour market regulation and access barriers, but trails behind in the area of bankruptcy legislation. Venture capital (seed market) is at a level with the best, while expansion stage venture capital trails behind the top performing countries. However, venture capital is primarily targeted at technology companies. In general, the Danish market for loan financing is quite efficient, whereas the market for venture capital remains underdeveloped vis-à-vis the top-4.

Table 4.1: Critical policy areas

	Insignificant correlation with performance	Significant correlation with performance
High priority among the top-4	<ul style="list-style-type: none"> • Bankruptcy Legislation • Labour Market Regulation • Access Barriers • Venture Capital 	<ul style="list-style-type: none"> • Entrepreneurship Education • Restart Possibilities • Income Tax • Corporate Tax • Entrepreneurship Culture • Public Entr. Infrastructure
Low priority among the top-4	<ul style="list-style-type: none"> • Access to Int. Markets • Traditional Business Education • Wealth and Bequest Tax • Knowledge Transfer • Administrative Burdens (Start-up) • Administrative Burdens (Operation) • Loan Capital • Stock Markets • Capital Tax 	

Note: The colours illustrate differences between the Danish framework conditions and the top-4. A green colour indicates that Denmark's framework conditions are superior or that Denmark trails the top-4 by less than 10 percent. The colour red indicates that Denmark trails the top-4 by more than 10 percent. A yellow colour shows significant gaps between individual areas; therefore, no simple conclusion is possible.

Source: Authors' calculations.

When comparing the 2006 Index with the 2005 Index by carrying out robustness analyses and by thoroughly testing and checking data, the results from last year are confirmed in this year's analysis with the exception of public entrepreneurship infrastructure (Exhibit 4.2), which will be analysed in detail in Chapter 5.

Exhibit 4.2: Testing robustness

This year's results compared to the 2005 Index:

Three of the most important policy areas – entrepreneurship education, personal income tax and restart possibilities – continue to be highly correlated and are given high priority by the Danish Government.

In this year's index, entrepreneurship culture and corporate tax have moved to the top right corner. This should come as no real surprise as the two areas were significant correlated and highly prioritised in the 2005 Index. As this year's focus is on growth, the area of corporate taxation claims a more dominant place.

The area of public entrepreneurship infrastructure has increased considerably over last year. This year, the area is highly correlated and is given high priority. The inclusion of Ireland among the top performers may help explain the importance of entrepreneurship infrastructure.

Labour market regulation, access barriers and venture capital were highly correlated and were given high priority in the 2005 Index. This year the three areas are "only" given high priority. Labour market regulation and access barriers are correlated in 25 to 50 percent of the outcomes. Because of a set-back in the U.S. and Korean markets, venture capital is not highly correlated in the 2006 Index.

Sensitivity analysis

A comprehensive sensitivity analysis shows that results are robust for all high priority areas, with the exception of entrepreneurship infrastructure (Hoffmann, 2006). Ireland's inclusion has a significant impact on the outcome for public infrastructure. The remaining areas are highly robust. Among other things, the sensitivity analysis accounts for differences in industry structure and market trends across countries.

The quality of data

A quality assessment has been carried out for all indicators included in the Index (see www.foranet.dk). The assessment shows that the areas of income tax, restart possibilities and corporate tax are high quality indicators, while the areas of entrepreneurship education, public entrepreneurship infrastructure and entrepreneurship culture are covered by lower quality indicators. The importance of entrepreneurship education and Denmark's poor ranking in this area has been confirmed by several studies (National Agency for Enterprise and Construction, 2004). However, no solid conclusions can be reached in the two areas.

4.3 Supplemental discussion of critical policy areas

From an analytical point of view, the six areas distinguish themselves as being highly critical to entrepreneurial activity. This section offers an assessment of four of the areas. Entrepreneurship infrastructure and restart possibilities will be discussed in Chapters 5 and 6 respectively, and will therefore only be described briefly in the following analyses.

The assessment in this chapter is based on four qualitative criteria developed in co-operation with three leading entrepreneurial scholars²:

- *The presence of market flaws that could warrant political initiatives.* According to basic economic theory, a perfect market will automatically lead to an efficient utilisation of resources. If there are any flaws in the market, it may be necessary to introduce measures to rectify those flaws.
- *The effect and time lag of a political initiative.* There will be some variation in the impact of changes in framework conditions and the time lag before improvements materialise into better performance
- *The costs associated with improving framework conditions.* There will be some variation in terms of the costs of new initiatives.
- *The effect of changes in framework conditions on other parts of society.* Some areas should be viewed in a larger perspective, and other societal considerations should be taken into account.

Entrepreneurship education

Entrepreneurship education will positively impact entrepreneurship activity. Studies show that the top performing countries are far ahead of Denmark, especially at the university level. A comprehensive benchmarking of Danish, U.S. and Canadian universities shows major flaws in entrepreneurship education in Denmark as compared to the United States (National Agency for Enterprise and Construction, 2004). According to the OECD, Denmark's performance in basic general education is better, although Denmark still trails the top performing countries in this aspect.

² The supplemental criteria have been developed during discussions with David Storey, Anders Lundström and David Audretsch.

Entrepreneurship education will impact entrepreneurship activity by:

- 1) Increasing awareness of entrepreneurship as a career path
- 2) Strengthening skills among future entrepreneurs
- 3) Strengthening skills among future entrepreneurial advisors.

The three factors reflect the market flaws faced by entrepreneurship education. The most obvious flaw is the classic argument that differences in the return of education in the private sector and in society as a whole will lead to an under-investment. This market flaw is the primary reason why all OECD countries support education (OECD, 2001). Another less known market flaw is that there is a lack of knowledge of the true return of entrepreneurship (Storey, 2006).

Entrepreneurship education in primary and secondary education usually focuses on the first factor as increased awareness will influence student motivation to become entrepreneurs and will positively impact their general perception of entrepreneurship. Such an effort may lead to a higher share of entrepreneurs because students are provided with a clear image of the rewards of entrepreneurship. The effort may also inject a belief among students that they could potentially make a difference (Lundström and Stevenson, 2005). However, there is a significant time lag before initiatives in primary and secondary education will materialise into a higher entrepreneurial activity.

Entrepreneurship education in technical and vocational schools usually focuses on factors 1 and 2. Often one will see an immediate effect of entrepreneurship education in technical and vocational schools, as quite a large number of people with a technical or vocational education will start a business shortly after graduation (National Agency for Enterprise and Construction, 2006).

Entrepreneurship education in higher education will most likely focus on the second and third factors, where skills among entrepreneurs and advisors are the primary focus areas. Significant efforts are needed in this area. It has been estimated that the total costs of introducing interdisciplinary entrepreneurship education at eight leading US universities amounted to 570 million DKK (www.kauffman.org).

The direct impact of entrepreneurship education in higher education is difficult to measure due to differences in the purpose of entrepreneurship education. The goal of Harvard's entrepreneurship programme is to educate managers with a talent for spotting opportunities while being able to adjust to change. This will be useful in most situations and in most companies (www.hbs.edu). Only a limited number of studies are available in this area though they document a healthy correlation between the supply of entrepreneurship courses and student career paths (Charney and Libecap, 2000).

A comprehensive British study of existing evaluations of educational programmes suggests that further knowledge is needed in order to conduct a cost-benefit analysis of entrepreneurship education (NICEC, 2006). Other studies point to a range of positive effects.

Income and corporate tax

Income and corporate taxation have a significant impact on entrepreneurship. In an international perspective, the Danish income tax system is characterised by a relatively high marginal tax rate for higher incomes. Danish company taxes – in particular the corporate tax rate – are at a level with corporate tax rates in other OECD countries. However, the top-4 countries have implemented corporate tax discounts for small businesses, as opposed to Denmark.

The impact of differences in taxation is unambiguous. The majority of empirical studies point to a negative impact of high taxes on entrepreneurship. In particular, a progressive tax regime may lower the incentives for growth in new enterprises (Gentry and Hubbard, 2000). Some scholars disagree and argue that salary earners are also taxed; hence, the effect of increased taxation does not necessarily lower entrepreneurial motivation (Parker, 2003).

In theory, most stakeholders agree that a reduction in income taxes will impact entrepreneurship in two ways. First, lower taxes will free up funds for starting a business. This rationale was the primary reasons behind the Danish establishment account that offers entrepreneurs a tax discount. Secondly, a lower marginal tax rate provides a strengthened incentive for company growth. Growth is driven by investments in risky projects, and investments are made by balancing potential costs with potential gains. A lower marginal tax rate will increase the potential gains and will therefore increase the number of growth projects.

Corporate taxation will impact a company's decision on location, where to direct profits and potential investments. The average tax rate is vital to the geographical location of production, while new investments are impacted by the marginal tax rate. Average and marginal tax rates are assessed in light of corporate taxation, depreciation and the financing structure.

A low corporate tax regime will lift investments in production machinery. This will increase labour productivity, which in turn will lift the number of growth enterprises. However, lower proceeds from corporate taxation will have to be balanced out. Furthermore, lenient corporate taxes may result in tax-related asymmetries.

Across-the-board reductions in income taxes and corporate taxes may support growth in entrepreneurship; however, the level and composition of tax rates are ultimately the result of political deliberations that focus on total tax proceeds, the redistribution of income by taxation, and the overall behavioural impact of taxes.

In practical terms, country taxation is a compromise that balances various considerations. Growth entrepreneurs will benefit from lower taxes and targeted tax cuts with a limited loss of tax revenue may be an option. However, it is essential that initiatives are designed so that competition is not distorted.

Entrepreneurship culture

Even if countries and regions offer similar incentives, entrepreneurial motivation may show some variation, for example in terms of social status and entrepreneurial risk taking. Thus, entrepreneurship culture reflects the perception of entrepreneurs by the general public, as well as the entrepreneur's perception of opportunities. A strong entrepreneurship culture will facilitate risk taking. Political initiatives rarely have a significant impact on the entrepreneurial culture, and no consensus exists in the available literature on the presence of market flaws in the area. There are three ways to improve entrepreneurship culture (Lundström and Stevenson, 2005). First, the introduction of entrepreneurship in the educational system may have a significant impact on entrepreneurial culture. Secondly, perceptions may be improved and awareness built through entrepreneurship campaigns where promising entrepreneurs are celebrated. Finally, the promotion of role models may have a positive impact.

Entrepreneurship may be driven by a sense of urgency. For example, several international studies show a high level of entrepreneurial activity among the developing countries (GEM, 2005). The entrepreneurial culture in the developing world is driven by poverty and unemployment and should therefore not be perceived as a positive phenomenon. In the Entrepreneurship Index, Denmark is compared to peer countries; i.e. any variation in the indicators for culture shows differences in the general perception of entrepreneurs rather than differences in poverty and unemployment.

Finally, a range of studies suggest that entrepreneurship culture reflects the business environment (Schramm, 2004). If correct, the motivation in Denmark will be increased by a strengthening of entrepreneurship framework conditions.

Entrepreneurship infrastructure

Building a growth enterprise is a complicated endeavour, and the demand for knowledge and skills will often exceed the individual skills of the entrepreneur. Inadequate information is highlighted as a market flaw in terms of making the right decisions (Storey, 2006).

This accentuates the need for competent counselling. This is a classic chicken and egg situation; On the one hand, entrepreneurs will have a difficult time to realise their growth potential due to the lack of competent and specialised advisors. On the other hand, the absence of emerging enterprises will make it difficult to build strong counselling skills. Chapter 5 shows that government may assume a critical role in building a strong infrastructure by offering core counselling services, by referring entrepreneurs to the private market, and by supporting the build-up of a private advisory market.

Restart possibilities

Restart possibilities will influence the incentives for starting a business. More importantly, entrepreneurs are given a second chance. Several studies show a strong correlation between the number of growth entrepreneurs and entrepreneurship-friendly bankruptcy legislation. While the analyses do not show any causal connection, several studies point to a positive effect on entrepreneurial activity through more lenient bankruptcy legislation (Armour and Cumming, 2005).

Chapter 6 details the area of restart possibilities and the rest of the bankruptcy legislative area. The chapter highlights a range of areas where government may assume a critical role. In many countries, early

warning systems have been initiated that will help identify companies with financial problems. The systems help ensure that profitable companies are restructured to survive a temporary financial predicament, while also ensuring the speedy and cost-efficient closing of enterprises with no hope for survival. Finally, the chapter highlights the availability of debt rescheduling programs as being highly important to entrepreneurs.

5 The Future Entrepreneurship Infrastructure

Danish regions and municipalities play a significant role in Denmark's entrepreneurial performance. Due to local government reform, an increasing amount of the framework conditions conducive to entrepreneurship will be drafted and implemented at a regional or municipal level.

Regional and local decision makers will assume a particularly important role in building an effective and qualified entrepreneurship infrastructure. Entrepreneurship infrastructure is a collective term for the supply of stakeholders that directly or indirectly supply new knowledge and advisory services to entrepreneurs and emerging enterprises.

Entrepreneurship infrastructure was highlighted in Chapter 4 as a key area in increasing the number of Danish growth entrepreneurs. The analysis showed that the Danish entrepreneurship infrastructure remains underdeveloped compared to the top performing countries. Also, the sensitivity analysis carried out showed that additional analyses of the entrepreneurship infrastructure are necessary given the poor quality of available indicators.

The current chapter focuses on how regions and municipalities can strengthen the entrepreneurship infrastructure for growth entrepreneurs. The regional perspective is important as the scope and quality of the entrepreneurship infrastructure shows more regional variation as opposed to country variation.

Therefore, it is vital that the overall framework is adjusted to regional conditions. Regional and local decision makers' first-hand knowledge of the challenges and conditions of local businesses is a key resource when building the future entrepreneurship infrastructure. Hence, the focus will be on the importance of Danish regions in terms of overall entrepreneurship performances, as well as to what extent regions and municipalities will be able to design framework conditions that will strengthen entrepreneurship growth.

The Danish performance suggests that the existing regional entrepreneurship infrastructure is more focused on enterprise start-up and survival rather than on the long-term growth potential.

Therefore, a range of international best practice examples will be included in the assessment of how the future entrepreneurship infrastructure may be designed to better support growth enterprises. The chapter will argue that the future entrepreneurship infrastructure should be more diversified and that government stakeholders may assume different roles depending on the nature of the individual enterprise.

The chapter will highlight the Government's initiatives targeted at strengthening the entrepreneurship infrastructure throughout Danish regions, including the establishment of the so-called "growth houses" that will serve as a valuable resource in the Danish entrepreneurship infrastructure.

It is vital that regional and municipal decision makers launch initiatives that further strengthen framework conditions. In terms of growth entrepreneurs with a significant potential, this requires the involvement of private institutions and advisors, as well as a targeted effort in strengthening the private advisory market.

5.1 The impact of entrepreneurship at a regional level

The start-up and growth of new enterprises have a significant impact on regional wealth and development. In addition, emerging enterprises contribute to a more diversified regional development, not only in terms of business structures but also among the general public, as entrepreneurs require highly-skilled employees and combine various professional profiles.

The positive effect of entrepreneurship on regional economic development is documented in several international studies. Among others, Audretsch and Keilbach (2004) find a positive correlation between start-up rates and regional GDP, while Stel and Suddle (2005) show a positive employment effect.

A recently published U.S. study on the impact of entrepreneurship on regional growth shows that highly entrepreneurial U.S. regions outperform regions with lower entrepreneurial activity on a range of economic indicators (Advanced Research Technologies, 2005).

In the top entrepreneurial regions, job creation is 125 percent higher, salary growth is 58 percent higher, and productivity is 109 percent higher as compared to regions with lower entrepreneurial activity. The study also points to a higher share of highly educated people and a higher share of high-tech companies.

5.2 Regional entrepreneurship performance in Denmark

The 2006 Entrepreneurship Index shows a solid Danish performance in start-up rates. However, despite marginal progress, Denmark continues to trail behind the top performing countries in terms of the number of growth entrepreneurs.

Denmark's regions play a pivotal role in Denmark's overall entrepreneurship performance. International records show a larger variation in performances across regions than across countries. This would indicate that framework conditions are primarily drafted at a regional level.

An overview of entrepreneurship performances across Danish regions indicates the regions that have successfully transformed local strongholds into sound framework conditions.

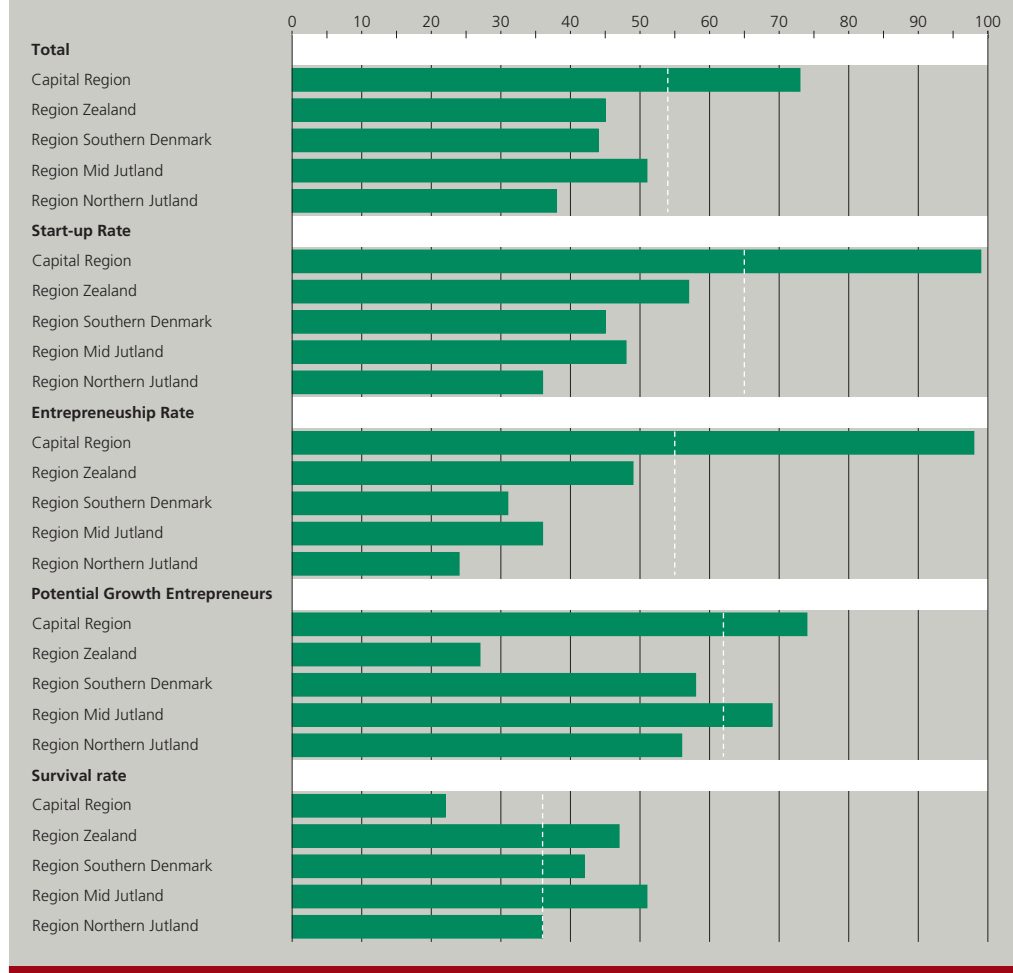
Regional entrepreneurship performance is measured in the same way as country performance, i.e. by looking at start-up rates and the share of growth enterprises.

Regional entrepreneurship performance – Start-up rates

Regional entrepreneurship performance in terms of enterprise start-up can be measured using 4 parameters: Start-up rates, entrepreneur rate, potential growth entrepreneurs and survival rate (Figure 5.1). The last three indicators are not applied on a national level due to the lack of internationally comparable data.

Overall, the Capital Region has the highest level of start-up activity, followed by the Mid-Jutland Region and the Zealand Region. The Northern Jutland Region registers the lowest level of entrepreneurial activity.

Figure 5.1: Regional entrepreneurship performance – Start-up



Note: The dotted white line indicates the national average. Data is calculated for 19 regions that can be grouped into five regions. For each indicator the top-performing region is given the value 100 and the worst-performing region is given the value zero.

Source: Data from the Regional Benchmark Model.

The Capital Region's strong showing can be accredited to high start-up rates (both as a share of the total number of companies and as a share of the population). Some 6 000 new enterprises are being started every year in the Capital Region. This constitutes a start-up rate of 10.2 percent and an entrepreneur rate of 5.2 new enterprises per 1 000 inhabitants. In comparison, start-up and entrepreneur rates in the Northern Jutland Region are 6.9 and 2.9, respectively (National Agency for Enterprise and Construction, 2006).

The Capital Region also heads the ranking in terms of the share of new enterprise with a potential for high growth³, followed by Mid-Jutland Region. The Southern Denmark Region and the Northern Jutland Region are positioned slightly below average, while the Zealand Region is positioned well below the other Danish regions.

In terms of survival rates, Mid-Jutland Region has the highest share, whereas the survival rate in the Capital Region is at the bottom of the ranking. Survival rates in the remaining regions remain average.

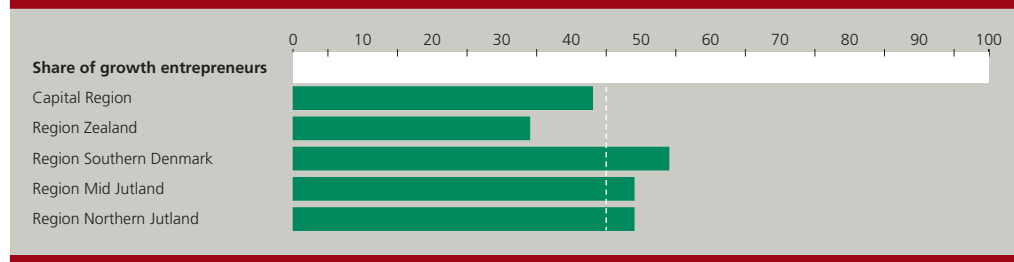
Regional entrepreneurship performance – new enterprise growth

The second aspect of regional entrepreneurship performance is new enterprise growth. The Capital Region is ranked fourth in new enterprise growth, well below the national average (Figure 5.2).

Part of the explanation lies in the fact the region holds the largest group of newly established enterprises, which in turn implies that the proportionate share of growth enterprises will be lower. In terms of absolute numbers, the Capital Region has the highest number of growth entrepreneurs (National Agency for Enterprise and Construction, 2006).

³ The share of potential growth entrepreneurs reflects the number of newly-established companies in the globally-competing industries and the number of newly-established companies with exports in the first year of operation.

Figure 5.2: Regional entrepreneurship performance – New enterprise growth



Note: The dotted white line indicates the national average. Data is calculated for 19 regions that can be grouped into five regions. For each indicator the top-performing region is given the value 100 and the worst-performing region is given the value zero.

Source: Data from the Regional Benchmark Model.

The Southern Denmark Region heads the ranking in terms of the share of new enterprises that become growth enterprises, followed by Mid-Jutland Region and Northern Jutland Region. The Zealand Region is ranked at the bottom of the table, well below the national average.

In light of the fact that Denmark trails behind the top performing countries in this area, it is vital that a dedicated effort be initiated across the five Danish Regions, in particular with regards to increasing the share of growth entrepreneurs.

The influence of local government on entrepreneurship performance

Variations in entrepreneurship performance across regions reflect various social, cultural, political and economic factors. Chapter 3 highlighted a range of framework conditions and factors that affect country entrepreneurship performances. These factors may be directly or indirectly influenced by political initiatives at a national level.

At the same time, a significant share of the framework conditions for entrepreneurship has a regional aspect (Feldmann, 2001). If a region is successful in tailoring region-specific factors to high quality framework conditions, the region may see higher entrepreneurship activity and growth.

With the implementation of the local government reform starting 1 January 2007, municipal and regional decision makers have been given a more significant role in the drafting of framework conditions conducive to growth and development.

The new municipalities will be able to implement business development initiatives that will strengthen entrepreneurship activity and new enterprise development. Among other things, the new municipalities have been handed over responsibility for carrying out the business service initiative, which provides information and counselling on the enterprise start-up, operation, and development, as well as providing information on transfer of ownership. The municipalities have been granted 85 million DKK from the Danish Government in order to drive the business service initiative forward.

The new regional growth houses will assume a key role. Their primary task is to draft strategies for regional growth and enterprise development. The regional growth houses will then further develop and prioritise the effort needed to transform the strategy into concrete improvements in regional framework conditions. Framework conditions should be designed and tailored to fit the region. One billion DKK has been granted for future regional business development. Half of the funds has been granted by the EU's Structural Funds, while the other half has been granted by municipalities, regions, the government and various private stakeholders.

Thus, the local government reform imposes a great deal of responsibility on regional and municipal decision makers in strengthening framework conditions conducive to the start-up and growth firms.

Not all policy areas are influenced by regional or municipal initiatives. A significant number of framework conditions are initiated at a national level. Still, regional and municipal decision makers may be able to insert influence in three of the five factors that influence entrepreneurship activity: market demand, supply of skills and entrepreneurship culture (Figure 5.3).

Regions and municipalities may contribute to an increased demand for entrepreneurs' products and services, and may draw inspiration from some of the world's most successful entrepreneurial countries and regions, where government procurement is targeted towards promoting innovation and entrepreneurship. However, regional and municipal initiatives in this area are mandated by national procurement regulation. At the same time, much effort is placed on providing entrepreneurs access to the latest knowledge and to prototype testing facilities at universities, hospitals or other public institutions.

Figure 5.3: Factors that influence entrepreneurship – and an assessment of regional and municipal influence

Composite Measure for Entrepreneurship Framework Conditions				
Demand	Supply of Capital	Supply of Skills	Incentives (Motivation)	Culture
Access Barriers	Loan Capital	Traditional Business Education	Income Tax	Cultural and Social Norms
Access to Foreign Markets	Wealth and Bequest Tax	Entrepreneurship Education	Corporate Tax	Dedicated Efforts for Selected Groups
Public Demand	Business Angels	Restart Possibilities	Fiscal Incentives	Entrepreneurship in Primary School/Traineeships
Private Demand	Venture Capital	Entrepreneurship Infrastructure (Public)	Social and Health Regulation for Entrepreneurs	Communication on Heroes/Awards
New Knowledge Transfer	Stock Markets	Entrepreneurship Infrastructure (Private)	Administrative Burdens – Start-Up	
Testing Facilities	Capital Tax		Administrative Burdens – Operation	
			Labour Market Regulation	
			Bankruptcy Legislation	

Source: Gabr and Hoffmann (2006).

Secondly, there appears to be a significant scope for action in terms of strengthening the regional supply of skills. Municipalities and regions exert a great deal of influence in tailoring the educational system to local and regional requirements. Furthermore, a significant share of the stakeholders providing entrepreneurship counselling and guidance is anchored locally.

The supply of capital and the availability of entrepreneurship incentives are primarily determined at a national level. Nevertheless, there is some regional scope for action in terms of securing a larger supply of loan capital, venture capital and business angel funding. At the same time, regions and municipalities can work to lower the number of administrative burdens by securing speedy and flexible administrative procedures.

Finally, entrepreneurship culture may be influenced at a regional and municipal level. A culture that emphasises risk willingness, creativity and independence may be enhanced through a dedicated effort in lower education or through entrepreneurship campaigns that promote role models.

5.3 The entrepreneurship infrastructure and its contribution to survival and growth

Regions and municipalities have a significant role in shaping and adjusting the entrepreneurship infrastructure to reflect regional requirements. The process of launching and growing a new enterprise is complicated, and the set of skills needed to succeed will often exceed the set of skills possessed by the individual entrepreneur. This applies in particular to a company that competes in a global market.

Therefore, it is vital that the entrepreneur is provided with the necessary skills, i.e. that the scope and quality of counselling and knowledge in the local community is adequate in supporting the entrepreneur. The supply of counselling and advisory services, and the creation of networks among the various stakeholders can be referred to as a region's entrepreneurship infrastructure.

A region's entrepreneurship infrastructure is comprised of multiple market participants. Regions that offer a diversified supply of highly qualified and highly specialised stakeholders with significant networking capabilities will provide the best conditions for the start-up, survival and growth of enterprises.

There are three types of market participants:

1. Accountants, business service providers, GTS Institutes etc. that provide information, counselling and advisory services.
2. Bridge-builders between entrepreneurs and advisers, and between individual players within the entrepreneurship infrastructure (Connect Denmark, Business Sparring).
3. Actors that assist entrepreneurs in skills development (knowledge institutions, entrepreneurship academies etc.).

Both public and private stakeholders participate in a region's entrepreneurship infrastructure. The presence of public sector will not be necessary if the private market is able to build an effective entrepreneurship infrastructure. However, experience shows that the entrepreneurship infrastructure is plagued by numerous market flaws. For example, the supply of competent Danish private advisers is limited. Furthermore, in several countries only a limited number of enterprises and entrepreneurs do in fact seek counselling and assistance to secure long-term survival and growth.

To prevent market flaws, several countries and regions have initiated public initiatives designed to strengthen entrepreneurship infrastructure. Public initiatives come in various forms; in some cases, the public sector may supply entrepreneurs with basic information on start-up, tax, VAT and accounting procedures. Other regions have set up government institutions that help map the entrepreneurial challenges and advisory requirements, and which may refer entrepreneurs to private advisers or other specialists. Finally, government institutions may offer financial support for networking programmes or mentoring schemes.

A diversified entrepreneurship infrastructure

One of the determining points in the actual organisation of the entrepreneurship infrastructure is an assessment of how individual participants match the needs of the entrepreneur. Entrepreneurs do not constitute a homogenous group. They will have inter alia different motives, growth ambitions, industry characteristics, educational level and business experience. Thus, the entrepreneurship infrastructure should fit the needs of different entrepreneurs and should not be built as a "one-size-fits-all" solution.

In a diversified entrepreneurship infrastructure, public and private participants fulfil different roles. Often, public participants will cater for a broad group of entrepreneurs, and will primarily supply general knowledge and standardised services on issues faced by most entrepreneurs. As mentioned above, public participants may provide introductory guidance; however, public participants will only play marginal roles in areas where the private participants constitute a strong entrepreneurship infrastructure. This applies in particular to accountants, lawyers and financial advisers.

Public advisers will rarely possess the specialised skills required by a small group of entrepreneurs. One such group covers growth-oriented entrepreneurs operating in global markets. This group may include a

biotech company developing products that is only marketed to large international pharmaceutical companies. Such an enterprise may need assistance to locate potential international buyers. Here, the necessary knowledge and experience will most likely be available only among private market participants.

In Denmark, government institutions must not engage in unfair competition in terms of competing with private participants. Hence, the role of the public participants (the 15 business service providers and their affiliated partners) is predetermined. The business service centres undertake various information activities and provide guidance in a company's early stages. Afterwards, entrepreneurs and new enterprises are referred to private participants and public institutions with specialised knowledge (GTS Institutes), which then provide entrepreneurs with concrete counselling. Thus, the role of public participants is to ease access to private advisers and help create an effective and qualified market for private advisory services.

Analyses carried out in connection with the work of the Globalisation Council show a wide range of stakeholders involved in offering counselling and advisory services. There are more than 75 institutions offering such services, as well as 150 locally anchored initiatives. As shown below, market participants have a positive influence on new firm survival.

The effect of entrepreneurship infrastructure on new firm survival

The regional entrepreneurship infrastructure may potentially have a significant impact on new firm survival. New companies often have limited resources and few network relations. Hence, the entrepreneurship infrastructure serves an important role in supplying new enterprises with relevant knowledge, competences and contacts, which in turn will lead to higher survival rates.

The positive effect of a well-established and highly-qualified entrepreneurship infrastructure can be seen in Viborg County, Denmark. In 1998, the county embarked on a targeted entrepreneurial effort with the goal of increasing survival rates in new enterprises. The county has focused its efforts on providing early stage advisory services. Furthermore, a significant effort has been made to discontinue companies with an unviable business plan.

Subsequent analysis of the county's efforts shows a 70 percent survival rate among companies after three years compared to a 55 percent survival rate in Denmark as a whole. Seventy additional companies survive every year, creating 100 additional jobs and generating 40 million DKK (Viborg County, 2004).

The county of Northern Jutland has also carried out an evaluation in 2001 of its entrepreneurial activities, which were carried out by the NiN (The Entrepreneurship Network of Northern Jutland) (Exhibit 5.1). The county of Northern Jutland has analysed survival rates among start-up enterprises to investigate the effect of NiN services. NiN companies have a higher survival rate compared to non-NiN companies, and the analysis points to a significant discrepancy.

Exhibit 5.1: The entrepreneurship infrastructure in Northern Jutland

NiN (The Entrepreneurship Network of Northern Jutland) is a virtual network-based business service organisation. NiN is supported by all key regional and municipal stakeholders.

As a network organisation, NiN offers access to streamlined advisory services anywhere in the region. The entrepreneurs may approach NiN themselves or may be referred by the municipal business offices.

NiN advisory services are focused on problem solving, as well as identifying the entrepreneur's requirements for counselling. Entrepreneurs are then referred to private advisers such as accountants, lawyers, etc. The majority of NiN resources are spent on matching the entrepreneur's advisory requirements to private advisers.

In addition to NiN, Women Entrepreneurs in Networks, Business Sparring and CONNECT Denmark North facilitate knowledge building and knowledge sharing among regional entrepreneurs and among entrepreneurs, advisers and other interested parties in the region.

The regional entrepreneurship infrastructure focuses on the interaction among the involved parties, such as public counsellors, networks, physical entrepreneurial environments, private advisers, etc. Thus, the system is constructed in such a way that the entrepreneur is referred to the relevant private market participant.

Source: www.nin.dk.

Ninety-eight percent of the companies, which were started in 2002 and which received counselling from NiN, were still in business in 2005. Of the companies which were started in 2002 and which did not receive counselling from NiN, the survival rate was 65 percent. The analysis was not able to identify the total number of companies having received NiN counselling; hence the numbers may overestimate the effect of NiN counselling. The overall effect of entrepreneurship infrastructure on Danish survival rates has not been mapped. However, some counties have conducted evaluations of business service centres. They show a positive effect on survival rates among the companies that have received counselling. At the same time, internal business service activity statistics show that the centres are primarily approached by intended group of entrepreneurs, i.e. entrepreneurs and companies with fewer than 50 employees in secondary and tertiary industries.

On the other hand, a study shows that growth entrepreneurs primarily approach private market participants (Statistics Denmark, 2003). One explanation may be that the knowledge and skills required by growth entrepreneurs are not available in the public system. However, this does not imply that there is no link between growth and general counselling.

The effect of entrepreneurship infrastructure on growth

Regional entrepreneurship infrastructures have a positive impact on the potential of growth entrepreneurs. Among the participants in the entrepreneurship infrastructure are consultants that offer advisory services on internationalisation and exporting opportunities. Other participants include development capital investors and advisers that facilitate strategic business development and entrepreneur skills development.

In a 2003 study, the National Agency for Enterprise and Construction compared growth entrepreneurs and non-growth entrepreneurs. One of the focus areas of the study was the use of advisory services in the start-up phase. Sixty-one percent of the growth enterprise sought advisory services when starting their business. The share among non-growth entrepreneurs was 58 percent (Statistics Denmark, 2003). Similar results are found in a study on the British entrepreneurship infrastructure, which points to a significantly higher level of external counselling among high growth companies (Bennett and Robson, 1999).

In Sweden, on-going monitoring of the Swedish entrepreneurship infrastructure, the ALMI system, shows a 23 percent revenue growth among enterprises that have received ALMI counselling compared to a one percent drop among non-ALMI companies. Similarly, employment among ALMI companies grew by 11 percent, with a 13 percent drop in employment among non-ALMI companies (ALMI, 2005).

Exhibit 5.2: ALMI – an important element in the public entrepreneurship infrastructure in Sweden

ALMI was established in 1994 and is comprised of a parent company and 21 regional business service centres. ALMI is owned by the Swedish government, the regional councils, regional authorities and municipal partners. ALMI employs 450 people.

ALMI's primary task is to promote the development of competitive SMEs, to bring more innovative ideas in the market and to create new businesses thereby supporting growth in the Swedish economy. ALMI activities cover everything from idea generation to profitable business.

ALMI has three target groups: Innovative companies, new businesses and established businesses. ALMI activities include 1) innovation financing, business development and start-up support through low-interest high risk loans, 2) advisory services and 3) access to business development networks and training.

Every year ALMI guides some 100 000 entrepreneurs, potential entrepreneurs and established companies. In 2005 ALMI circulated 3.3 billion SEK among 12 000 Swedish companies.

Source: www.almi.se.

Multiple factors influence the initial stages of a company beginning: the entrepreneur's own ambition, access to capital, experience etc. Therefore, it is difficult to show a causal link between entrepreneurship performance in relation to both survival and growth and the use of advisory services. The empirical data presented in this section suggests a positive correlation between access to knowledge and skills, and company survival and growth.

The largest impact comes from the private entrepreneurship infrastructure. Robson and Bennett (2000) found that the most significant positive correlation between counselling and company performances was found among lawyers and suppliers. On the other hand, only a limited statistical correlation was detectable between public counselling and company performance. For some reason, growth entrepreneurs are reluctant to approach public market participants.

While Danish start-up rates are impressive, only a limited number of companies enter a healthy growth trajectory. This would indicate that the Danish entrepreneurship infrastructure does not cater for the different needs and ambitions of Danish entrepreneurs, and that it remains too focused on survival. Companies with significant growth potential and global ambitions only receive limited support.

Overall, this section suggests that the public sector could assume a greater role in catering to the needs of the typical entrepreneur in the early stages⁴. On the other hand, private advisers may assume a larger role in offering specialised knowledge to ambitious growth entrepreneurs.

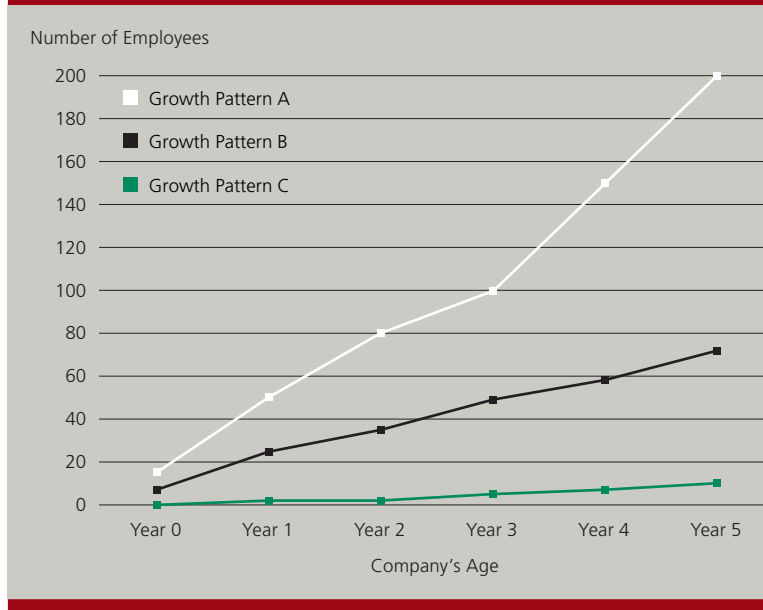
5.4 The future of the Danish entrepreneurship infrastructure

Knowledge is a key, competitive factor. Therefore, an effective and qualified entrepreneurship infrastructure could play an important part in the entrepreneur's quest for success. However, regions and municipalities should pay close attention when designing their entrepreneurship infrastructures. It is vital that the infrastructure is designed to allow for coexistence among private and public market participants, providing the entrepreneur with a wide range of skills regardless of needs, company life-cycle and growth ambitions.

Often, entrepreneur needs are closely tied to growth ambitions. An on-going OECD project takes a closer look at the growth patterns of growth entrepreneurs.

⁴ No cost-benefit analyses of the public entrepreneurship infrastructure are available.

Figure 5.4: Growth patterns for newly established companies



Source: Vale (2006).

Figure 5.4 shows three general growth patterns for newly established enterprises⁵. Growth pattern A represents the broad group of Danish entrepreneurs with limited growth ambitions. Companies in Group A are often started with no, or only a few, employees and see limited employment growth in the first year of operation. Employment in Group A companies typically reaches a maximum level of 10, as the entrepreneur would prefer to run the business themselves. Another reason may be that the market is unable to sustain large companies. Group A companies typically produce an already known product and is primarily focused on existing local and regional markets. Group A companies include hair dressers, mechanics and restaurants.

Companies in Group B can be described as potential growth entrepreneurs. They typically hire one or more employees in the first year of operation. In general, growth entrepreneurs see stable growth in the start-up years. Group B companies have a global focus, but the market potential will place a limit on the maximum number of employees (50 to 100).

⁵ The OECD study shows a variety of linear and non-linear growth patterns. Figure 5.4 focuses exclusively on three of those patterns. Furthermore, it should be noted that the three growth patterns are not industry-dependant.

Growth pattern C covers entrepreneurs with the potential to become global winners. Group C companies have significant growth ambitions. Companies will see rapid revenue and employment growth, and will hire a number of employees in the start-up phase. Companies with a C growth pattern offer new products to international markets. Only a handful of Danish entrepreneurs become global winners.

It is evident the B and C companies will require more specialised counselling as opposed to Group A companies. Companies with an international focus will benefit from having access to a broad experience base in areas such as product and technology development, international organisation and IPOs. This type of assistance will hardly be relevant to local restaurants and hair dressers, where the focus is on local area marketing, and effective inventory and financial management.

Advisory services will have a significant impact when tailored to the ambitions and potential of these growth entrepreneurs (Chrisman and McMullan, 2004). With the local government reform and the municipal involvement in business services, the Danish Government has a unique opportunity to adjust the Danish entrepreneurship infrastructure. The future entrepreneurship infrastructure should focus on utilising the strengths of municipal, regional and private market participants. At the same time, the infrastructure should reflect the needs and growth ambitions of the entrepreneurs.

A diversified Danish entrepreneurship infrastructure

A strong entrepreneurship infrastructure and an improved interaction between private and public participants is a prerequisite for Denmark's entrepreneurial ambitions (National Agency for Enterprise and Construction, 2004). Therefore, the Danish Government has taken the initiative, based on the work of the Globalisation Council, to adjust the entrepreneurship infrastructure. The goal is to build an infrastructure that caters to the individual needs of the entrepreneur. The infrastructure will be organised with three key stakeholders: municipalities, regional growth houses and private advisers.

Local business service

Local entrepreneurs and local companies should be given the opportunity for basic guidance and relevant information on local issues. The local business service providers play a key role by meeting this demand for information. Basic counselling covers a range of standardised services, such as business plan guidance, financial support opportunities, rules and regulations etc.

Local business service providers serve an important role in referring entrepreneurs and companies to the regional growth houses. Hence, the local business centres are responsible for identifying entrepreneurs with a will and potential for growth that matches the specialised guidance offered by regional growth houses.

Regional growth houses

The Danish Government will launch five regional “growth houses”. The ambition is to build a simple, yet strong entrepreneurship infrastructure that focuses on new firm growth. The houses will provide entrepreneurs and businesses with strong professional guidance and counselling.

The core idea behind the regional growth houses is to establish a one-stop-shop that provides a single entry to qualified counselling and guidance that focuses on helping healthy companies to grow.

By gathering and coordinating activities in one entity and further developing the interaction between private and public market players, the growth houses will contribute to a higher quality and effect of regional advisory services.

Among other things, the houses will offer free objective guidance and problem trouble shooting for new and existing companies with growth ambitions. The regional growth houses will be specialised in growth-related issues and will coordinate their efforts with the local business service providers.

In addition, the growth houses will refer entrepreneurs and established businesses with significant growth ambition to private advisers and other relevant parties. Growth-oriented entrepreneurs and enterprises will benefit from three types of advisers: 1) advisers specialised in certain professional areas (functional specialisation), 2) advisers specialised within a specific sector or technology, and 3) advisers specialised in the international challenges that new enterprises face. One of the most important tasks of the growth houses is facilitating the private entrepreneurship infrastructure because this will strengthen the incentives for private advisers to develop their skills. Services provided by the growth houses must not lead to a distortion of competition vis-à-vis the private advisory market.

The growth houses serve an important role in nurturing collaboration between public and private advisers. The growth houses will work with other market participants to test if co-localisation will create further synergies. The Danish Growth Fund, the Danish Export Council, the

Entrepreneurship Academy (IDEA), the Independence Fund, CONNECT Denmark, Venture Cup, Business Sparring, various GTS Institutes and other regional players may benefit from combining a close interaction with a physical presence. Thus, the growth houses will contribute to a strengthening of the overall Danish entrepreneurship infrastructure.

Strengthening network and entrepreneurship skills among private advisers

The growth houses will undoubtedly strengthen the private entrepreneurship infrastructure. However, further initiatives are required to strengthen entrepreneurial skills in the private entrepreneurship infrastructure. Several private advisory networks across some of the most successful growth regions in the United States and Canada are often managed by private market participants. Finely-knitted formal and informal networks play an important role in this respect.

The networks typically include resource individuals from various sectors, and will encompass the following market participants:

- 1) Private advisers: lawyers, accountants, patent lawyers, marketing experts, advertising consultants and management consultants etc.
- 2) Investors: financial advisers, venture capitalists and business angels.
- 3) Mentors: experienced business managers and successful entrepreneurs.
- 4) Skilled individuals from universities, incubators or other institutions with specialised knowledge on entrepreneurship.

Communitech in the Kitchener-Waterloo Region in Canada provides a first-rate example of a privately-anchored regional network (Exhibit 5.3). Communitech forms the backbone of the private entrepreneurship infrastructure for high-tech companies in the region, which is one of the most successful regions in North America.

Exhibit 5.3: Communitech in the Kitchener-Waterloo Region, Canada

Communitech is a regional network of entrepreneurs and advisers. The purpose of Communitech is to build a dynamic network of mentors and local private sector investors: The network targets growth entrepreneurs in the high-tech industry.

Communitech has several focus areas. The network prepares entrepreneurs for meeting potential investors and provides education in various management skills. Communitech has set up two mentor groups. One group of mentors is targeted towards companies that have received venture capital funding. The other group focuses on early stage entrepreneurs. In addition, Communitech offers advisory services to entrepreneurs and private advisers.

Communitech was launched in 1995 by a group of private market participants. A number of experienced entrepreneurs and business leaders each contributed 5 000 USD to establish the network. Today, the network has 250 members.

Source: Rumball (2005) and Landry et.al. (2002).

Private advisory networks serve several purposes in the entrepreneurship infrastructure. First and foremost, they constitute a unique resource of entrepreneurial skills. Through the networks, entrepreneurs and new enterprises with significant growth potential will have access to highly qualified and highly specialised advisers and resourceful individuals.

Private networks, such as Communitech, constitute a skills resource that are continuously developed and strengthened. The networks allow private entrepreneurial advisers, investors and resource individuals to share and build knowledge on the challenges faced by globally-oriented entrepreneurs. Some networks have dedicated educational programmes for network advisers, thereby further facilitating and strengthening knowledge building among network advisers.

International case studies point to a limited participation of government institutions in building and running advisory networks. Advisory networks are primarily anchored in the private sector, which reflect user preferences. Growth entrepreneurs are typically sceptical towards publicly-anchored institutions, while the private market participants possess a higher level of legitimacy in the eyes of the entrepreneur.

CONNECT Denmark is a privately-anchored advisory network that offers professional advice for start-up enterprises. CONNECT Denmark is a broadly-based network of private advisory companies, investors, educational institutions and research institutions.

In that respect, a strong regional anchoring is vital. Regions often possess different business strengths and may therefore have different advisory requirements. In Northern Jutland, the private advisers will be specialised in areas related to IT and health technologies. The Capital Region will offer a number of highly specialised biotech advisers. If each region contributes advisory skills and competences to a national network, the highly specialised knowledge will benefit entrepreneurs in other regions.

Given Denmark's size, it will probably be difficult to build a network that encompasses all relevant specialities. For example, a small group of entrepreneurs with global ambitions may only need access to a limited pool of international experts to meet their advisory requirements. Thus, the skills development of Danish advisers should be supplemented with international alliances and networks.

6 Danish Bankruptcy Proceedings in an International Context

As in previous years, the 2006 Index highlights the bankruptcy legislation as a critical framework condition. The analyses presented in Chapter 4 points to a correlation between the number of growth entrepreneurs and the character of the bankruptcy legislation. While the analyses do not point to a causal connection, several studies suggest that more lenient bankruptcy legislation will positively impact the level of entrepreneurial activity (Armour and Cumming, 2005). Indeed, several countries have revised in recent years their bankruptcy legislation.

However, this area has been plagued by a lack of internationally comparable data and analyses. In previous editions of the Entrepreneurship Index, the area was covered by only a handful of indicators, including the costs and time spent closing a business, and the debt rescheduling period. These indicators have been a part of the general discussion on bankruptcy legislation; however, the validity of the indicators has been the subject of some dispute.

Therefore, the National Agency for Enterprise and Construction (FORA) has launched a project with the OECD in order to compile a new set of bankruptcy indicators (OECD, 2006). The work is founded on a survey that highlights the effect of various bankruptcy systems on entrepreneurs. Government institutions across 26 countries have participated in the survey. Furthermore, the analysis introduces a range of detailed country case studies in the bankruptcy area. Overall, the study has contributed a range of indicators, as well as valuable information on bankruptcy regulation across the OECD.

The analysis allows for focusing on areas that have not previously been discussed in the Entrepreneurship Index. In particular, the analysis highlights the effects of early warning systems and the possibilities for restructuring viable companies.

The purpose of this chapter is to supplement the discussion presented in Chapter 4 with a more detailed description of bankruptcy regulation in selected countries. Thus, this chapter could serve as inspiration in the continued effort to improve the Danish bankruptcy system.

The chapter shows that Denmark is well-positioned to close the gap vis-à-vis the top-performing countries in the area of early warning systems. A large number of countries have introduced early warning systems to help locate and restructure companies that are showing signs of temporary financial distress. Early warning systems may also lead to the rapid and cost-efficient closing of companies with limited hope of survival. The Globalisation Fund has allocated resources for the development of a Danish early warning system that will bring Denmark in the foreseeable future on par with the best performing countries

In terms of the possibilities of restructuring and the effective closing of insolvent estates, Denmark trails the top performing countries. The Danish Bankruptcy Council is currently addressing these issues. The chapter highlights a number of international examples that may serve as inspiration in future deliberations. The chapter highlights four areas in which Denmark may draw inspiration: “fast-track” procedures for small companies, creditor voting rules, creditor insight into proceedings and specialised courts.

It is expected that the Ministry of Justice will introduce legislation in early 2007 that will contribute to a speedy and effective closing of insolvent estates. The chapter will only briefly touch upon this subject. However, future Entrepreneurship Indices will closely monitor if this new legislation will have the expected effect.

In 2005, the Danish bankruptcy legislation was adjusted to provide non-fraudulent entrepreneurs with improved restart possibilities⁶. As the changes were only recently put into effect, the section below evaluates Denmark’s progress vis-à-vis the top-performing countries in three different areas. Denmark now matches the best performing countries in terms of the time passed before a debt discharge is awarded following a petition for bankruptcy. However, the debt repayment period continues to be longer compared to the United States and Canada, though Denmark is at a level with a number of key EU countries. Due to the fact that a debt rescheduling is only rewarded to non-fraudulent

6 An “honest” bankrupted has conducted himself in a manner that is loyal and responsible to the company’s creditors and public authorities. Fraudulent behaviour may occur if the debtor or the management of the distressed company have neglect their responsibilities with regards to declaration of VAT, income taxes etc.

entrepreneurs, Denmark trails the top performing countries in terms of the conditions necessary for a rescheduling of debt. Still, as the current rules were only recently implemented future Entrepreneurship Indices will provide more insight into the eventual effects of the new rules.

The level of regulation in assisting distressed companies in Denmark and abroad is described in detail in the section below. This is followed by a run-down of the regulation pertaining to bankruptcy proceedings and rescheduling of debt. When possible, the Danish regularity framework is compared to that of the top performing countries and areas for improvement are identified.

6.1 The impact of bankruptcy legislation on entrepreneurial activity

Until recently rules and practices concerning bankruptcy generally favoured the creditor and were very harsh toward the bankrupt. In medieval Italy, when a businessman did not pay his debts, it was the practice to destroy his trading bench. Indeed, the term bankruptcy comes from the Italian for broken bench, “banca rotta,” which symbolises the negative connotation associated with bankruptcy (www.bankruptcy.com).

In this respect, the United States is an exception. Here, rules and practices have generally favoured the bankrupt. This dates back to the Colonial Era where the bankrupt simply moved west if no debt discharge was granted. In recent times, the Bankruptcy Reform Act of 1978 further supported the part of the bankrupt (www.bankruptcy.com).

The unique bankruptcy legislation and the world-class entrepreneurship performance found in the United States, as well a growing interest in entrepreneurial issues, have led to adjustments in bankruptcy legislation in most OECD countries (Surlmont et.al., 1999). Adjustments come in various shapes and forms; yet, the debtor’s standing has been improved in most countries.

Why is it so important that bankruptcy legislation takes into consideration the interests of the bankrupt? The public debate highlights three main arguments:

First of all, it is argued that the number of potential entrepreneurs will be affected by the possibility of restarting following bankruptcy; poor

restart possibilities will negatively affected the pool of potential entrepreneurs. Furthermore, it should be noted that the bankrupt has already shown the will and courage to start a business (Armour and Cumming, 2005) and may learn from the process.

Secondly, it is argued that entrepreneurs carefully assess the potential gains when starting a business against the risk incurred. Bankruptcy legislation will influence the risk incurred in regulating outstanding debt should the business adventure fail. Changes in bankruptcy legislation will therefore have a significant impact on the decision to start a business for the “marginal” entrepreneur (Armour and Cumming, 2005; White and Fan, 2002).

Thirdly, it is argued that the restarting possibilities will have an impact on entrepreneur skills. The argument is rooted in the United States where entrepreneurship is regarded as a learning process. A bankrupt has gained valuable knowledge in terms of starting and operating a business. An entrepreneurial “restarter” is regarded as being better equipped and the chance of success is perceived as being much higher (Lee et al, 2000; Boston Consulting Group, 2002). In some cases, a bankrupt will have an easier time raising capital for a new venture compared to inexperienced entrepreneurs. The latter argument is subject to much debate and further analysis is required.

On the other hand, several analyses show that a significant deterioration in creditor interest may lead to higher interest rates and limited loan financing (Berkowitz and White, 2004), which are detrimental to entrepreneurs and companies.

The area of bankruptcy legislation should therefore balance debtor and creditor interests. Bankruptcy legislation that takes into consideration the interest of the debtor is important to all companies, not only that of new enterprises. The debate on bankruptcy legislation is often tied to entrepreneurs, which can be explained by the fact that the majority of new enterprises are not in business after five years, while only a limited number of established companies go bankrupt (NAEC, 2005).

6.2 Early warning systems

Data from Statistics Denmark shows that only four out of ten companies are still in business after 5 years. Other OECD countries show similar survival rates. It is generally believed that the economy will benefit from the testing of new ideas in the market by emerging companies. Viable ideas turn into profitable businesses, while others will disappear.

However, several Dutch and Canadian studies show that company distress is not always tied to a lack of market opportunities. In the Netherlands, approximately 20 percent of the discontinued start-ups could have been saved if their problems had been recognised at an earlier stage, and had the entrepreneur been given adequate counselling. In Canada, 50 percent of the distressed companies suffered from internal conflicts, including a lack of experience among entrepreneurs (Baldwin et al, 1997).

Several countries have implemented so-called early warning systems. The systems are intended to identify distressed companies at the earliest possible moment. The system will ensure that otherwise viable companies are restructured and, thus, survive a temporary financial distress. Furthermore, the early warning system will allow for a speedy and cost-efficient closing of companies with no or limited hope of survival.

In the 2007 Budget, the Danish Government has allocated 29 million DKK to build an early warning system. The system will ensure that distressed companies have a higher survival rate and that unviable businesses are dismantled as quickly as possible. Temporarily distressed companies will be offered counselling from legal, financial and organisational experts on how to avoid bankruptcy.

Early warning systems come in various shapes and forms. An OECD study (2006) shows that 15 of 26 OECD countries have implemented successfully early warning systems (Table 6.1).

Table 6.1: Early warning systems

Countries with early warning systems:	Countries with no early warning systems:
Australia	Canada
Austria	Denmark
Belgium	Hungary
Finland	Italy
France	Japan
Germany	Korea
Greece	Mexico
Ireland	Norway
Israel	Portugal
Netherlands	Sweden
New Zealand	Turkey
Poland	
Spain	
Switzerland	
UK	

Source: OECD (2006).

Some of the common characteristics in the available early warning systems are:

- Specialised counselling, where experienced business individuals offer advice on management issues and financial management.
- Accounting and diagnosis tools that companies may apply in analysing the company's financial and overall development.
- Information campaigns targeted at financially distressed companies.

Only a handful of countries have evaluated the effect of implementing early warning systems. Evidence suggests that early warning system may serve an important role in securing financially distressed companies. This has been the case in the Netherlands, where the "Ondernemersklankbord", an organisation of business professionals, provides counselling services on a voluntary basis (Exhibit 6.1).

Exhibit 6.1: Early warning systems and reorganisations in the Netherlands - The Ondernemersklankbord

In the 1990s, only four out of ten Dutch enterprises were still in business after five years. A study showed that failure is often linked to a lack of experience and late recognition of problems.

The Ondernemersklankbord was set up in 1999 with the purpose of assisting entrepreneurs to obtain a healthy growth trajectory and to increase survival rates. The Ondernemersklankbord offers advice to financially distressed small and medium-sized businesses or companies looking to increase the growth potential of their business. Entrepreneurs are referred by the Dutch courts or may approach the Ondernemersklankbord voluntarily. The organisation receives funding from the Dutch business community and from the Dutch Ministry of Economic and Business Affairs.

The Ondernemersklankbord is an organisation of retired entrepreneurs, general managers with entrepreneurial experience and experts providing assistance on a voluntary basis. A team of Ondernemersklankbord volunteers, with expertise in management, accountancy and law, conducts a review of the company's financial position and business plan. If the expert team proposes that a reorganisation should be carried out an action plan is drafted and is presented to the creditors. The plan needs the acceptance of all parties involved. Four out of five cases handled by the Ondernemersklankbord result in a successful rescue.

Source: OECD (2006) and EU (2003).

Danish insight into the area of early warning systems has been facilitated by the longstanding relationship between the National Agency for Enterprise and Construction and the OECD. Based on various OECD analyses, Denmark has opted to model the proposed early warning system in line with Dutch experience in this area. However, the Danish set-up will be founded on voluntary collaboration with the relevant courts rather than a compulsory referral. Under all circumstances, it will take some time before the Danish early warning system has the scope and magnitude of the Dutch system.

The Danish experimental scheme will be evaluated after three years. The evaluation will shed light on the survival rates and growth trajectories of companies that were identified by the early warning system. The evaluation will also track the extent to which unviable companies are closed at a faster pace.

6.3 Reorganisations

A company reorganisation is a partial or full continuation of a distressed company as part of the same legal entity. In general, both debtors and creditors will benefit from a reorganisation given that the company is or can be made profitable. Hence, it is important to establish a sound framework for reorganisations for a temporarily distressed company (Sundgren, 1998).

Like the early warning systems, a reorganisation covers a wide range of elements. However, the two most important elements of a reorganisation are the restructuring of business procedures to re-establish company profitability and the reorganisation of debt through debt rescheduling, debt write-down or by bringing in new capital (Adriaanse, 2005).

Reorganisations may be carried out within the legal framework (in-court) or outside the legal framework (out-of-court). In Denmark both alternatives are available, but are seldom used. Both options will be described in further detail below.

Out-of-court reorganisations

A distressed company may, in co-operation with its direct interested parties, make an attempt at reorganisation outside the legal framework and, thus, not directly influenced by insolvency legislation.

Out-of-court reorganisations are particularly relevant to entrepreneurs. In general, reorganisations are speedy and cost-effective. It will hardly be relevant to carry out a costly reorganisation if a company has limited assets. Several Dutch and Austrian studies show that the costs of out-of-court reorganisations is 50 percent lower compared to a reorganisation within the legal system. Furthermore, out-of-court settlements are more easily adjusted to small companies and provide more flexibility. Not all countries have norms and procedures for out-of-court reorganisations. Other countries do, but rarely apply these (Table 6.2).

Table 6.2: Reorganisations outside the legal framework

Yes:	Yes, but rarely used:	No:
Australia	Hungary	Belgium
Austria	Israel	Japan
Canada	New Zealand	Mexico
Denmark	Sweden	Poland
Finland		
France		
Germany		
Greece		
Netherlands		
Ireland		
Italy		
Korea		
Norway		
Portugal		
Spain		
Switzerland		
Turkey		
UK		

Source: OECD.

An out-of-court reorganisation requires the full commitment and acceptance of all affected parties, in particular when the reorganisation calls for a debt write-down. The legal system may stipulate that only a share of creditors will have to accept the rescue plan for a reorganisation to be carried out. Outside the legal framework, all creditors must accept the reorganisation scheme. Hence, reorganisations are mostly relevant when only a few creditors are affected.

In Denmark, it is possible to enter a voluntary composition agreement with one's creditors. Such an agreement may be settled outside the legal system as opposed to an agreement enforced by a majority of the creditors, which has to be settled in the judicial system. The entrepreneur may try to arrange a voluntary composition settlement with the creditors. The voluntary composition agreement may lead to debt reduction or debt annulment. The acceptance of all creditors is usually required for such an agreement. In a voluntary agreement, the debtor may be insolvent, i.e. unable to pay his debt in due time. However, this is not a requirement for a voluntary agreement.

In principle, a voluntary agreement will not automatically lead to a reorganisation of the affected company. Nevertheless, it is unlikely that a distressed company is able to enter into a voluntary agreement without presenting a detailed reorganisation plan to its creditors.

No available information exists in terms of how often voluntary agreements are carried out, how often voluntary agreements are settled, nor the costs incurred compared to reorganisations within the legal system.

OECD analyses shows that several countries do not collect information on the number of reorganisations outside the legal framework. On the other hand, a number of countries are quite active in this area (OECD, 2006).

In the Netherlands, 26 000 voluntary agreements are settled outside the legal framework. In Australia, an estimated 2 540 agreements are settled. In Austria, it is estimated that 130 voluntary agreements are entered on an annual basis.

National governments may play an important role in providing a sound framework for reorganisations outside the legal framework. Denmark may draw inspiration from several initiatives.

Several countries have established norms and procedures for reorganisation outside the legal framework that may be drafted and “marketed” by national governments. Such norms and procedures may include which party initiates a reorganisation, who establishes contacts with the creditors, who drafts a rescue plan, how capital is raised, and how a rescue plan is adopted by all parties. A neutral participant or a large creditor may assume the responsibility for these issues and may serve as a mediator when conflicting interests are at stake. Out-of-court reorganisations will hardly be viable if the “rules of the game” are drafted on a case-by-case basis.

The Dutch Ondernemersklankbord is an example of a scheme where the government assumes an active role in out-of-court reorganisation. The system is designed to identify financial challenges as early as possible. However, as mentioned above, the voluntary experts will assist in the drafting of a rescue plan, which encompasses some type of restructuring. Although the system is not governed by law, there is a set of unwritten rules as to who drafts the proposal for the reorganisation and how it is approved. In the United Kingdom and in several Asian countries, the government has played a part in building an effective

out-of-court reorganisation framework (Exhibit 6.2) (Mako, 2003, www.bba.org.uk).

Exhibit 6.2: Out-of-court reorganisations in the United Kingdom

The recession in the 1980s gave rise to an increasing number of financially distressed companies. The Bank of England became concerned that the increasingly complex loan structures might prevent viable companies from being rescued. The Bank of England circulated a letter to banking associations with the aim of ensuring that every bank in London should be familiar with the multi-bank approach to supporting companies in difficulty. It is this informal framework that has become known as the London Approach.

The ultimate objective is to avoid corporate collapse as a result of inter-creditor disputes. The basic concept is a moratorium outside a statutory process whereby lenders agree (for a period) not to take any individual action, nor to improve their positions relative to each other in terms of repayment. During the moratorium, information on the company is gathered, the viability of the company is considered and various action plans are evaluated. An agreement will typically be based on a revised strategy and a debt reduction.

A lead bank is appointed as coordinator of the procedure and will organise inter-creditor issues. A detailed independent accountants' review is frequently commissioned inter alia to establish viability and options going forward. The Bank of England may assume the role of mediator. It is a principle that each lender is entitled to exercise its own commercial interest and should be sympathetic to the overall objectives of supporting the company.

Source: www.bba.org.uk.

Based on data from the Netherlands and Austria, the OECD analysis estimates a success rate of 50 to 80 percent in terms of out-of-court reorganisations (Exhibit 6.3) (OECD, 2006).

Exhibit 6.3: Out-of-court reorganisations in the Netherlands

Reorganisations are well-suited for less complicated cases, where only a limited number of creditors are involved. In the Netherlands, companies are monitored closely by their financial institution. Hence, the bank will often have the opportunity to identify financial distress at an early stage and will take the initiative to conduct an out-of-court reorganisation. Several large banks have dedicated Intensive Care Departments that offer guidance and counselling for distressed companies. A review of 111 cases shows a success rate of more than 50 percent in reorganising financially distressed companies. The analysis shows that time is of the essence and this requires the presence of dedicated monitoring facilities. Furthermore, the study shows that management skills are vital to company survival.

Pending negotiations additional capital may be required for continuing operations, but this may be difficult to find. Hence, the Financial Aid Programme for Entrepreneur Debtors has been launched. Here, potentially viable companies may borrow additional funds during the negotiation process.

On average, the costs of out-of-court reorganisations constitute only 25 percent of the costs incurred during in-court reorganisations. The number of out-of-court reorganisations amounted to 26 000 in 2003.

Sources: Van Amsterdam, 2004; Adriaanse, 2005.

The country case studies show that an out-of-court reorganisation may be a viable road for financially distressed companies. Indeed, a number of countries have made a great effort in facilitating an effective out-of-court reorganisation system. In some countries, the government has assumed an active role in the process, while in other countries financial institutions have been the primary drivers.

The country case studies do not provide a out-of-the-box solution that Denmark should copy, but they all hold a set of common characteristics. Reorganisations are supported by the private market and are designed with a moratorium on a bankrupt company pending reorganisation deliberations. Denmark should pay attention to these examples when drafting an early warning system, as many of the companies identified will be subject to a reorganisation.

Reorganisations within the legal framework

The purpose of in-court reorganisations is to ensure that viable companies are given a second chance. The guidelines for an in-court reorganisation are stipulated by law. All OECD countries, except for Hungary, covered in the analysis have developed procedures for in-court reorganisations (OECD, 2006).

Under Danish insolvency law, a debtor may file for a suspension of payments with the bankruptcy court. Provided that the bankruptcy court receives a written request for extension before this period expires, it may extend in certain circumstances the suspension of payments for a further three months. However, the total period of suspension of payments cannot exceed 12 months. During a suspension of payments, the debtor obtains “immunity” from creditors.

Upon receipt of notification of the suspension of payments, the bankruptcy court will immediately appoint a supervisor. The supervisor’s role is to assist the debtor in its attempts to establish a voluntary debt arrangement. In the event that a voluntary debt arrangement is not deemed possible, the company may file for a compulsory composition arrangement. In 2004 and 2005, 109 and 83 compulsory compositions agreements were carried out in Denmark.

If the bankruptcy court approves a petition for a compulsory composition agreement, the composition proposal is sent to the creditors for approval. The minimum dividend payable to unsecured creditors is 10 percent of their claims. This requires the approval of at least 60 percent in terms of the number of the creditors and 75 percent of the creditors in terms of the value of the total amount of claims. The rules are designed to prevent a minority of creditors from stalling a reorganisation that may be beneficial to the debtor and the majority of creditors. In cases where multiple creditors are involved and where a minority of creditors are expected to forestall a composition agreement, the case will most likely be settled out-of-court.

The entrepreneur is obliged to present a reorganisation plan that may include proposals for the streamlining of operations, cost-cutting, work force reductions, or the sell-off of parts of the company.

All costs connected with the suspension of payments must be borne by the debtor. The court fee is currently 1 500 DKK, while other incurred expenses will depend on the magnitude of the case. In-court reorganisations are often expensive and may not therefore be relevant to a company with limited assets.

The International Association of Restructuring, Insolvency and Bankruptcy Professionals (INSOL) has drafted a number of good practice principles for company reorganisations. The fundamental characteristics of the Danish system – suspension of payments, the appointment of a supervisor, creditor access to company accounts – are in line with Insol recommendations.

The procedure where the management files for suspension of payment, the suspension is approved by the court, and the management drafts a rescue plan in co-operation with the appointed trustee is also part of bankruptcy systems in other countries.

Still, there have only been a limited number of in-court agreements in Denmark (Table 6.3). Country variations reflect local traditions and the attractiveness of the solution over various alternatives. Job security is very important in France; hence, the country has a high number of reorganisations.

Table 6.3: In-court reconstructions in internationally comparable countries

Country	In-court reconstructions in 2004	Reconstructions per million inhabitants
France	14 950	245,6
Finland	317	60,6
UK	3 063	50,5
Switzerland	232	30,9
Canada	824	24,9
Denmark*	109	20,0
Spain	480	11,9
Sweden	47	5,2
Norway	12	2,6
Ireland**	6	1,5

Note: It would more prudent to compare the number of reconstructions with the total stock of companies. However, there are great country variations in terms of how companies are registered. Hence, the number of reconstructions is compared to the total population in each country. Furthermore, it has not been possible to deduct the number of reconstructions and liquidations outside the legal framework. The numbers should be treated with some caution and are best suited for deducing general trends across countries.

* A voluntary agreement may be commenced by a file of suspension of payment. In that case, the bankruptcy court will play an active part in the proceedings. However, the appointed trustee still maintains sole responsibility for carrying out the reconstruction, and the creditors may opt not to accept the proposed reconstruction plan. In Denmark the number of voluntary agreements following a petition for suspension of payment cannot be deduced from available data.

** Data for Ireland is not comparable to other countries as most reconstructions take place outside the legal framework.

Source: OECD (2006).

The Bankruptcy Council is currently focusing on the area of reorganisation. The Ministry of Justice has asked the Council to evaluate best practices and to emphasise debtor protection in the Council's deliberations.

International best practice identifies four areas that may be included in the current debate: a fast-track procedure for small companies, creditor voting rules, creditor access to information and specialised courts.

Six countries have implemented fast-track procedures for the reorganisation of small companies, as these are often less complicated (Table 6.4).

Table 6.4: Countries with “fast-track” procedures for reconstructions of small and medium-sized enterprises

Greece	Ireland	Italy
Japan	Korea	Spain

Source: OECD (2006).

There are certain requirements in order to be granted a fast-track procedure, such as requirements related to company revenues or the availability of updated company accounts that provide a precise image of the company’s financial situation. In general, fast-track procedures are less complicated and are limited in time. Fast-track procedures are designed to ensure a speedy and effective handling of uncomplicated cases.

The EU Commission highlights the Austrian system of out-of-court reorganisations as being particularly effective in terms of procedures, voting rules and the time associated with company reorganisations.

Exhibit 6.2: Out-of-court reorganisations in Austria

In the publication “A Guide on Good Practices and Principles on Restructuring, Bankruptcy and a Fresh Start”, the EU highlights the Austrian reorganisation system as a good practice.

Austrian insolvency law obliges receivers to attempt to restructure the business rather than liquidate it. Almost 40 % of all bankruptcy proceedings ultimately lead to restructuring.

According to the law on restructuring, the decision on restructuring is made by the creditors and the court's involvement in the process is purely functional.

The debtor's proposal is made public, and the receiver and the creditors can accept it by a simple majority of the voting creditors and 75 % of the voting claims on the debtor.

The only formal requirements involved in the procedure are the summoning the parties and voting in court.

The procedure is fast (three to six months) and predictable, owing to the small number of parties involved.

In Austria, two creditors associations, or Gläubigerschutzverbände, were created to protect among other things the interest of SMEs. These organisations provide a wide range of services to their members, such as lodging claims in insolvency cases or representing them in court. They gather information and negotiate on the creditors' behalf, such that the creditors can vote. This process is also beneficial to debtors, since there are a smaller number of parties with which to negotiate..

Source: <http://ec.europa.eu/enterprise/entrepreneurship>.

The creditor's access to information is a key element in Insol's best practice principles for insolvency and restructuring. In the Danish Bankruptcy Council's report on debt rescheduling, the chairman of the now discontinued Bankruptcy Legislation Committee proposes a series of reforms. Among those were the improved visibility in proceedings, a speedier closing of estates, a modification of voting rules to allow for a less complicated acceptance of compulsory agreements, and the possibility for lowering creditor claims against the estate.

In 18 of the 25 countries covered by the OECD study, reorganisations are handled by specialised courts. Reorganisations are often quite complicated and it requires significant professional skills to assess if a company should be reorganised. The specialised courts will contribute to knowledge building and sharing among judges that handle a significant number of insolvency cases.

Denmark is divided into 82 judicial districts, each district has a probate court. On 1 January 2007, the new police and court reform takes effect, and the number of judicial districts is limited to 28. The reform will allow for some degree of specialisation in the court system. However, it should be noted that in 2005 only 85 compulsory agreements were carried out.

6.4 Bankruptcy and debt rescheduling

If an insolvent company cannot be made profitable, it is vital that the business is discontinued as soon as possible. Unprofitable companies with massive debts will impact the business owner, other entrepreneurs and society as a whole. Other entrepreneurs may be negatively affected because they are forced to write-down outstanding debt from unprofitable companies, or because it will be more difficult and expensive to raise new capital.

The commencement of bankruptcy proceedings requires the filing of a bankruptcy petition with the bankruptcy court, either by the debtor itself or by a creditor. The main condition for a declaration of bankruptcy is that the debtor is insolvent. Once the disposal of all assets has been completed the assets are distributed among the creditors.

If the bankruptcy petition is granted, the bankruptcy court appoints a trustee to ensure the optimal financial result for the creditors. Once the assets have been allocated, the trustee will draft an account of distribution of the insolvent estate, which is presented to the bankruptcy court after which the court will make a formal decision (www.domstol.dk).

Only a limited number of discontinued businesses are declared bankrupt. Every year 2 500 companies are declared bankrupt, while 30 000 enterprises close or become inactive (www.dst.dk). In general, considering the relative size of the countries, the number of bankruptcies is quite significant across the Nordic countries (Table 6.5).

Table 6.5: Bankruptcies and reconstructions across comparable countries

Country	Bankruptcies (2004)	Bankruptcies per million inhabitants	In-court reconstructions (2004)	Reconstructions as share of bankruptcies (in percentage)
Switzerland	9 798	1 403	232	1,0
Sweden	7 649	950	47	0,6
Norway	4 367	928	12	0,3
France	32 192	530	14 950	31,7
Denmark⁹	2 620	481	109	4,2
Finland	2 428	467	317	11,5
Netherlands	4 063	303	-	-
UK	12 813	212	3 063	19,3
Canada	1 958	60	824	29,6
Ireland	347	87	6	1,7
Spain	561	14	480	46,1

Note: It would more prudent to compare the number of reconstructions with the total stock of companies. However, there are great country variations in terms of how companies are registered. Hence, the number of reconstructions is compared to the total population in each country. Furthermore, it has not been possible to deduct the number of reconstructions and liquidations outside the legal framework. The numbers should be treated with some caution and are best suited for deducing general trends across countries.

* The Danish numbers only include compulsory agreements.

** Data for Ireland is not comparable to other countries as most reconstructions take place outside the legal framework.

Source: OECD (2006).

Country differences can be accredited to various factors, such as the number of out-of-court reconstructions and liquidations, differences in industry structures and different market trends. However, those factors may only explain a portion of the country variations. Different approaches to regulation may also contribute to country variations.

In continuation of the discussion of the number of reorganisations in Denmark (Section 6.3), it would appear that countries with a high number of bankruptcies only carry out a limited number of reorganisations and vice versa. When comparing Denmark with the Netherlands and the United Kingdom, the data show a significantly lower number of bankruptcies and far more reorganisations in those two countries as compared to Denmark.

The speedy and cost-effective closing of bankrupt estates is important. Effective procedures will secure a larger share of the estate for the creditors, and a speedy bankruptcy process will allow the insolvent

party to restart at a much faster pace. The time to close an insolvent estate should be balanced against the proper settlement of the estate such that creditors are paid what they are entitled.

The World Bank has constructed comparable indicators for the time and costs associated with closing an insolvent estate (www.doingbusiness.dk). The indicators show that the time and costs associated with closing a business are much lower across a range of comparable countries. In Denmark, the average time spent on closing a business is 3.3 years, while the average for the OECD is 1.5 years. However, the World Bank indicators should be treated with some caution. Data is built around a hypothetical case study, developed and refined by the World Bank and international experts. There was only one Danish participant in the World Bank survey. The participant is a practising lawyer; participants from the Danish court system have not been included in the analysis.

An in-depth study carried out by the Ministry of Justice of 546 bankruptcy cases shows an average time of closing an insolvent estate of 1.5 years for individuals and 2 years for businesses. Ten percent of the cases were still pending. In the study, the time to close an insolvent estate with no assets was estimated at 1.5 years.

The trustee's fee depends on the time spent by trustees in closing the insolvent estate. The fee has to be approved by the bankruptcy court. In the United Kingdom, time limits have been introduced to secure a speedy and effective closing of insolvent estates. In other countries, the trustee's fee is linked to the time spent on closing the estate (OECD, 2006).

The Danish Government's Globalisation Strategy proposes that initiatives be carried out to decrease the time to close a business, and the Bankruptcy Council has been asked to present amendments to existing legislation. It is expected that a proposal will be submitted in early 2007. While this chapter does not go into an in-depth discussion of this area, future entrepreneurship indices will monitor Denmark's progress in this area vis-à-vis the top-performing countries.

Debt rescheduling

From an entrepreneur's perspective, it is vital that non-fraudulent entrepreneurs are given the opportunity for a debt discharge following a bankruptcy. As long as entrepreneurs are liable to old debt it will be impossible to raise capital for a new business adventure. Therefore, several countries have changed the norms and procedure related to debt rescheduling to improve the possibility of non-fraudulent entrepreneurs to quickly restart.

In sole proprietorships and personal liability companies, the entrepreneur is liable to the share of the debt that is not covered by the proceeds following a bankruptcy. In private companies and limited liability companies, the entrepreneurs are only liable for the deposited capital; however, the entrepreneurs will often be asked to give collateral for loans. Regardless of company type, the entrepreneur may be left with debt that cannot be repaid following a bankruptcy.

In most countries, the debtor may be granted a rescheduling of debt, which implies that the debt is either deferred or reduced. The Danish Government has recently changed the legislation pertaining to debt discharge, leading to a number of improvements for bankrupt entrepreneurs.

In 2005, Denmark made a series of adjustments to its bankruptcy legislation. Previously, the insolvent party could only be awarded a discharge if he or she could uphold a stable income following the liquidation, a demand that most "restarters" are unable to fulfil. Today, the stable income requirement has been removed from the bankruptcy legislation. On the other hand, the new legislation allows for increasing the debt instalments if the bankrupt entrepreneur is capable of repaying a larger sum than predicted. The most substantial new piece of legislation is that the repayment period has been lowered from five to three years.

The regulation only pertains to non-fraudulent bankruptcies in which the management has fulfilled its obligations in accounting, tax settlement and in reporting to public authorities. Furthermore, a rescheduling of debt can only be granted once every 10 years.

Due to the recent change in the Danish bankruptcy legislation, this section will assess if Denmark has gained ground on the top performing countries and will not attempt to identify possible areas of improvement. OECD analyses shows that three areas are critical to debt discharge: timing, the possibilities for a rescheduling of debt and the instalment period.

In terms of timing, Denmark is at a level with the top performing countries, as debt discharge is granted immediately following court proceedings.

The Danish framework for rescheduling of debt is more difficult to assess. In the United Kingdom and the United States, a rescheduling of debt is automatically granted. In Denmark, the rescheduling debt is granted only to non-fraudulent entrepreneurs. A full assessment of this area will be made in a few years time.

In terms of the instalment period, Denmark matches the top performing European countries. In the United Kingdom, debt is annulled one year after the bankruptcy is filed; however, creditors may assert claims for a period of three years. In most other European countries, the debtor must accept to pay a share of future incomes for three or five years to be granted a debt rescheduling (OECD, 2006). On the other hand, in the United States, Korea and Canada the instalment period is shorter. In the United States, which is often highlighted as the top performing country in terms of the possibility for rescheduling of debt, a rescheduling is granted automatically and there are no instalments (Exhibit 6.5). International examples show that lenient rescheduling rules may lead to an increase in the number of bankruptcies, which in turn has negatively impacted the supply of capital and interest rates (www.kauffmann.org, www.telegraph.co.uk, Berkowitz and White, 2004).

Exhibit 6.5: Liquidation and debt rescheduling in the United States

In the United States, liquidation automatically leads to a debt discharge. The debtor will receive a discharge 2 to 3 months following the bankruptcy petition. In the United States, the creditor cannot assert claims on future incomes.

A trustee is appointed to dispose of the company's assets. With a few exceptions, the debtor's personal assets are also disposed.

In 2005, the United States revised its bankruptcy legislation and limited the possibilities for a rescheduling of debt. According to the new legislation, high-income individuals may be forced to file for bankruptcy under less favourable conditions, where creditors can assert claims for up to five years. The less favourable rules are primarily targeted towards individuals with consumer debt rather than business-related debt. Since many Americans use their credit cards or overdraft facility to finance a business start-up the new legislation may hamper restart possibilities.

Source: Ralph (2004).

Appendix 1 **Growth in US and European Enterprises**

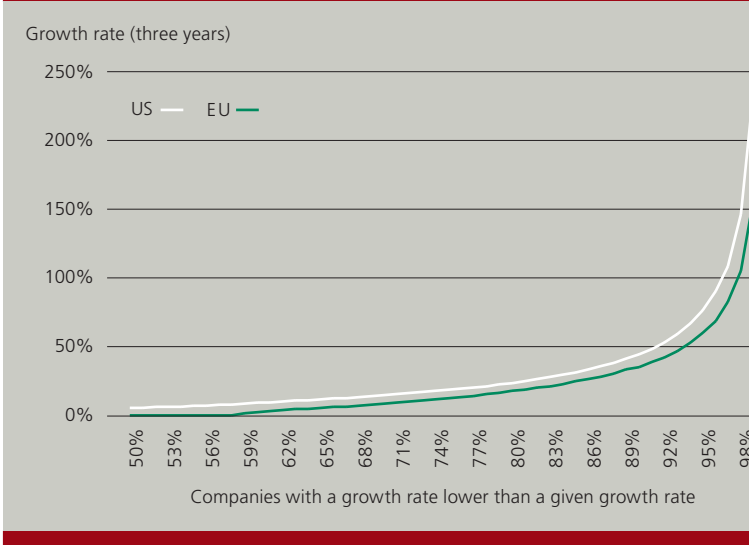
Growth indicators are drawn from a company database, entitled the ORBIS database which is marketed by the Bureau van Dijk and contains approximately three million company accounts.

At present, the database is considered the most reliable source for extracting new firm growth indicators. However, the data is not without flaws. The database is incomplete as far as containing information on all small companies, some companies may be registered on more than one occasion, and company updates are fairly irregular. However, the weaknesses are identical for all countries, which produce relatively comparable indicators.

In the Entrepreneurship Index, growth entrepreneurs encompass companies started between 1997 and 2004 that are still in business in 2004 and that have seen 60 percent or more revenue or employee growth from 2002 to 2004. Annual growth must exceed 20 percent. As small company registration is flawed, companies must have between 15 and 200 employees in 2002.

A distribution curve of growth in US and European companies shows that for all positive growth rates the United States has the highest share of growth entrepreneurs. For example, seven percent of new US enterprises have growth rates of more than 60 percent compared to five percent in Europe (Figure A.1.1). Any conclusion as to the gap between Europe and the United States is not linked to definitions of high growth companies.

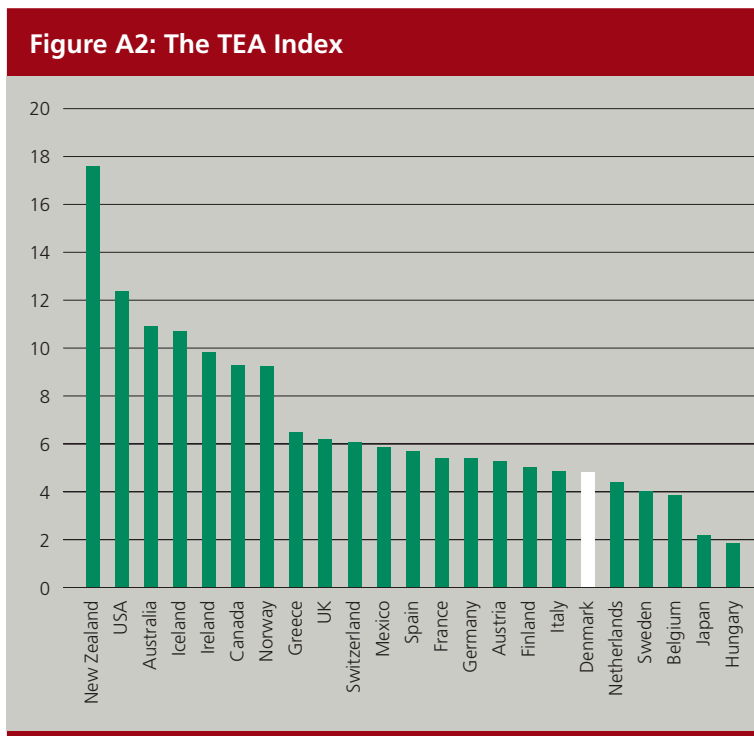
Figure A.1.1: Distribution of growth rates in US and European companies (employment, 2004)



Source: Author's calculations.

Appendiks 2 The TEA Index

The Total Entrepreneurship Activity (TEA) Index measures the share of the adult population engaged in launching or actually running a business (less than 3½ years old). The Index ranks Denmark far behind the United States, Ireland and Canada (GEM, 2005) (Figure A2).



Source: GEM (2005).

The inclusion of the TEA Index in this year's Entrepreneurship Index does not significantly influence the overall outcome of the analysis. When including the TEA Index, there are no changes among the Top-4, and Denmark still trails behind the top performers by some margin. However, the TEA Index shows a lower share of the Danish population being actively involved in the entrepreneurial process compared to the United States and the other Top-4 countries.

The conclusion may be partially in line with the new data for start-up rates. The TEA Index holds a certain subjective assessment of when an individual is involved in the start-up of an enterprise, and may therefore register individuals that never actually launch an enterprise.

Among others, Reynolds (2006) shows that of the respondents in the United States claiming to be involved in the start-up of an enterprise, only 32 percent are actually running a business after six years. Of the remaining 68 percent, 33 percent are involved in starting a business, while 35 percent have discontinued their plans.

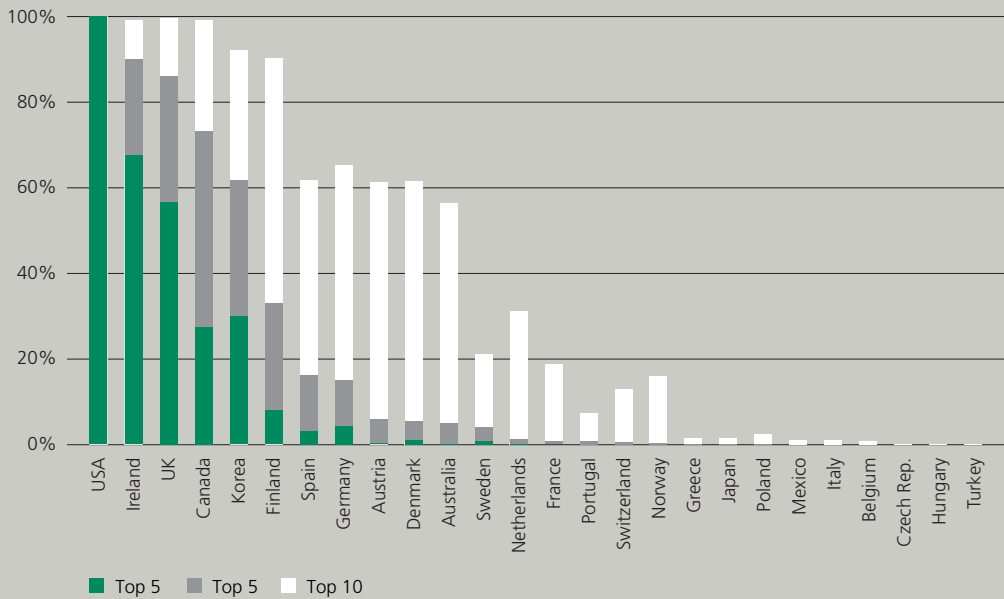
Furthermore, the TEA Index measures the number of people involved in the start-up of an enterprise, which shows some variation across countries and not the actual number of new enterprises. In other words, if multiple individuals are involved in the launch of a single enterprise, the country will rank high on the TEA Index. In the United States, the number of people involved in the launch of an enterprise is higher than in most European countries. This weakness may explain some of the variation in U.S. and European TEA scores. This is confirmed by several GEM studies that convert TEA Index scores into start-up rates. The conversion shows that the United States has a start-up rate of 11.5 percent, while the average for the EU is 10 percent. This corresponds to a 15 percent gap. The TEA Index shows a 65 percent gap between the United States and Europe (11 percent and 6.7 percent, respectively).

Appendiks 3 Sensitivity Analysis

The conclusions presented in the 2006 Index are to a large extent built on composite indices. Therefore, results are sensitive to the choice of weights when weighting the underlying indicators. In these calculations, all indicators are given identical weights in each of the policy areas, and the policy areas have been given identical weights in the composite index.

In the sensitivity analysis, the policy areas and the underlying indicators are given random weights. This illustrates the probability for a country's ranking given the assigned weights. A robustness analysis is carried out in order to calculate the frequency with which countries are ranked in the top-3, top-5 and top-10, respectively. The calculations point to a robust ranking of countries (Figure A.3.1).

Figure A.3.1: Robustness analysis – Framework conditions for entrepreneurship



Note: The robustness analysis shows the frequency with which countries are ranked in the top-3, top-5 and top-10, respectively, using different weights. A total of 100 000 weights have been applied, which resulted in 100 000 different rankings.

Source: Author's calculations.

The United States, Ireland, the UK, Canada and Korea claim the majority of top-3 rankings. A second group of countries, including Finland, Spain and Germany make the top-3 in a limited number of outcomes. A third group of countries, including Austria, Denmark and Australia occasionally post top-10 rankings and a limited number of top-5 rankings.

Regardless of weights, applied Denmark never makes a top-3 ranking. Denmark claims a limited number of top-5 rankings. In more than 60 percent of the outcomes, Denmark posts top-10 rankings. This is an improvement over last year, where Denmark made a limited number of top-10 and top-5 rankings. Still, Denmark trails considerably behind the top performing countries.

Appendiks 4 **Government Entrepreneurship Initiatives**

The appendix provides a summary of all initiatives implemented to improve entrepreneur framework conditions. The Ministry of Business and Economic Affairs has launched five action plans to support the business environment and entrepreneurship framework conditions: “The Competitive Power Package” (January 2002), Action Plan for Entrepreneurs” (January 2003), “A Society with Room for the Free Initiative” (October 2003), “Action Plan on Venture Capital” (January 2005), and “Agreement on coining of the Globalisation Fund” (November 2006). In addition, other ministries have implemented initiatives that impact entrepreneurs and emerging enterprises.

The list is confined to initiatives that directly impact entrepreneurial framework conditions. They have been categorised in line with the 29 policy areas (Figure A.4.1).

Figur A.4.1: Overview of policy indicators

Composite Measure for Framework Conditions				
Market Access	Supply of Capital	Supply of Skills	Incentives (Motivation)	Culture
Access Barriers	Loan Capital	Traditional Business Education	Income Tax	Cultural and Social Norms
Access to International Markets	Wealth and Bequest Tax	Entrepreneurship Education	Corporate Tax	Targeted Initiatives
New knowledge Transfer	Venture Capital	Restart Possibilities	Administrative Burdens – Start-up	Introducing Entrepreneurship In Primary Ed.
Private Demand	Stock Markets	Ent. Infrastructure (Public)	Administrative Burdens – Operation	Communication on “heroes”/ “awards”
Public Demand	Capital Tax	Ent. Infrastructure (Private)	Labour Market Regulation	
Testing Facilities	Business Angels		Bankruptcy Legislation	
			Financial Incentives	
			Social and Health Insurance	

I. Demand

Entry Barriers

Stronger competition

Competition in both the private sector and the public sector should be strengthened. This is to be achieved by a strengthening of the competition laws so that the Danish control and investigation tools match the top performing European countries. In addition, the competition authorities will be equipped with new and effective tools for investigating cartels and unfair competition involving private and public suppliers.

The possibilities for public-private partnerships in municipalities and regions should be improved though co-financing of the additional costs associated with testing new approaches to public-private partnerships.

Access to International Markets

Export promoting measures for SMEs

The scheme has established four programs for SMEs with revenues of less than 50 million DKK and with fewer than 50 employees that have a potential to internationalise;

The export preparation programme: 18 experienced consultants offer one-on-one sparring on exporting and other forms of internationalisation.

The export start programme: provides funding for counselling and market analysis in connection with exporting activities.

Born Creative is a programme dedicated to creative enterprises.

Born Global is a programme dedicated to high-tech companies and entrepreneurs.

The overall purpose of the four programmes is to promote internationalisation among SMEs, innovative growth companies and entrepreneurs

Access to International Markets

Next generation incubators	Seven new incubators were approved in October 2003. The incubators will support the development of knowledge-based high-tech companies.
Improved prioritisation of incubator funding	The grants allocated to innovation incubators should be prioritised towards incubators that have the foundations for the achieving the best results.
Biotech technology transfer unit	This initiative will strengthen the business application of research-based knowledge in the area of bio health. The initiative was launched in 2003 by setting up a secretariat at the University of Copenhagen and by setting up a technology transfer consortium.
From research to business – a shorter path	In May, the Parliament passed the government's proposal on technology transfer at public research institutions, thereby promoting the flow of knowledge and technology from public research institutions to the business community.
Commercialisation of new inventions	To promote the development of novel concepts for technology transfer, the Council on Technology and Innovation has co-financed five pilot projects (2005-2008) in the areas of health, medico and agriculture.
Easier access to researcher patents	A higher level of transparency for investors and companies in knowledge that is manufactured and patented. This involves the further development of the www.techtrans.dk portal. The portal is supported by the National Network for Technology Transfer which covers all patent-active research institutions. The Council for Technology and Innovation will co-finance the project.
From idea to patent – an easier road	Prior to the filing of a patent application, an introductory package will provide entrepreneurs with advice on the patent system. The emerging growth houses will provide information on the introductory package.

Private Demand

	The government has not proposed entrepreneurship-related initiatives in the area of private demand.
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Public Demand

The government has not proposed entrepreneurship-related initiatives in the area of public demand.

Testing Facilities

"Proof-of-concept"

The Danish Growth Fund will provide financing of idea generation, market testing and sparring with experienced business professionals.

II. Supply of Capital

Loan Capital	
Improved financing opportunities for service companies and more lenient generational change	An executive order concerning the role of the Danish Growth Fund took effect in July 2003. The executive order will improve access to growth guarantees in relation to generational change and transfer of ownership.
Adjusting the set-up account scheme	A revision of the set-up account scheme was implemented in February 2004. Deposits may now be used to cover operating costs including salaries, lease of non-residential premises, lawyer and accountant's fees incurred when launching a business, market research, and R&D costs, among others.
Get-started-loans	<p>Working closely with selected financial institutions, the Government has initiated a new type of loans, "get-started-loans". In addition to a range of core financial services, the entrepreneur will be offered counselling on enterprise start-up. An EU tender has been carried out to select the banks and advisers that will facilitate the get-started-loans. Three consortiums were selected for carrying out the project, which was commenced January 1 2005.</p> <p>Two additional financial institutions were added to the scheme in December 2005.</p>
Proof-of-concept	The Danish Growth Fund will provide financing of idea generation, market testing and sparring with experienced business professionals.

Wealth and Bequest Tax

The Tax Freeze	<p>The tax freeze imposes a ceiling on real property value tax so that an increase in property value does not carry additional property value taxation.</p> <p>Environmental considerations and EU regulation may force the government to raise taxes. In such an event, the proceeds will be used for lowering other taxes.</p>
Raising the succession limit when taking over an enterprise with multiple assets	<p>It is essential that the available funds are not affected by tax-related issues when a company is sold. This may be alleviated by allowing the buyer of the company to assume the seller's fiscal position (succession). The succession limit has been raised from 25 to 50 percent.</p>

Venture Capital

Entrepreneurship Fund	<p>The Danish Entrepreneurship Fund was set-up in co-operation with several private and institutional partners. The fund has a capital base of 500 million DKK and was opened for investments December 1 2004.</p>
A new venture fund	<p>The Government aims to establish a venture fund that will improve skills and investments in the early stages. The fund's capital will be raised through a working relationship with pension funds and private investors through a partial privatisation of the Danish Growth Fund. The amount of capital raised will be approximately three to four billion DKK. The proposal was passed in May 2006.</p>
A new entrepreneurship fund	<p>In co-operation with regional venture funds, the Danish Growth Fund will launch a new entrepreneurship fund. The fund will pool existing funds and will also seek to raise additional capital.</p>

Stock Markets

Joint statement on investments in unlisted shares and simpler tax rules for pension funds	<p>An agreement between the Government and the pension industry has been reached in making a joint statement on investments in unlisted shares and simpler tax rules for pension funds.</p> <p>In the third quarter of 2005, a proposal was passed that establishes a net statement principle when taxing pension fund investments through tax transparent units (limited partnerships). This will ease the administrative burdens for investments in unlisted shares and will lower the number the tax authorities' administrative burdens.</p>
Establishing second tier stock markets	<p>On 13 April 2005, the Danish Government introduced L155 that provides the legal framework for the establishment of a second tier stock market for companies that do not meet the Stock Exchange's requirements for a listed company. Based on L155, the Copenhagen Stock Exchange launched the First North market place in late 2005.</p>
Simplification of rules for business development associations	<p>The government has proposed a simplification of the regulatory framework pertaining to business development associations. The proposal will make it more attractive to invest in unlisted shares.</p>
Instalment and capital pension investments in unlisted shares	<p>On 30 March 2005, the Government introduced proposal L134. The proposal will allow among other things wealthy individuals to invest a share of their instalment and capital pension funds in unlisted shares. The proposal was passed on 31 May 2005.</p>

Capital Tax

Tax deductions for investments in unlisted shares	Proposal L134 introduces as well a five percent deduction for institutional investors of the purchased price for investments made in the second tier stock market.
Joint statement on investments in unlisted shares and simpler tax rules for pension funds	<p>An agreement between the Government and the pension industry has been reached in making a joint statement on investments in unlisted shares and simpler tax rules for pension funds.</p> <p>In the third quarter of 2005, a proposal was passed that establishes a net statement principle when taxing pension fund investments though tax transparent units (limited partnerships). This will ease the administrative burdens for investments in unlisted shares and will lower the number the tax authorities' administrative burdens.</p>

Business Angels

Business Angel capital	An initiative has been taken to provide more information on the tax benefits for business angel investments in partnering with companies. This will be facilitated through an elaboration of the Tax Authority's Assessment Guide, which now contains information on the tax benefits.
Matching fund for new enterprise investments	In co-operation with experienced investors, the Danish Growth Fund will provide equity funding for new and growth-oriented enterprises.

III. Supply of Skills

Traditional Business Education	
Courses in entrepreneurship in vocational education and training (VET) and in higher education	Entrepreneurship courses should be made available to all students in VET and in higher education.

Entrepreneurship Education	
Entrepreneurship in the educational system	<p>The proposal includes the following initiatives:</p> <p>An educational Entrepreneurship Portal was established in 2004 (www.ivaerksaetter.emu.dk).</p> <p>The optional course "innovation" has been made available to all high school students (August 2005).</p>
The Entrepreneurship Academy	The Entrepreneurship Academy, IDEA, was officially opened 23 May 2005. Among other things, IDEA offers merit awarding courses in entrepreneurship. A consortium headed by the University of Southern Denmark was awarded the task of establishing the Academy.
A strategy for an independence and entrepreneurship culture	In early 2004, the Government presented an educational strategy for innovation, entrepreneurship and independence. The strategy pools a number of initiatives to strengthen the entrepreneurship culture in the educational world.
Open educational institutions	A stronger interaction between universities and the business community will shed light on the possibilities of entrepreneurship and self-employment. Among other things, the initiative will focus on the use of role models as well as building partnerships with the business world.
Entrepreneurs as innovative teachers	This initiative will help facilitate the use of business and entrepreneurial skills in higher education. Among other things, the initiative will focus on the inclusion of external professors with a background in entrepreneurship.

Entrepreneurship Education

Student growth houses	Drawing on inspiration from Sweden and the United States, a pilot project on student growth houses has been initiated. The core purpose of this initiative is to support the idea generation in the early stages of its development.
The Øresund Entrepreneurship Academy	Together with HUR and Skåne Region, the Danish and Swedish governments will invite regional universities to a collaborative effort in entrepreneurship. The Øresund Entrepreneurship Academy will be the largest of its kind in Northern Europe.
Entrepreneurship Summer School	The establishment of an entrepreneurship summer school for young entrepreneurial talents.
A stronger regional anchoring of the Entrepreneurship Academy	Each region should establish networks encompassing business schools, profession colleges and universities to strengthen entrepreneurship education for pupils and students across all regions.
Courses in entrepreneurship in vocational education and training (VET) and in higher education	Entrepreneurship courses should be made available to all students in VET and in higher education.
Elite course in entrepreneurship	The Government proposes the set-up of an elite entrepreneurship course targeting business professionals, growth entrepreneurs, investors and researchers.

Restart Opportunities

Improved restart opportunities	It is the government's goal to improve the restart possibilities following a bankruptcy. In August 2004, the Bankruptcy Council put forward a proposal to change the rules on debt rescheduling. In response to this, the Government put forward a proposal in November 2004 to change the bankruptcy legislation and the bankruptcy tax legislation. The adjustments will make it easier for a bankrupt to be granted a debt discharge. The legislation took effect on 1 October 2005.
Early Warning System	The government has initiated a pilot project for the establishment of an early warning system that will assist temporarily distressed companies.

Public Entrepreneurship Infrastructure

Business service reform	On 1 January 2004, 15 new business service centres were opened. The business centres provide counselling for entrepreneurs and small companies.
www.startguiden.dk	In January 2004, a new version of www.startguiden.dk was launched, providing a one-stop-shop for local personal counselling and an electronic one-stop-shop for information and various digital tools. The website won the 2004 edition of "best on the net".
New growth houses offering qualified counselling for growth entrepreneurs	The Government aims to establish regional growth houses where entrepreneurs and small companies with growth ambitions have access to various types of counselling and assistance in business start-up and financing.
A stronger regional anchoring of the Entrepreneurship Academy (IDEA)	Each region should establish networks encompassing business schools, profession colleges and universities to strengthen entrepreneurship education for pupils and students across all regions.
Improved prioritisation of incubator grants	The grants allocated to innovation incubators should be prioritised towards incubators that have the basis for achieving the best results. Heavier demands should be based on the competences of the innovation incubators.

Private Entrepreneurship Infrastructure

Private counselling

To strengthen the counselling of entrepreneurs and smaller companies, a virtual entrepreneurship network was established in September 2004. In addition, a nation-wide network of local entrepreneurship "clubs" or "Business Sparring" will offer individual sparring for entrepreneurs.

IV. Incentives

Income Taxes

Tax freeze

The liberal-conservative government imposed a tax freeze upon its election in the autumn of 2001. The tax freeze commits the government to abstain from raising any tax or duty either as a percentage rate or as a nominal amount.

Lower personal income taxes

The personal income tax was lowered by raising the threshold for paying the medium bracket tax by 48 000 DKK and by implementing a job allowance of 2.5 percent.

Abolishing the SP

The pension contribution "SP" was suspended in 2004 and 2005. The suspension has been extended to cover the years 2006 and 2007

Generation change

In some cases, a buyer may benefit from assuming the seller's fiscal position. Previously, this option was limited to the closest relatives. However, it is now possible for employees to assume the fiscal position.

Equal opportunities for pension tax deductions

In May 2004, the Parliament approved the government's proposal for simpler pension rules. Entrepreneurs are given the opportunity to deposit a certain share of their company's profit in a pension scheme. The deposit will be tax deductible.

Giving the entrepreneur "the benefit of the doubt"

To ensure that citizens are properly recognised as self-employed business owners, tax authorities are required to use any well-founded assessment made by citizens in determining if the individual is genuinely a self-employed business owner. This should make it easier for self-employed business owners to claim any tax deduction to which they are entitled.

Corporate Taxes

Annulment of the time limit for the carry-over of deficits and losses	The time limit for the carry-over of deficits and losses incurred from the year 2002 and onwards has been abolished. This will be beneficial to newly established companies, which often be run at a deficit in the first few years of operation.
Lower corporate taxes	The corporate tax was lowered from 30 to 28 percent in 2005.

Administrative Burdens

Modification of the fixed time of credit for VAT	The VAT revenue limit has been raised from 10 to 15 million DKK. As a consequence, some 7 000 additional companies are exempt from paying VAT on a monthly basis as opposed to a quarterly basis. Furthermore, the VAT registration limit has been raised from 20 000 DKK to 50 000 DKK.
Repeal of requirement for Safety Board	This initiative applies to companies with five to 10 employees.
Adjustment of BST regulation	The further development of the compulsory health scheme has been abolished. This implies that some 80 000 trade and service companies will be exempt from several administrative burdens.
Improved effect measurement of new rules and regulations	The Government has strengthened the use of test and focus groups in relieving the business community of various administrative burdens.
Postponement of requirement for gender specific salary statistics	The requirement for gender-specific salary statistics has been abolished.
Simplification of ATP and SP pension schemes	The payment of SP and ATP has been simplified to lower the administrative burdens for smaller companies.

Administrative Burdens

Better utilisation of IT tools

This initiative will make it easier to launch a new enterprise by simplifying a number of administrative tasks such as start-up procedures and hiring employees. www.virk.dk provides a one-stop-shop for information and digital tools relevant to entrepreneurs.

Furthermore, there is a constant flow of new digital initiatives that will facilitate various administrative tasks as well as providing access to relevant information. The two websites – www.virk.dk and www.startguiden.dk have been merged into one.

AMWAB – Activity Measurement of a Company's Administrative Burdens

AMWAB is a method for mapping the time spent by Danish companies in complying with business-related regulation. The administrative costs will become much more transparent and the method will allow for identifying particularly burdensome procedures.

The Business Portal www.virk.dk

Digitalisation of forms, development and launch of various reporting solutions, as well as development of themes that pool digital services by industry sector, has been launched. In addition, there is a "Start Package" for new employers.

Labour Market Regulation

The Government has not introduced initiatives specifically targeting entrepreneurs in this area.

Bankruptcy Legislation

Improved restart opportunities	It is the government's goal to improve the restart possibilities following a bankruptcy. In August 2004, the Bankruptcy Council put forward a proposal to change the rules on debt rescheduling. In response, the Government put forward a proposal in November 2004 to change the bankruptcy legislation and the bankruptcy tax legislation. The adjustments will make it easier for a bankrupt to be granted a debt discharge. The legislation took effect on 1 October 2005.
Early warning systems	The government has initiated a pilot project for the establishment of an early warning system that will assist temporarily distressed companies.
More effective measures for company reorganisations	The Ministry of Justice has asked the Bankruptcy Council to assess entrepreneurship best practices and to emphasise entrepreneur considerations when revising regulation pertaining to company reorganisations.
Speedier bankruptcy case handling	Bankruptcy cases should be settled at a much faster pace. The Bankruptcy Council has been asked to present a statement on the issue and a new proposal will be presented in 2007.

Fiscal Incentives

Employee shares	In February 2004 the limit for allocation of employee shares was raised to 20 000 DKK, up from 8 000 DKK.
More transparent rules for employee stock options	In April 2004 The Parliament passed legislation on employee stock options that clarifies the employee's legal rights when owning stock options.

Social and Health Insurance

	The Government has not introduced initiatives specifically targeting entrepreneurs in this area.
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Cultural and Social Norms

Independence Fund	In collaboration with the Young Enterprise Fund the Independence Fund has been set up to promote and independence and entrepreneurial culture. In particular the Fund is aimed at promoting young peoples' skills in the area of independence, innovation and entrepreneurship at all educational levels.
Strategy for and independence and entrepreneurship culture	In early 2004 the government introduced a strategy for innovation, entrepreneurship and independence in the educational system. The strategy pools a number of initiatives aimed at promoting and strengthening the entrepreneurship culture.
Independence campaign – including the entrepreneurship award	To shed light on the role of entrepreneurs and self-employed a campaign on independence and entrepreneurship culture has been initiated.
Strengthening the Independence Fund	The Independence Fund will produce teaching material and entrepreneurship games for young people.

Efforts Targeting Specific Groups

	The Government has not introduced initiatives specifically targeting entrepreneurs in this area.
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Introducing Entrepreneurship in Primary Education

Entrepreneurship education	<p>The efforts to promote entrepreneurship education include:</p> <ul style="list-style-type: none"> • The entrepreneurship portal, which was launched in the Spring of 2004 (www.ivaerksaetter.emu.dk) • Creative technology projects: supplemental training for primary school teachers and 6th grade projects in natural science and technical courses. Completed in June 2005
Stronger counselling in entrepreneurship and business operations	<p>A 2004 reform calls for a stronger focus on entrepreneurship related issues when counselling pupils in primary education.</p>
Strengthening the Independence Fund	<p>The Independence Fund will produce various teaching material and entrepreneurship games for young people.</p>

Communication on "Heroes"/"Awards"

Independence campaign including the entrepreneurship award	<p>In recognition of the valuable contributions made by entrepreneurs a campaign focusing on independence and entrepreneurship culture has been initiated.</p>
"The Jump"	<p>TV2 ran a documentary on entrepreneurs sponsored by the National Agency for Enterprise and Construction. The winner was selected by a group of mentors and was awarded 1 million DKK</p>
The Danish Entrepreneurship Barometer	<p>The Ministry of Science, Technology and Innovation measures the level of entrepreneurship culture and entrepreneurship education across educational institutions through the Entrepreneurship Barometer.</p>
Entrepreneurship Education Award	<p>As part of the Government's focus on entrepreneurship the Entrepreneurship Education Award (75 000 DKK) is awarded to a specific course, teaching material or innovative teaching methods.</p>

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GEM acknowledgement

Data for our study were partly supplied by the University of Southern Denmark and provided by the Global Entrepreneurship Monitor (GEM), which is a consortium that in 2004 comprised the following countries Argentina, Australia, Belgium, Brazil, Canada, Chile, China, Croatia, Denmark, Ecuador, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, India, Italy, Japan, Korea, Mexico, Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Russia, Singapore, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Uganda, United Kingdom (which includes separate reports for Scotland and Wales), United States, Uruguay and Venezuela. Names of the members of national teams, the global coordination team, and the financial sponsors are published in the Global Entrepreneurship Monitor 2004 Report, which can be downloaded at www.gemconsortium.org.



Entrepreneurship Index 2006 presents a comprehensive mapping and evaluation of entrepreneurship in Denmark.

The Index is built on data for a range of OECD countries and identifies Danish strengths and weaknesses as an entrepreneurial nation.

Furthermore, the Index allows for the continued monitoring of entrepreneurship framework conditions and entrepreneurship performance to determine if Denmark is meeting the government's goal that by 2010 Denmark should be part of the European entrepreneurial elite in terms of start-up activity, and by 2015 that Denmark should have the highest share of growth entrepreneurs.