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FORA

International Consortium for Dynamic  
Benchmarking of Entrepreneurship

## Quality Assessment of Entrepreneurship Indicators

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14

## FORAs mission

### **FORA ensures a fact-based platform conducive for effective business policy development.**

FORA enables decision makers to make fact-based decisions that take into account the current and future challenges faced by private enterprises by linking the current state of knowledge to policy making.

FORA's analyses are cutting edge and based on sound research, empirical evidence, public-private dialogue and partnerships with leading knowledge institutions and international organisations. Through dialogue with these key actors, FORA's state-of-the art analyses are situated at the crossroads between the advancing state of knowledge and the shifting challenges faced by private enterprises.

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FORA  
Dahlerups Pakhus  
Langelinie Allé 17  
2100 København Ø

> T 35 46 63 20  
> F 35 46 62 01  
> M [fora@ebst.dk](mailto:fora@ebst.dk)  
> W [www.foranet.dk](http://www.foranet.dk)



Anders Hoffmann  
Lars-Bjørn Larsen  
Peter Nullemann  
Nikolaj Vibe Michelsen

Quality  
Assessment of  
Entrepreneurship  
Indicators

# Introduction

Effective decisions and solid policy making require clear, comprehensive and reliable data and information. For this reason, more and more countries have constructed large national indicator systems to measure their current stage and progress in various areas. The overall validity of these efforts depends amongst others on the quality of each of the individual indicators.

This paper provides the quality framework used to assess indicators measuring framework conditions for entrepreneurship. All of the discussed indicators are collected in database, which hopefully will be made available on-line in 2006, when the copyright issues attached to the data are solved.

The work is financed by an international Consortium on Dynamic Benchmarking including Canada, Denmark, Finland, the Netherlands, Norway and Sweden. The quality framework draws on experience from the OECD, Eurostat and the US Key Indicator Project (OECD, 2003; Wallman et al, 2004; Munoz, 2004).

Quality is defined as “fitness for use” in terms of user needs (OECD, 2003). This definition is broader than has been customary used in the past when quality was equated with accuracy. It is now generally recognised that there are other important dimensions. Even if data is accurate, it cannot be said to be of good quality if it is produced too late to be useful, or cannot be easily accessed, or appear to conflict with other data. Thus, quality is viewed as a multi-faceted concept. The most important quality characteristics depend on user perspectives, needs and priorities, which vary across groups of users. This paper focuses on three quality dimensions: relevance, accuracy and availability.

It is important to note that each indicator must be evaluated in its

context; in this case it would be entrepreneurship. Consequently, an indicator used in this quality assessment may be applied and assessed differently in other studies focusing on other issues (for instance, innovation, human resources, etc.). Thus, the quality measure for an indicator is meant to guide the policy maker on issues related to entrepreneurship rather than the statistician.

The paper first introduce the quality framework and then it introduce a set of gatekeeper requirements, i.e. the minimum requirements an indicator must meet in order to be used in included in the database. Finally, the quality framework is used to grade each indicator included in the study.

The current paper is a first version of the documentation of entrepreneurship indicators. All comments are welcome: Anders Hoffmann (ah@ebst.dk).

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The quality framework has three dimensions: relevance, accuracy and availability. Each indicator is evaluated by grading it for each dimension and by an overall assessment. If considered useful, further qualitative information may be taken into account in the evaluation of the indicator. This implies that room is provided to describe other characteristics which may lead to restricting the use of a given indicator, relating for example to the complexity of an indicator, to a lack of an unambiguous scientific basis or to the lack of coherence with other existing indicators, etc.

### 1. Relevance

The relevance of an indicator is a qualitative assessment of the value contributed by the indicator. That is, the evaluation depends on the proximity between what the indicator measures and the framework condition it is supposed to measure. It is desirable for the indicator to be as close as possible to the framework condition it is intended to measure (Table 1.1).

**Table 1.1**  
**Assessment of Relevance**

<b>The Indicator's Proximity to the Framework Condition it is Supposed to Measure</b>	<b>Direct Measure</b>	<b>Proxy Measure</b>
Mark	A	B

An example is the indicator labeled Barriers to Competition. Here the level of legal barriers to entry and number of antitrust exemptions is a direct measure of the level of barriers to competition in existing markets.



Relevance has one more dimension. If an indicator is applied as a measure for a specific policy, it is useful to know whether a policy initiative has a direct or indirect impact on the indicator (Table 1.2).

<b>Policy initiatives' impact on indicator</b>	<b>Direct Impact</b>	<b>Indirect Impact</b>
Mark	A	B

**Table 1.2**  
**Assessment of Policy**  
**Indicator Typology**

For example, for Barriers to Competition changing formal regulation concerning entry barriers and antitrust exemptions will have direct impact on the size of the barriers to competition.

## **2. Accuracy**

The accuracy of an indicator is the degree to which the indicator correctly estimates or describes the quantities or characteristics it is designed to measure. Accuracy has two dimensions: data collection method and degree of cross-country standardisation.

### **a) Data Collection Method**

The data collection method is sound if data correctly estimates or describes the quantities or characteristics that it is designed to measure. Thus, accuracy based on data collection method refers to the closeness between the values provided and the (unknown) true value. It is desirable for the value of the indicator to be as close as possible to the unknown, true value.

Major sources of error in data collection include coverage, sampling, non-response, response, processing and problems in dissemination. Addressing these standard problems are common for national statistical offices and international governmental institutions. Data from these sources should not suffer, in general, from these problems, whereas data from other sources should be evaluated on a case by case basis.

The appraisal of accuracy is based on the method used in collecting the data. Almost all indicators are based on surveys,

polls or censuses. This framework distinguishes among three types: fact-based, action-based and opinion-based surveys.

- Fact-based surveys relate to easy quantifiable aspects, in which different people would give the same response to a question. The OECD Regulatory Database is an example of this type because respondents are asked about whether or not a country has a given regulation.
- Action-based surveys concern issues where respondents are asked if they have performed a given action within a given time period or not. The European Community Innovation Survey is an example of this type of survey. In this survey, firms are asked whether they have introduced new or technologically improved products or processes on the market during the last year.
- Opinion-based surveys deal with questions asking for a subjective evaluation of a given aspect of the economy. The World Economic Forum's Executive Survey is an example of this type of survey. It asks executives about their opinion of the functioning and the quality of various aspects of the economy.

The accuracy of data collection methods can be evaluated as very good, good, acceptable (Table 1.3).

**Table 1.3**  
**Assessment of Accuracy**

<b>Data Collection Method</b>	<b>Very good</b>	<b>Good</b>	<b>Acceptable</b>
Mark	A	B	C

These scores can be clarified as follows:

- *Very good*: the indicator originates from national statistical offices or international government institutions; or the indicator stems from a fact-based survey.
- *Good*: the indicator comes from an action-based survey.
- *Acceptable*: the indicator comes from an opinion-based survey.

### b) Cross-country Comparability

Whether an indicator is comparable across countries requires consideration as to the method of data collection in the concerned countries. For example, an indicator is comparable if the same question is asked in all the countries in the same way and by the same means. It is desirable to have the highest degree of comparability across countries (Table 1.4).

<b>The indicator is Crosscountry Comparable</b>	<b>Fully Comparable</b>	<b>Comparable to some extent</b>
Mark	A	B

**Table 1.4**  
**Assessment of Cross-Country Comparability**

”Fully comparable” is given if it is the same institution that collects the indicator in all countries or if the indicators are made comparable by an international institution like EU Stat of the OECD.

”Comparable to some extent” covers indicators that are collected by different agencies in different countries following a common approach.

### 3. Availability

The concept of availability relates to the accessibility of a given indicator in various countries and for a given time frame. It is desirable to have data from as many countries as possible (Table 1.5). In addition, an indicator available beyond the initial benchmark year is better than one that is not available beyond that year (Table 1.5).

<b>The share of OECD countries for which the indicator is available</b>	<b>100-76%</b>	<b>75-50%</b>
Mark	A	B

**Table 1.5**  
**Assessment of Availability Across Countries**

**Table 1.6**  
**Assessment of Availability**  
**over Time**

<b>The indicator is available beyond the initial benchmark year</b>	<b>Yes</b>	<b>No</b>
Mark	A	B

It could be considered to expand this dimension with a time aspect. It may take years to release data - which makes the indicator less useful.

#### **4. Overall Quality Assessment**

The overall quality assessment is divided into three categories: good, acceptable and questionable (Table 1.7).

**Table 1.7**  
**Overall Evaluation**

<b>Name of indicator</b>	<b>Good</b>	<b>Acceptable</b>	<b>Questionable</b>
Indicator A	A	B	C

Clarification of the three indicator score categories:

- *Good (A)*: at least 5 A's and no C's
- *Acceptable (B)*: at least 3 A's and no C's
- *Questionable (C)*: less than 3 A's or one or more C's.

### **1.1 Gatekeeper Requirements**

Certain quality restrictions have been used for the selection of indicators. For an indicator to be included in the Quality Assessment it has to fulfill four gatekeeper requirements concerning the quality of the indicator. These gatekeeper requirements follow the dimensions of the quality framework: relevance, accuracy and availability – in addition, it focuses on the coherence of the data (Table 1.8).

<b>An indicator <i>must</i> be:</b>	
•	An indicator must measure the issue or factor it is supposed to measure and, therefore, at a minimum act as a proxy for the measured concept.
•	The indicator must originate from a reliable source, i.e. from a well-known, verifiable and well-documented source. The method for collecting data must also be standardised to some extent across countries in order to increase cross-country comparability based on the indicator.
•	The indicator must be available for at least 50 percent of countries in the study.
•	The indicator must be interpretable a priori as to whether a high value is to be preferred over a lower value or the other way around.

**Table 1.8**  
**Gatekeeper Requirements**  
**for each Indicator**

## Part 2

# Quality Assessment of each Indicator - an Overview

The General Policy Framework for Entrepreneurship can be divided into 22 framework conditions (described in the paper "A General Policy Framework for Entrepreneurship", see [www.foranet.dk](http://www.foranet.dk)).

The table presents a quality assessment of indicators related to entrepreneurship known by FORA, which fulfill the four gatekeeper requirements. The table shows that most framework conditions are covered by at least one indicator. However, some framework conditions are inadequately covered – either because no indicators exist or because the existing indicators are of a questionable quality and did not meet the gatekeeper requirements.

The quality assessment can be summarized by evaluation the combined quality of the indicators measuring each of the 22 framework conditions (Figure 1). The areas of ability and culture are in most need of further development of indicators. All of the areas of abilities are measured by subjective judgments, which make comparison across countries and time difficult. Culture is also measured by subjective indicators but this is less problematic. The culture component of the model is a judgment of peoples' perception of for example entrepreneurs and risks, which is subjective by nature.

Total measure of the buisness environment for entrepreneurhsip				
Opportunities	Capital	Ability	Incentives	Culture
Technology Transfor 2 indicators	Loans 5 indicators	Restart Possibilities 1 indicator	Personal Income Tax 2 indicators	Entrepreneurial Motivation 6 indicators
Procurement Regulation 1 indicator	Venture capital 2 indicators	Entrepreneurship Education 2 indicators	Business tax & Fiscal incentive 2 indicators	Initiatives towards Specific groups
Entry Barriers/Deregulation 3 indicators	Business Angels	Trad. Business Education 2 indicators	Bankruptcy Legislation 2 indicators	Communication About heroes
Access to foreign Markets 2 indicators	Stock markets 4 indicators	Entrepreneurship Infrastructure (public) 1 indicator	Soceal security discrimination	
Private demand conditions	Wealth & bequest tax 3 indicators	Entrepreneurship Infrastructure (private)	Administrative Burdens 8 indicators	
	Capital taxes 5 indicators		Labour market Regulation 6 indicators	

A summary of evaluatin of all the indicators is shown in table 2.2.

**Table 2.2**  
**Overall Quality Assessment of Available Entrepreneurship Indicators**

Indicator	Overall Grade	Relevance		Accuracy		Availability	
		Relevance	Policy Relevant	Data Collection	Comparability	Across Countries	Over time
<b>1. Technology Transfer Regulation</b>							
a. University/Industry Research Collaboration	C	A	B	C	A	A	A
b. Technological Co-Operation	C	A	B	C	A	A	A
<b>2. Procurement Regulation</b>							
a. Procurement Regulation	C	B	B	A	A	B	B
<b>3. Entry Barriers</b>							
a. Barriers to Competition	A	A	A	A	A	A	B
b. Public Ownership	A	A	A	A	A	A	B
Public Involvement in Business Operation	A	A	A	A	A	A	B
<b>5. Access to Foreign Markets</b>							
a. Share of New Enterprises with Exports	B	A	B	A	A	A	B
b. Export Credits and Insurance	C	B	B	C	A	A	A
<b>6. Business Angels</b>							
<b>7. Loans</b>							
a. Extent of Guarantees for SMEs	C	B	A	B	A	B	B
b. Private Credit	A	A	B	A	A	A	A
c. Interest Rate Spread	B	B	B	A	A	A	A
d. Cost to Create Collateral	A	B	A	A	A	A	A
e. Country Credit Rating - 2.3.04/418	C	B	B	C	A	A	A



<b>8. Venture Capital</b>							
a. Venture Capital - Early Stage	A	A	B	A	A	A	A
b. Venture Capital - Expansion Stage	B	A	B	A	B	A	A
<b>9. Stock Markets</b>							
a. Capitalization of Secondary Stock Market	B	A	A	B	A	A	B
b. Newly listed Companies in Secondary Stock Market	B	A	A	B	A	A	B
c. Capitalisation of Primary Stock Market	A	A	A	B	A	A	A
d. Turnover in Primary Stock Market	A	A	A	B	A	A	A
<b>10. Wealth &amp; Bequest Tax</b>							
a. Revenue from Bequest Tax	A	A	A	A	A	A	A
b. Revenue from net Wealth Tax	A	A	A	A	A	A	A
c. Top Marginal Bequest Tax Rate	B	B	A	A	A	B	B
<b>11. Capital Taxes</b>							
a. Taxation of Dividends – Top Marginal Tax Rate	B	B	A	A	A	A	B
b. Taxation of Dividends –Top Marginal Tax Rate for Self-employed	B	B	A	A	A	A	B
c. Taxation of Stock Options	B	B	A	A	A	B	B
d. Taxation of Capital Gains on Shares – Short Term	B	B	A	A	B	A	B
e. Taxation of Capital Gains on Shares – Long Term	B	B	A	A	B	A	B
<b>12. Restart possibilities</b>							
a. Claims on a Bankrupt’s Assets - Length of Time	C	B	A	A	B	B	B
<b>13. Entrepreneurship Education</b>							
a. Entrepreneurship Education at Primary & Secondary Level	C	B	B	C	A	A	A

b. Entrepreneurship Education at Higher Levels	C	B	B	C	A	A	A
14. Traditional Business Education							
a. Quality of Management Schools	C	B	B	C	A	A	A
15. Entrepreneurship Infrastructure							
a. Government Programs	C	B	B	C	A	A	A
16. Personal income tax							
a. Highest Marginal Income Tax Plus Social Contributions	A	A	A	A	A	A	A
b. Average Income Tax plus Social Contributions	A	A	A	A	A	A	A
17. Business Tax & Fiscal Incentive							
a. SME Tax Rates	A	A	A	A	A	A	B
b. Taxation of Corporate Income Revenue	A	A	A	A	A	A	A
18. Bankruptcy Legislation							
a. Actual Cost to Close a Business	B	B	A	B	A	A	A
b. Actual Time to Close a Business	B	B	A	B	A	A	A
19. Social Security Discrimination							
20. Administrative Burdens							
a. Number of Procedures for Starting a Business	A	A	A	A	A	A	A
b. Number of Days for Starting a Business	A	A	A	A	A	A	A
c. Costs required to Start a Business	A	A	A	A	A	A	A
d. Regulatory and Administrative Opacity - Index	A	A	A	A	A	A	B
e. Enforcing Contracts - Number of Procedures	A	A	A	A	A	A	A

f. Enforcing Contracts – Time	A	A	A	A	A	A	A
g. Minimum of Capital required to Start Business	A	A	A	A	A	A	A
h. Enforcing Contracts - Cost in percentage of debts	A	A	A	A	A	A	A
<b>21. Labour Market Regulation</b>							
a. Difficulty of Hiring	A	A	A	A	B	A	A
b. Difficulty of Firing	A	A	A	A	B	A	A
c. Rigidity of Hours Index	A	A	A	A	B	A	A
d. Number of Administrative Procedures when Recruiting First Employee	A	A	A	A	A	A	B
e. Number of Administrative Procedures when Recruiting Additional Employee	A	A	A	A	A	A	B
f. The Costs of Firing	A	A	A	A	A	A	A
<b>22. Entrepreneurial Motivation</b>							
a. Cultural and Social Norms	C	A	B	C	A	A	B
b. Entrepreneurial Motivation	C	A	B	C	A	A	B
c. Self-employment Preference	C	A	B	C	A	B	A
d. “The wish to own one’s own Business”	C	A	B	C	A	B	A
e. Desirability of becoming Self-employed	C	A	B	C	A	B	A
f. Risk for business failure	C	A	B	C	A	B	A

### 3.1 University/Industry Research Collaboration

Definition:

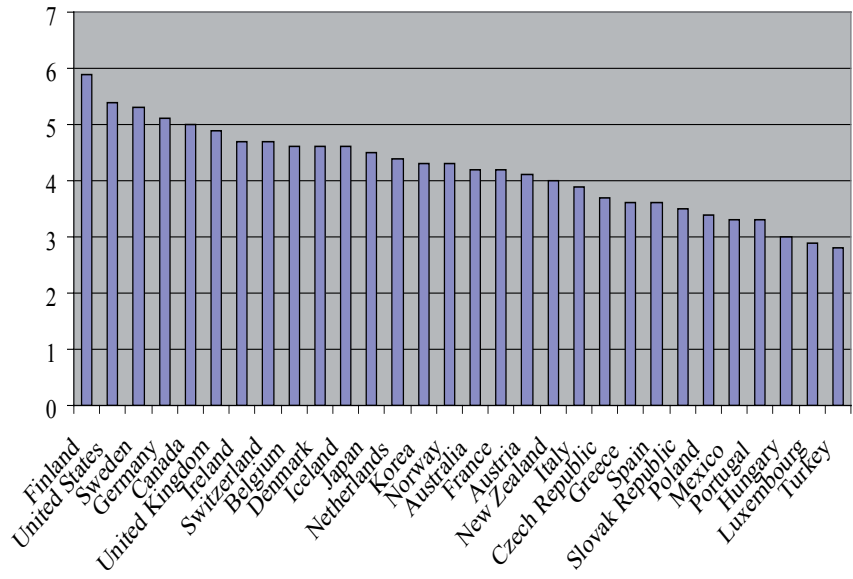
The indicator measures business executives' perceptions of the level of collaboration between their firm and local universities when conducting research and development (R&D).

The indicator is based on the Executive Opinion Survey, which is part of the Global Competitiveness Report. Business executives are asked whether their business collaborates with local universities. The ranking goes from 1 (non-existing) to 7 (intensive and ongoing).

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The level of R&D collaboration between firms and local universities is a direct measure of an effective technology transfer regulation.	A
	<i>b) Assessment of the Type of Policy Indicator</i> Effective collaboration between R&D oriented companies and local universities is an important outcome of an efficient technology transfer regulation and, thus, not a direct measure of the regulation per se.  Furthermore, the indicator is opinion-based. Policy measures can only have an <u>in-direct</u> impact on the opinions of business executives.	B

<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i>  The indicator is <u>opinion</u>-based as the information is provided by leading business executives and entrepreneurs responding to the Executive Opinion Survey, which is part of the Global Competitiveness Report 2003-2004.</p>	C
	<p><i>b) Cross-country Comparability</i>  The same methodology is used in every country.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i>  The indicator is available for 102 industrialised and emerging countries.</p>	A
	<p><i>b) Availability over Time</i>  The indicator is based on a survey disseminated in 2003. It will be updated annually.</p>	A
<b>Source</b>	<p>The indicator is published in the <i>Global Competitiveness Report 2003 – 2004</i>, World Economic Forum, no 3.08, page 433.</p>	

University/Industry Research Collaboration



## 3.2 Technological Co-operation

### Definition:

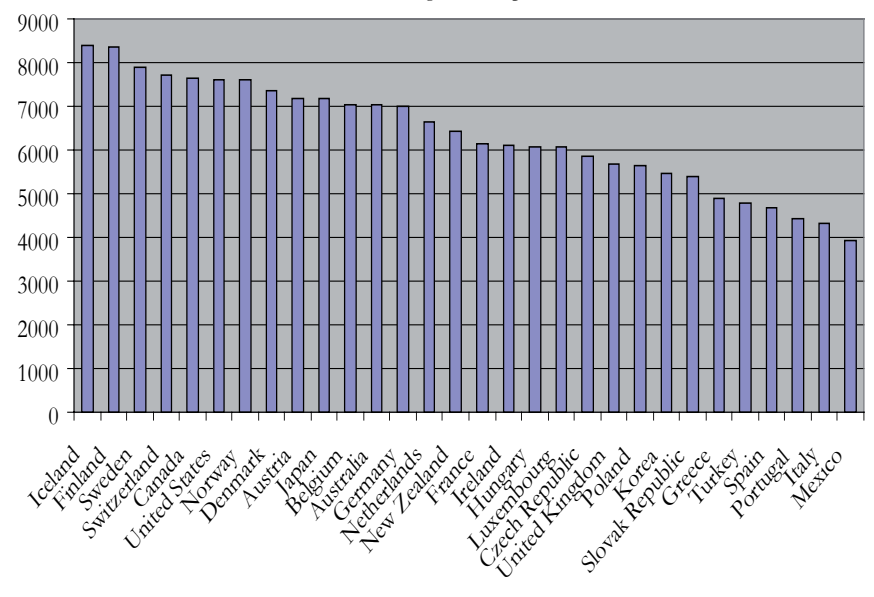
The indicator measures top and middle managements' perceptions of the level of technological co-operation between companies.

The indicator is based on the Executive Opinion Survey, part of the IMD World Competitiveness Yearbook. Top and middle management, representing a cross-section of the business community, in each country are asked whether technological co-operation is lacking or is developed between companies.

The ranking goes from 1 (lacking) to 6 (developed).

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The level of technological co-operation between companies is a <u>direct</u> measure of <i>an effective technology transfer regulation</i> .	A
	<i>b) Assessment of Policy Indicator Typology</i> Effective technological co-operation between companies is an important <i>outcome</i> of an efficient technology transfer regulation and, thus, not a <u>direct</u> measure of the regulation per se.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>opinion</u> -based.	C
	<i>b) Cross-country Comparability</i> The same methodology is used in every country surveyed.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for 60 industrialised and emerging countries.	A
	<i>b) Availability over Time</i> The indicator is based on a survey disseminated in 2004. It will be updated annually.	A
<b>Source</b>	The data is published by the Institute for Management Development (IMD) in the <i>Competitiveness Yearbook</i> , Switzerland, 2004, survey no. 4.2.13, page 701.	

Technological Co-operation





### 3.3 Procurement Regulation

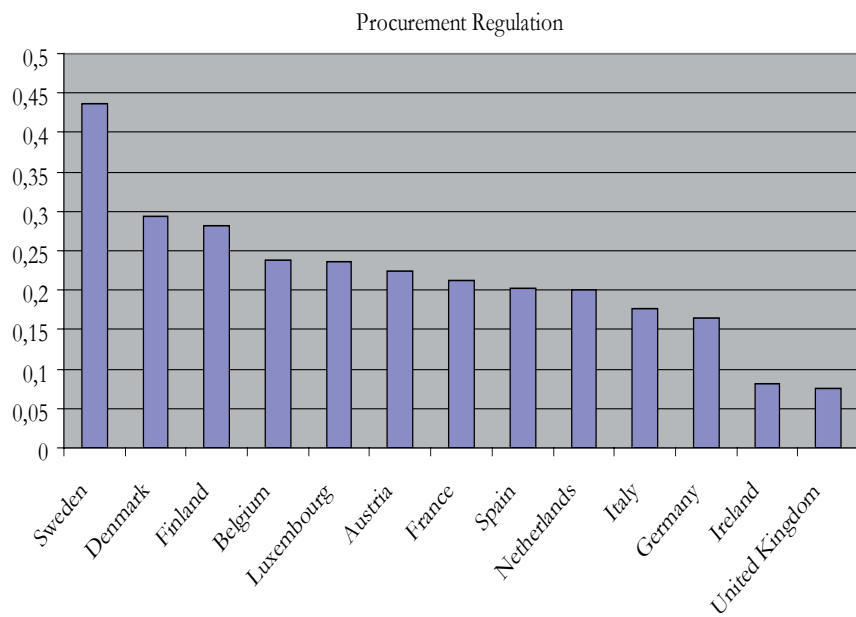
#### Definition:

The indicator measures the share of procurement contracts that goes to micro-firms (controlled for the percentage of micro-firms in each country).

The ranking goes from 0 (no micro-firms winning any procurement contracts) to 1 (only micro-firms winning procurement contracts).

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i> The share of procurement contracts that goes to micro-firms is a <u>proxy</u> measure for <i>an entrepreneurship friendly procurement regulation</i>. The success of micro-firms is only a proxy for the success of entrepreneurial firms.</p>	B
	<p><i>b) Assessment of Policy Indicator Typology</i> A high share of micro-firms receiving procurement contracts is an important <i>outcome</i> of an entrepreneurship friendly procurement regulation and thus not a direct measure of the regulation <i>per se</i>.</p> <p>Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of the regulation.</p>	B
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i> The indicator is <u>fact</u>-based. The information is provided by the TED database, which in 2001 contained 52,099 notices of contract awards.</p>	A
	<p><i>b) Cross-country Comparability</i> The same methodology is applied in every country.</p>	A

<b>3. Availability</b>	<i>a) Availability across Countries</i> The Indicator is only available for 13 European countries.	B
	<i>b) Availability over Time</i> Data is from 2001. The report was published in 2004. Future updates are uncertain.	B
<b>Source</b>	The indicator is published by the EC in the report: The Access of SMEs to Public Procurement Contracts - Final report, 2004 (pages 37). Available online: <a href="http://europa.eu.int/comm/enterprise/entrepreneurship/craft/craft-studies/documents/public-procurement-finalreport.pdf">http://europa.eu.int/comm/enterprise/entrepreneurship/craft/craft-studies/documents/public-procurement-finalreport.pdf</a> .	



### 3.4 Barriers to Competition

The Indicator consists of two low level indicators called Legal Barriers to Entry (weight 0,3) and Antitrust Exemptions (weight 0,7).

#### Definitions:

*Legal barriers indicator:* Measures whether national, state or provincial laws or other regulations restrict the number of competitors allowed to operate a business in some markets in 24 manufacturing and service sectors – two response categories (yes = 6 or no = 0) for each sector.

*Antitrust exemptions:* Measures the scope of exemptions to competition law for public enterprises or government mandated behaviour - two response categories (yes = 6 or no = 0) for each question (Exhibit 1).

#### Exhibit 1: Questions Covering Antitrust Exemptions

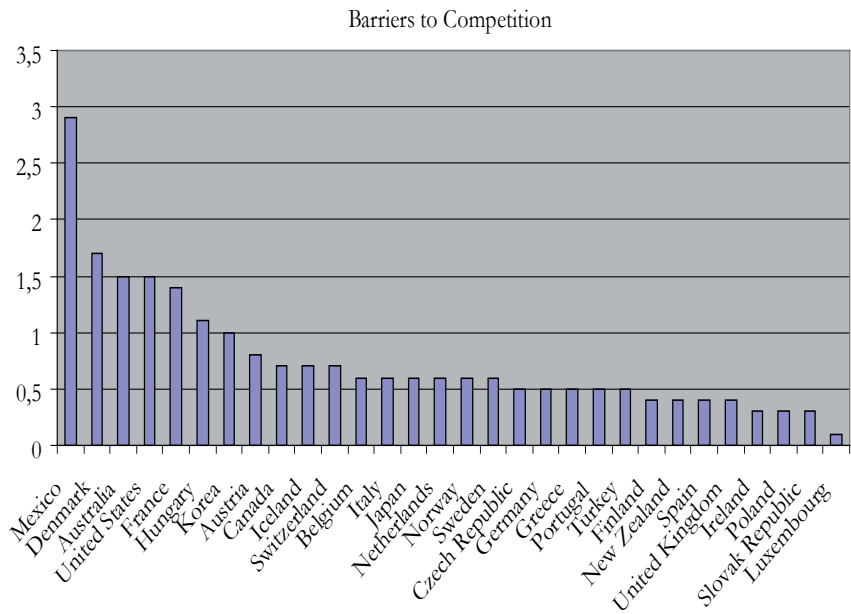
##### Indicator

Measured by countries' answers to the following four questions (Weighted by % of business sectors in which the state controls at least a firm):

- Is there a rule or principle providing for exclusion or exemption from a liability under the general competition law for conduct that is required or authorized by government authority (in addition to exclusions that might apply to complete sectors)?
- Publicly-controlled firms: Exclusion or exemption from competition law: Cartel & other horizontal?
- Publicly-controlled firms: Exclusion or exemption from competition law: Vertical & abuse of dominance monopolisation.
- Publicly-controlled firms: Exclusion or exemption from competition law: Merger?

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The level of legal barriers to entry and number of antitrust exemptions is a <u>direct</u> measure of <i>the level of barriers to competition in existing markets</i> .	A
	<i>b) Assessment of Policy Indicator Typology</i> Changing formal regulation concerning entry barriers and antitrust exemptions will have <u>direct</u> impact on the size of the indicator for barriers for competition.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact-based</u> indicator that measures whether or not a country has formal exemptions or formal legal barriers written into laws or regulation.  Both indicators are measuring formal regulation, not the quality of regulation or the enforcement of the regulation.	A
	<i>b) Cross-country Comparability</i> Fully comparable – fact-based questions collected and computed using the same methodology in all countries.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is fact-based and available for years 1998 and 2003.  The data will not be updated annually. Some of the data may be updated at a later stage.	B

<p><b>Source</b></p>	<p>The data is published in OECD reports. ECO/WKP(1999)18. Available online: <a href="http://www.oilis.oecd.org/oilis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF">http://www.oilis.oecd.org/oilis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF</a></p> <p>New data: ECO/WKP(2005)6.</p>
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### 3.5 Public Ownership

The indicator consists of three low level indicators **Scope of Public Enterprise Sector** (weight 0,3), **Size of Public Enterprise Sector** (weight 0,3) and **Direct Control over Business Enterprises** (weight 0,4).

#### Definitions:

*Scope of Public Enterprise Sector:* Based on responses of OECD Member countries to an ad hoc questionnaire (The OECD Regulatory Indicators Questionnaire). Measures whether national, state or provincial government controls at least one firm in 24 different sectors - two response categories (yes = 6 or no = 0) for each sector. *Size of Public Enterprise Sector* measures the overall size of the state-owned enterprises relative to the size of the economy. The indicator is an OECD estimate based on CEEB 1997 (source not available) and Gary & Larson 1997 (source not available). Index is scaled from 0 to 6 from smallest to largest size.

*Direct Control over Business Enterprises* measures the existence of government special voting rights in privately-owned firms, constraints on the sale of state-owned equity stakes, and the extent to which legislative bodies control the strategic choices of public enterprises. - two response categories (yes = 6 or no = 0)) for each question (exhibit 1).

#### **Exhibit 1: Questions covering the direct control over business enterprises indicator**

##### General Constraints

- Legal or constitutional constraints to the sale of the stakes held by government in these firms (weighed 0,3).
- Strategic choices of any publicly-controlled firms have to be reviewed and/or cleared in advance by national, state, or provincial legislatures (weighed 0,2).

##### Golden Shares

- National, state or provincial governments have special voting rights (e.g. golden shares) in any firms within the business sector (weighed 0,25).

#### Extent of the Special Voting Rights

- Special rights can be exercised in: (weighed 0,25)
  - o Merger with or acquisition by another company (sub-question weight 0,25).
  - o Change in controlling coalition (sub-question weight 0,25).
  - o Choice of management (sub-question weight 0,25).
  - o Strategic management decisions (sub-question weight 0,25).

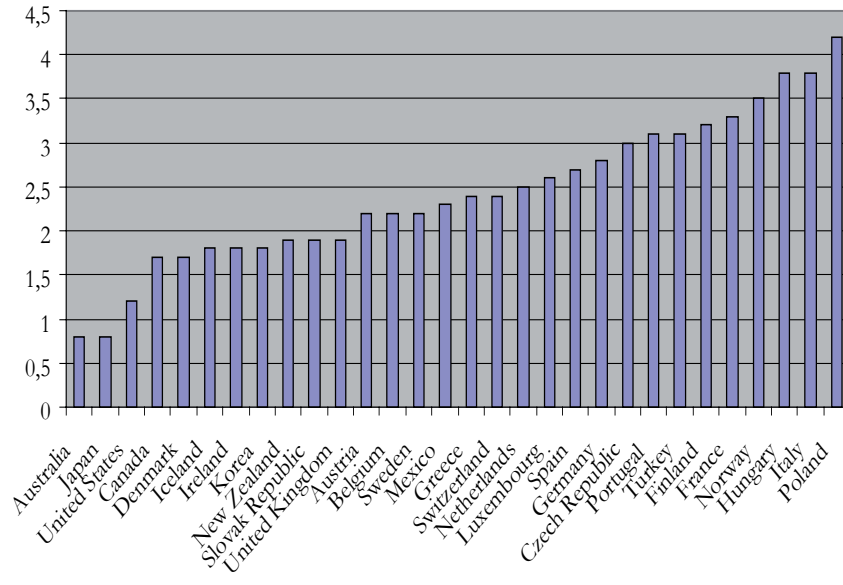
The second indicator (Size of Public Enterprise Sector) measures the overall effect of direct and indirect initiatives on the size of the public sector, while the first and third indicator measure formal regulations of public influence in business sector.

Assessment		Grade
Overall		A
1. Relevance	<i>a) Assesment of Relevance</i> The scope and size of the public enterprise sector and the level of direct public control over business enterprises is a <u>direct</u> measure of <i>the level of barriers to competition in existing markets</i> .	A
	<i>b) Assessment of Policy Indicator Typology</i> Low level indicators measure regulation in a direct way. Changing formal regulation concerning scope and size of public enterprise and direct control over business enterprises will have <u>direct</u> impact on the size of the indicator for public ownership.	A

<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>Fact-based indicator. Measuring the scope and size of state control in the economy and whether or not a country has special voting rights in privately-owned firms, constraints on the sale of state-owned equity stakes etc. written into laws or regulation.</p> <p><i>NB: The sources for the second low level indicator (Size of public enterprise sector) have not been checked.</i></p>	A
	<p><i>b) Cross-country Comparability</i></p> <p>Fully comparable, fact-based questions collected and computed using the same methodology for all countries.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for most of the OECD countries (30 countries).</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is fact-based and available for years 1998 and 2003. The data will not be updated annually. Some of the data may be updated at a later stage.</p>	B
<b>Source</b>	<p>The data is published in OECD reports. ECO/WKP(1999)18: <a href="http://www.oilis.oecd.org/olis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF">http://www.oilis.oecd.org/olis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF</a>.</p> <p>New data: ECO/WKP(2005)6.</p>	



Public Ownership



### 3.6 Public Involvement in Business Operation

The indicator consists of the two low level indicators **Use of Command and Control Regulation** (weight 0, 55) and **Price Controls** (weight 0, 45).

#### Definitions:

*Use of command and control regulation:* indicates the extent to which government uses coercive (or incentive-based) regulation in general and in specific service sectors – two response categories (yes = 0 or no = 6) for each question (Exhibit 1).

*Price controls:* reflects the extent of price controls in specific sectors. The indicator includes sector specific information – two response categories (yes/no) for each question (Exhibit 2).

#### Exhibit 1: Questions Covering the Use of Command and Control Regulation Indicator

Questions	Coding of answers	
	Yes	No
<b>General information</b>		
• Regulations are required to assess alternative policy instruments (regulatory and non-regulatory) before adopting new regulation.	0	6
• Guidance has been issued on using alternatives to traditional regulation.	0	6
<b>Sector-specific information</b>		
<i>Road Freight</i>		
• Regulations prevent or constrain backhauling (picking up freight on the return leg).	6	0
• Regulations prevent or constrain private carriage (transport only for own account).	6	0

<ul style="list-style-type: none"> <li>Regulations prevent or constrain contract carriage (contractual relation between an otherwise independent hauler and one shipper).</li> </ul>	6	0
<ul style="list-style-type: none"> <li>Regulations prevent or constrain inter modal operations (operating or ownership links between firms in different transportation sectors).</li> </ul>	6	0
<i>Retail Distribution</i>		
<ul style="list-style-type: none"> <li>Shop opening hours are regulated.</li> </ul>	6	0
<ul style="list-style-type: none"> <li>Government regulations on shop opening hours apply at national level.</li> </ul>	6	0
<ul style="list-style-type: none"> <li>The regulation of opening hours have become more flexible in the last 5 years.</li> </ul>	0,5 <sup>1</sup>	0
<i>Air Travel</i>		
<ul style="list-style-type: none"> <li>Carriers operating on domestic routes are subject to universal service requirements (e.g. obligation to serve specified customers or areas).</li> </ul>	6	0
<i>Railways</i>		
<ul style="list-style-type: none"> <li>Companies operating the infrastructure or providing railway services are subject to universal service requirements (e.g. obligation to serve specified customers or areas).</li> </ul>	6	0

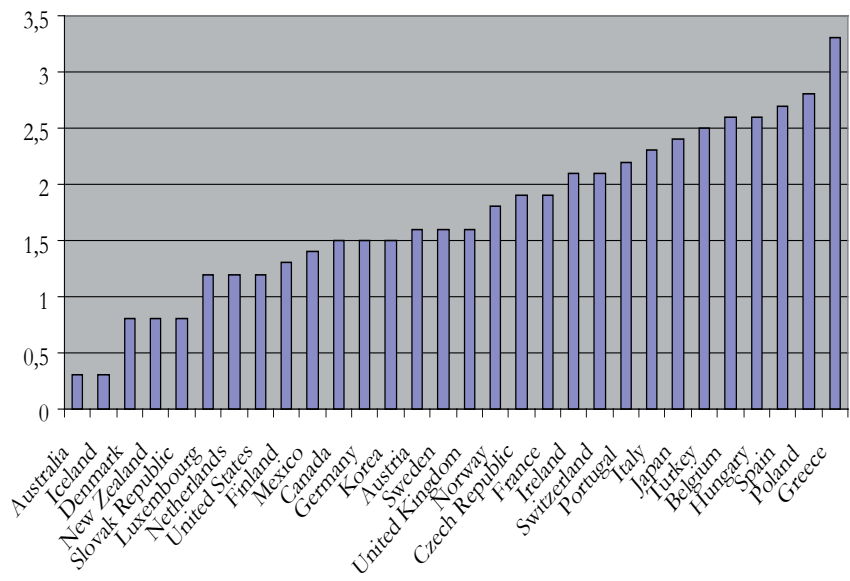
1 If answer is yes, 0,5 is subtracted from the industry-specific score.

**Exhibit 2:****Questions Covering the Price Controls Indicator**

Questions	Coding of answers	
	Yes	No
<b>Air Travel</b>		
• Prices of domestic air fares are regulated.	6	0
• 5 or 4 busiest international routes subject to price regulation	(n/5)*6 or (n/4)*6	
<b>Road Freight</b>		
• Retail prices of road freight services are regulated in any way by the government.	6	0
• Government provides pricing guidelines to road freight companies.	6	0
• Professional bodies or representatives of trade and commercial interests are involved in specifying or enforcing pricing guidelines or regulations.	6	0
<b>Retail Distribution</b>		
• Retail prices of the following products are subject to price controls:		
• - Retail prices of certain staples (e.g. milk and bread).	6	0
• - Retail prices of gasoline.	6	0
• - Retail prices of tobacco.	6	0
• - Retail prices of alcohol.	6	0
• - Retail prices of pharmaceuticals.	6	0
• - Retail prices of other product.	6	0
<b>Telecommunication</b>		
• Retail prices of digital mobile service in telecommunications are regulated.	6	0

Assessment	Grade
<b>Overall</b>	<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i> The use of price controls and command and control regulation is a <u>direct</u> measure of <i>the level of barriers to competition in existing markets.</i></p>
	<p><i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing formal regulation concerning price controls and use of command and control regulation will have direct influence of the size of the indicator for barriers for public involvement in business operation.</p>
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i> <u>Fact-based</u> indicator. Measuring whether or not a country has price controls and use of command and control regulation written into laws or regulation.</p>
	<p><i>b) Cross-country Comparability</i> Fully comparable fact-based questions collected and computed using the same methodology for all countries.</p>
<b>3. Availability</b>	<p><i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).</p>
	<p><i>b) Availability over Time</i> The indicator is fact-based and available for year 1998 and 2003. The data will not be updated annually. Some of the data may be updated at a later stage.</p>
<b>Source</b>	<p>The data are published in OECD reports. ECO/WKP(1999)18. Available online: <a href="http://www.oilis.oecd.org/oilis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF">http://www.oilis.oecd.org/oilis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF</a>.</p> <p>New data: ECO/WKP(2005)6.</p>

Public Involvement in Business Operation



### 3.7 Share of New Enterprises with Exports

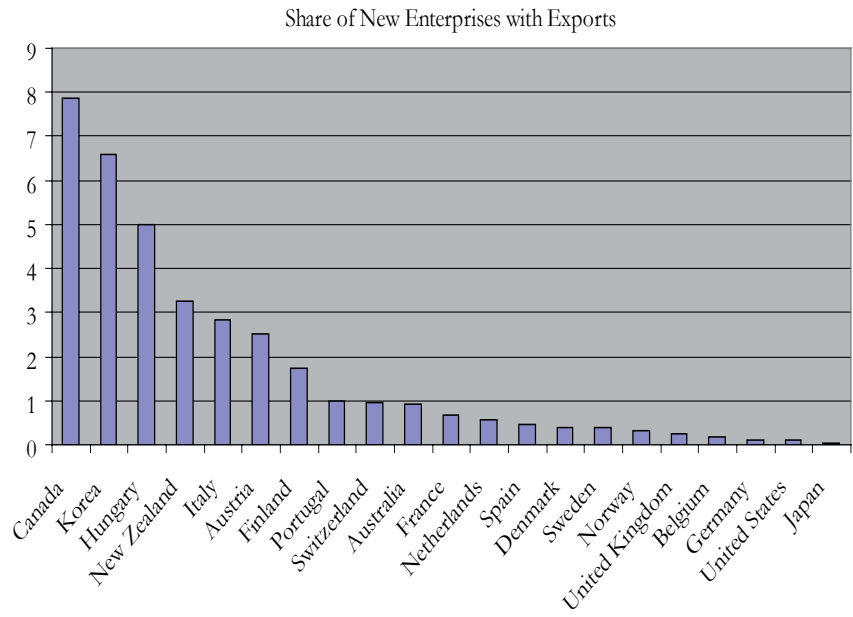
**Definition:**

The indicator measures the share of exporting companies among new companies (controlled for size of domestic markets).

The ranking goes from 0 (no exporting new companies) to 1 (all new companies exports).

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The share of new enterprises with exports is a <u>direct</u> measure for entrepreneurs' <i>access to foreign markets</i> .	A
	<i>b) Assessment of Policy Indicator Typology</i> The share of new enterprises with exports is the <i>outcome</i> of an efficient policy framework for ongoing global enterprises and thus not a direct measure of the regulation <i>per se</i> .  Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of the regulation.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact-based</u> indicator.	A
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is fact-based and available for year 2002 The data will not be updated.	B

<b>Source</b>	<p>The data are published by FORA. Available online: <a href="http://www.foranet.dk/upload/globaliseringsindeks-hjemmesiden_001.pdf">http://www.foranet.dk/upload/globaliseringsindeks-hjemmesiden_001.pdf</a>.</p> <p>Source of raw data: Dun &amp; Bradstreet Database.</p>
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### 3.8 Export Credits and Insurance

**Definition:**

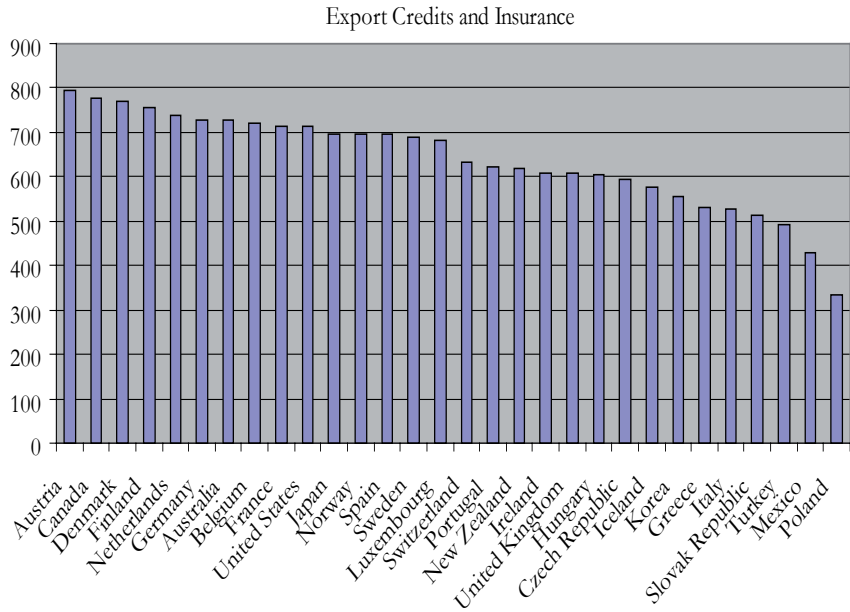
The indicator measures top and middle managements' perceptions of the availability of export credits and insurances at reasonable prices.

The indicator is based on the Executive Opinion Survey, which is part of the IMD World Competitiveness Yearbook. Top and middle management, representing a cross-section of the business community in each country, are asked whether export credits and insurances are available for their companies. The ranking goes from 1 (not available) to 6 (easily available).

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The availability of export credits and insurances at reasonable prices for companies is a direct measure of the potential risk of firm internationalisation but only a <u>proxy</u> measure for entrepreneurs' <i>access to foreign markets</i> .	B
	<i>b) Assessment of Policy Indicator Typology</i> The indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of the business community.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>opinion</u> -based.	C
	<i>b) Cross-country Comparability</i> The same methodology is used in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for 60 industrialised and emerging countries.	A
	<i>b) Availability over Time</i> The indicator is survey-based for the year 2004 and will be updated annually.	A

**Source**

The data is published by the Institute for Management Development (IMD), Competitiveness Yearbook, Switzerland, 2004, survey no 2.4.04 page 625.



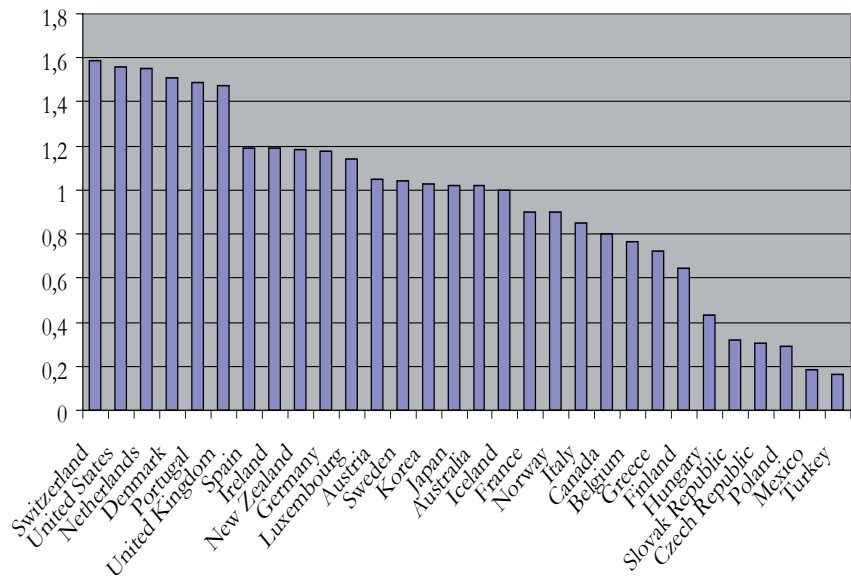
### 3.9 Private Credit

#### Definition:

The indicator measures the ratio of credit towards the private sector from deposit-taking financial institutions relative to GDP.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i> The ratio of private credit relative to GDP is <u>direct</u> measure of the supply of debt-capital.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i> The ratio of private credit relative to GDP is the <i>outcome</i> of an efficient policy framework for getting access to capital and thus not a direct measure of the regulation per se.</p> <p>Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of regulation.</p>	B
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i> The indicator is <u>fact</u>-based.</p>	A
	<p><i>b) Cross-country Comparability</i> In every country the same methodology is used.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i> The indicator is updated annually.</p>	A
<b>Source</b>	The indicator is updated annually by FORA based on data from IMF International Financial Statistics. Available online: <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=637301">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=637301</a> .	

Private Credit



### 3.10 Interest Rate Speed

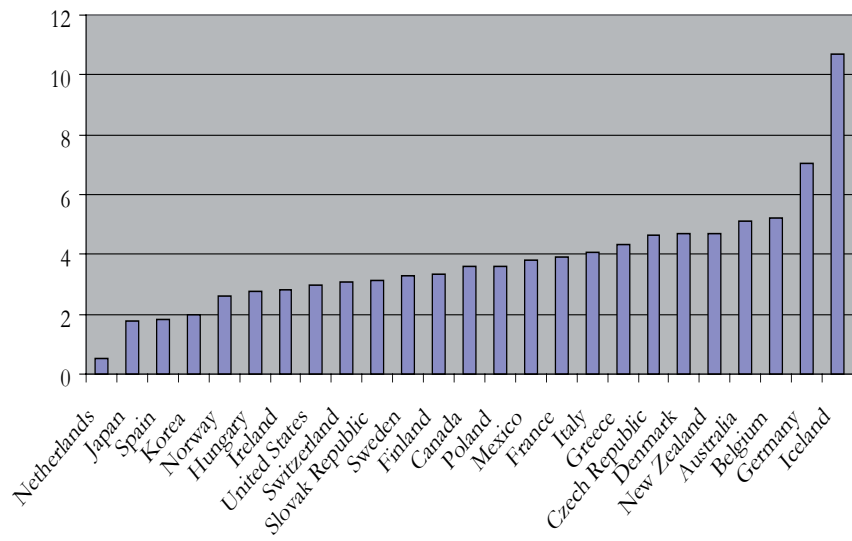
#### Defenitioin:

The indicator measures the lending rate minus deposit rate based on an average of annual rates for each country.

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The interest rate spread reflects the level of price competition in the credit markets, but is only a <u>proxy</u> measure of the supply and accessibility of debt-capital.	B
	<i>b) Assessment of Policy Indicator Typology</i> The interest rate spread relative to GDP is the <i>outcome</i> of an efficient policy framework for capital markets and thus not a direct measure of the regulation <i>per se</i> .  Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the outcome of regulation.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>fact</u> -based.	A
	<i>b) Cross-country Comparability</i> In every country the same methodology is used.	A
<b>3. Availabi- lity</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.	A
	<i>b) Availability over Time</i> The indicator is accessible for the years 1995 - 2004 and will be updated annually.	A

<b>Source</b>	<p>The data is derived from International Financial Statistics (IFS) published by IMF and national sources. Available online:  <a href="http://ifs.apdi.net/imf/ifsBrowser.aspx?Entry=0050492_PUB&amp;sType=other&amp;QueryType=other&amp;ShowSeries=True">http://ifs.apdi.net/imf/ifsBrowser.aspx?Entry=0050492_PUB&amp;sType=other&amp;QueryType=other&amp;ShowSeries=True</a>.</p>
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Interest Rate Spread



### 3.11 Cost to Create Collateral

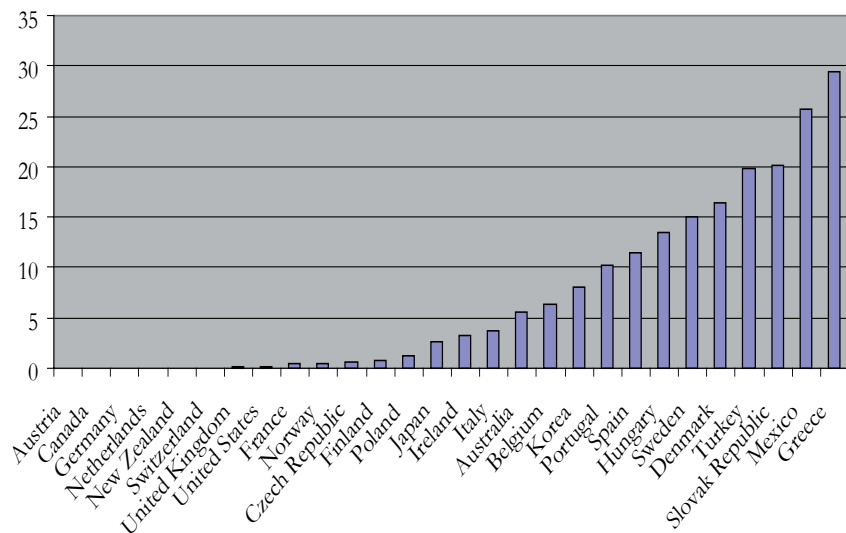
**Definition:**

The indicator measures the creditor’s cost associated with creating and registering collateral. The cost measure is presented as a percentage of income per capita.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i>            The cost to create collateral is a direct measure of the ease of creating and registering collateral, which would make creditors more motivated to assist entrepreneurs but it is only a proxy measure of the supply and accessibility of debt capital.</p>	B
	<p><i>b) Assessment of Policy Indicator Typology</i>            Policy focused indicator. Changing formal regulation (collateral and insolvency laws) will have <u>direct</u> impact on the size of the indicator.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i>            The indicator is fact-based based on research on collateral and insolvency laws, and responses to a World Bank survey on secured transactions laws.</p>	A
	<p><i>b) Cross-country Comparability</i>            Fully comparable. The data is based on standardised case and based on research of collateral and insolvency laws and responses to a survey on secured transactions laws, developed with input and comments from experts, including from the Center for Economic Analysis of Law, the International Bar Association Committee E8 on Financial Law, and the European Bank for Reconstruction and Development.</p>	A

<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries.	A
	<i>b) Availability over Time</i> The indicator will be updated annually.	A
<b>Source</b>	World Bank - Doing Business. Available online: <a href="http://rru.worldbank.org/DoingBusiness/Explore-Topics/GettingCredit/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/Explore-Topics/GettingCredit/CompareAll.aspx</a> .	

Cost to Create Collateral





### 3.12 Country Credit Rating

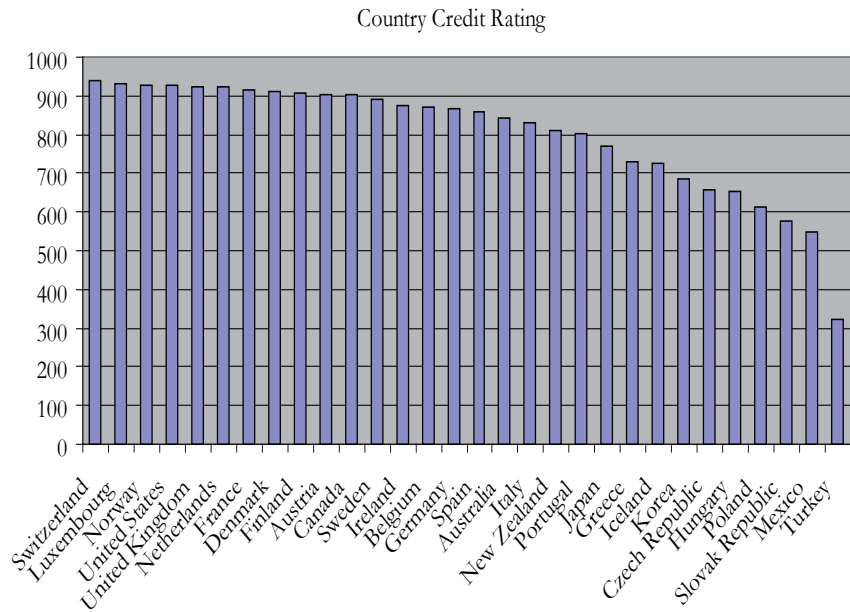
**Definition:**

The indicator measures the country credit rating, which is based on an assessment by the Institutional Investor Magazine Ranking.

The ranking goes from 1 (worst) to 100 (best).

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> Country credit rating indicates the risks of lending capital to specific countries, but it is only a <u>proxy</u> measure of the supply and accessibility of debt-capital to individual entrepreneurs.	B
	<i>b) Assessment of Policy Indicator Typology</i> The country credit rating is the <i>outcome</i> of individual investor’s assessments of each country’s credibility. Policy initiatives will only have an <u>indirect</u> impact on other people’s assessment of each country’s credibility.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is opinion-based as information is provided by senior economist and sovereign risk analysts at leading global banks and money management and securities firms.	C
	<i>b) Cross-country Comparability</i> In every country the same methodology is used.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for 60 industrialised and emerging countries.	A
	<i>b) Availability over Time</i> The indicator will be updated annually.	A

<b>Source</b>	<p>The data is published by the Institute for Management Development (IMD), Competitiveness Yearbook, Switzerland, 2004, survey no. 2.3.04, page 617.</p> <p>Original source: Institutional Investor Magazine Ranking.</p>
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### 3.13 Venture Capital - Early Stage

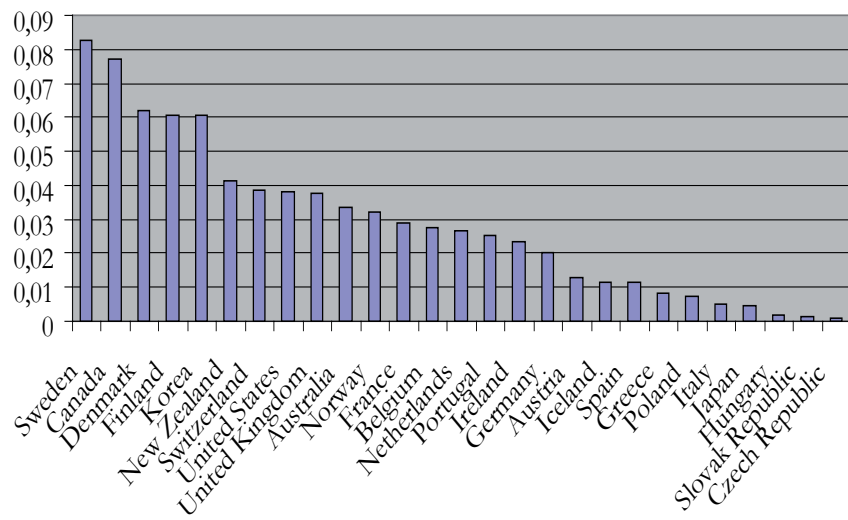
#### Definition:

The indicator measures the total early stage venture capital investment per year as a share of GDP.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i> The amount of early stage venture capital is a <u>direct</u> measure of the supply of early stage venture capital in each country.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i> Although the government can take initiatives to build up new national venture funds via direct investments, the amount of early stage venture capital is primarily the <i>outcome</i> of an efficient policy framework for venture capital markets and thus not a direct measure of the regulation per se.</p> <p>Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the outcome of regulation.</p>	B
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i> The indicator is fact-based.</p>	A
	<p><i>b) Cross-country Comparability</i> Comparable to some extent. The definition of expansion stage versus other stages may vary from country to country. The data for the US is not directly comparable to the data from the other countries as only part of the US expansion capital investment is included.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i> The indicator is available for all OECD countries.</p>	A

	<p><i>b) Availability over Time</i></p> <p>The indicator is available from 1998 to 2003. The data will not be updated every year.</p>	A
<b>Source</b>	<p>The data is published by OECD in the OECD Venture Capital database.</p> <p>For an earlier publication, see <a href="http://www.oecd.org/dataoecd/4/11/28881195.pdf">http://www.oecd.org/dataoecd/4/11/28881195.pdf</a>.</p>	

Venture Capital - Early Stage



### 3.14 Venture Capital - Expansion Stage

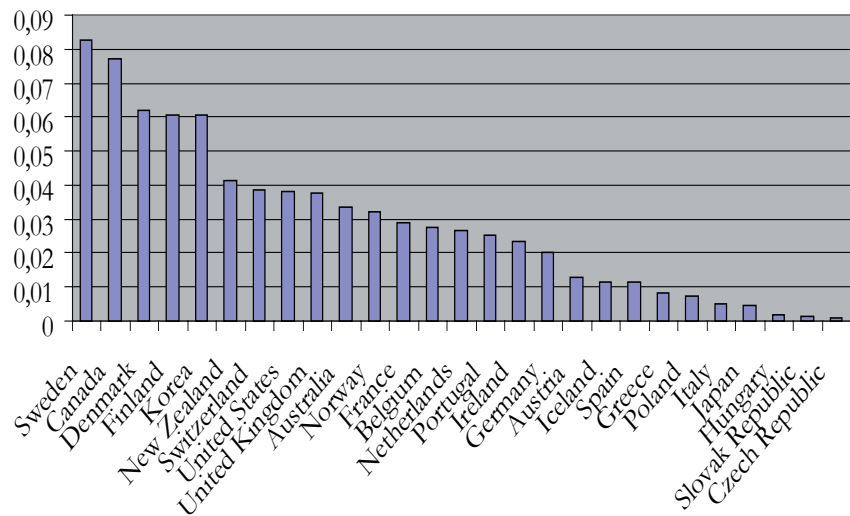
**Definition:**

The indicator measures the total expansion stage venture capital investment per year as a share of GDP.

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The amount of expansion stage venture capital is a <u>direct</u> measure of the supply of expansion stage venture capital in each country.	A
	<i>b) Assessment of Policy Indicator Typology</i> Although the government can take initiatives to build up new national venture funds via direct investments, the amount of expansion stage venture capital is primarily the <i>outcome</i> of an efficient policy framework for venture capital markets and thus not a direct measure of the regulation per se.  Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of regulation.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is fact-based.	A
	<i>b) Cross-country Comparability</i> Comparable to some extend. The definition of early stage versus other stages may vary from country to country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries.	A
	<i>b) Availability over Time</i> The indicator is available from 1998 to 2003. The data will not be updated every year.	A

<b>Source</b>	<p>The data are published by OECD in the OECD Venture Capital database.</p> <p>For an earlier publication, see <a href="http://www.oecd.org/dataoecd/4/11/28881195.pdf">http://www.oecd.org/dataoecd/4/11/28881195.pdf</a>.</p>
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Venture Capital - Early Stage



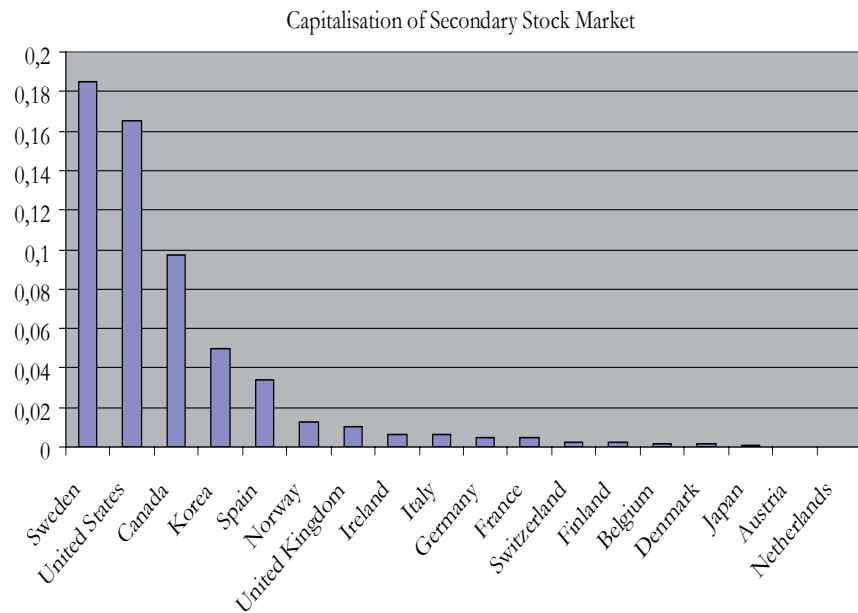
### 3.15 Capitalisation of Secondary Stock Market

#### Definition:

The indicator measures the capitalisation of the secondary stock market (the value of the issued shares on the market) in percentage of GDP.

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure of the supply and accessibility of expansion capital.  An efficient secondary stock market is a facilitator of expansion capital and indirectly a source to more capital in earlier investment phases.	A
	<i>b) Assessment of Policy Indicator Typology</i> The size of the secondary capital market is primarily the <i>outcome</i> of market-based initiatives and an efficient policy framework for stock markets. It is not a direct measure of the regulation per se.  Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of regulation.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>fact</u> -based.	B
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries.	A

	<p><i>b) Availability over Time</i></p> <p>The indicator is available for the average of year 1999 -2002.</p> <p>The data will not be updated every year, but may be updated in the future if funding is found.</p>	B
<b>Source</b>	<p>The data is published by OECD, Venture Capital: Trends and Policy Recommendations, p. 25. Available online: <a href="http://www.oecd.org/dataoecd/4/11/28881195.pdf">http://www.oecd.org/dataoecd/4/11/28881195.pdf</a>.</p>	





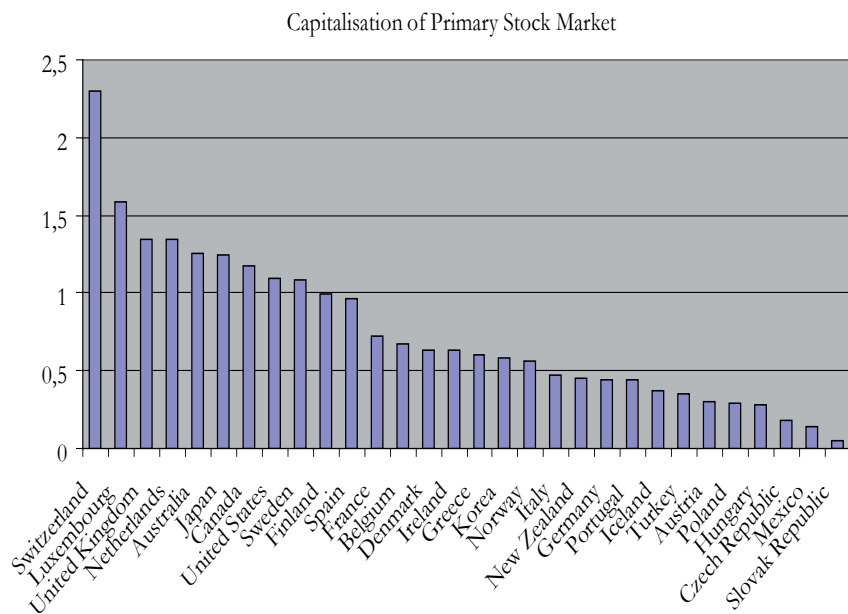
### 3.16 Capitalisation of Primary Stock Market

#### Definition

The indicator measures the capitalisation of the primary stock market (the value of the issued shares on the market) in percentage of GDP. The indicator is measured as the average of the years 1997-2001.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i></p> <p>The indicator is a <u>direct</u> measure of the supply and accessibility of expansion capital.</p> <p>An efficient primary stock market is a facilitator of access to expansion capital and indirectly a source to more capital in earlier investment phases.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>The size of the primary capital market is primarily the <i>outcome</i> of market-based initiatives and an efficient policy framework for stock markets. It is not a direct measure of the regulation <i>per se</i>.</p> <p>Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of regulation.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is fact-based and originates from the World Bank and Standard and Poor's Emerging Market Database.</p>	B
	<p><i>b) Cross-country Comparability</i></p> <p>Fully comparable.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A

	<i>b) Availability over Time</i> The indicator is fact-based for the year 2004 and will be updated annually.	A
<b>Source</b>	World Bank and Standard and Poor's Emerging Market Database. Available online: <a href="http://www.worldbank.org/research/projects/finstructure/structure_database.xls">http://www.worldbank.org/research/projects/finstructure/structure_database.xls</a> .	



### 3.17 Turnover in Primary Stock Market

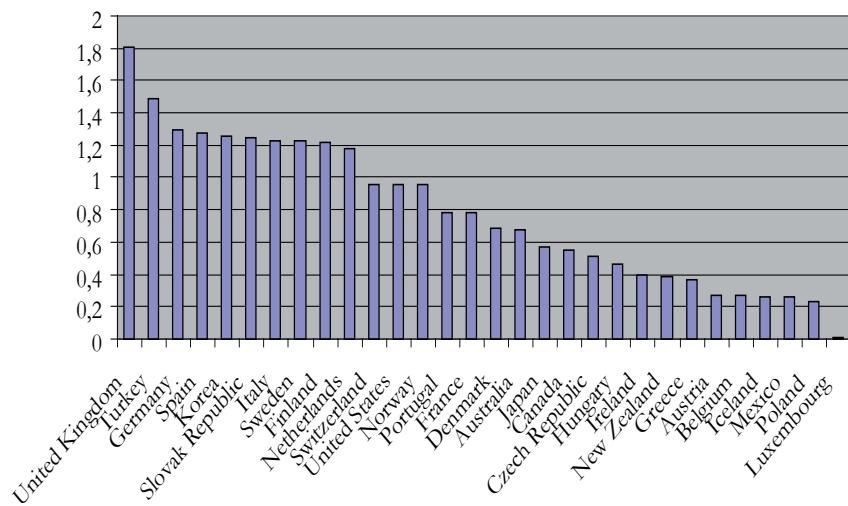
**Definition:**

The indicator measures the total shares traded on the stock market exchange in percentage of GDP. The indicator is the average of years 1997- 2001.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i></p> <p>The total number of shares traded on the stock market is an indication of the well functioning and efficiency of the capital market.</p> <p>The total number of shares is a <u>direct</u> measure of the accessibility of expansion capital via the stock market.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>The total number of shares traded on the stock market is primarily the <i>outcome</i> of market-based initiatives and an efficient policy framework for stock markets. It is not a direct measure of the regulation per se.</p> <p>Policy initiatives will only have an <u>indirect</u> impact on an indicator measuring the <i>outcome</i> of regulation.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is fact-based and originates from the World Bank and Standard and Poor's Emerging Market Database.</p>	B
	<p><i>b) Cross-country Comparability</i></p> <p>Fully comparable.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A

	<i>b) Availability over Time</i> The indicator is fact-based for the year 2004 and will be updated annually.	A
<b>Source</b>	World Bank and Standard and Poor's Emerging Market Database. Available online: <a href="http://www.worldbank.org/research/projects/finstructure/structure_database.xls">http://www.worldbank.org/research/projects/finstructure/structure_database.xls</a> .	

Turnover in Primary Stock Market



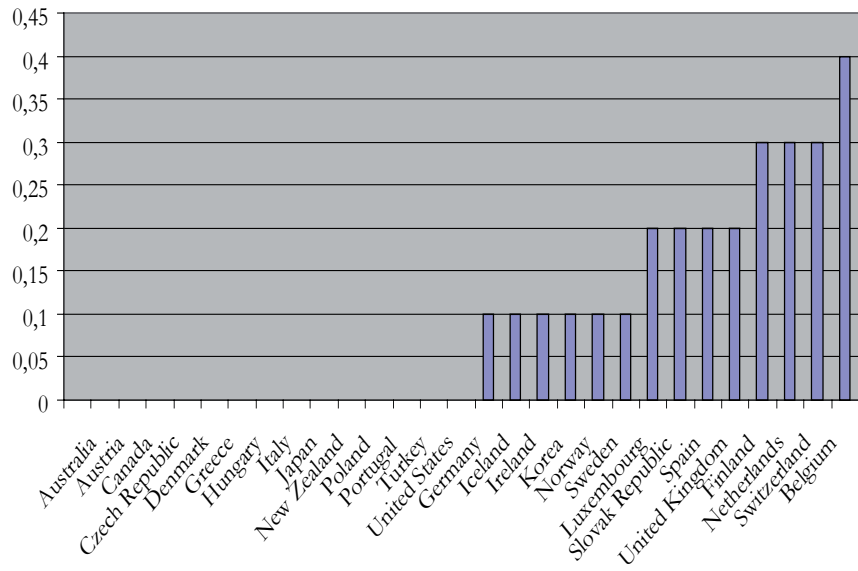
### 3.18 Revenue from Bequest Tax

**Definition:**

The indicator measures the revenue from bequest tax as percent of GDP-3 year moving average.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The revenue from bequest tax is a <u>direct</u> measure of wealth tax's negative impact on financial possibilities.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the bequest tax-rates will have a <u>direct</u> impact on the revenue from bequest tax.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is fact-based, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the OECD countries.	A
	<i>b) Availability over Time</i> The indicator is registry-based and is available for years 1965-2003. The data will be updated every year.	A
<b>Source</b>	Source OECD, Revenue Statistics. Available online: <a href="http://thesius.sourceoecd.org/vl=7366043/cl=22/nw=1/rpsv/~4018/v55n1/s13/p1">http://thesius.sourceoecd.org/vl=7366043/cl=22/nw=1/rpsv/~4018/v55n1/s13/p1</a> .	

Revenue from Bequest Tax



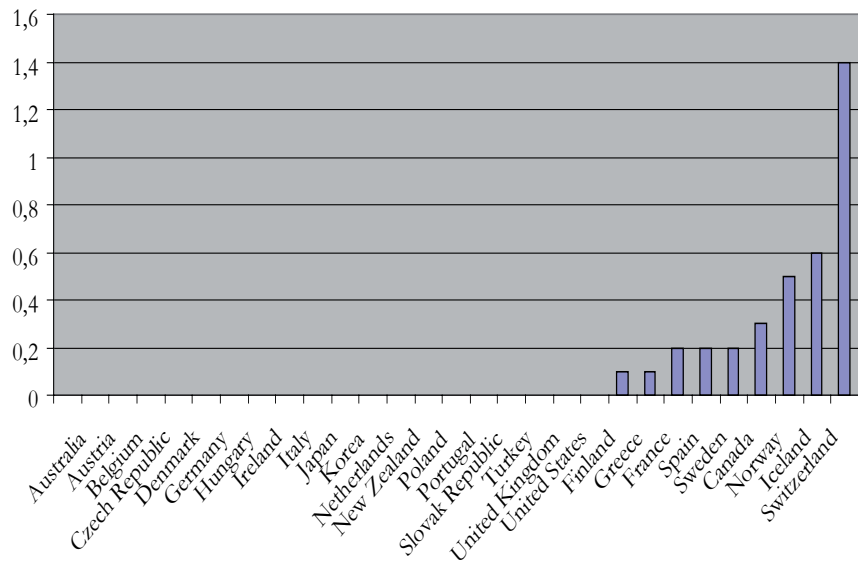
### 3.19 Revenue from Net Wealth Tax

**Definition:**

The indicator measures the revenue from net wealth tax in a 3-year moving average as a percentage of GDP.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The revenue from net wealth tax is a <u>direct</u> measure of wealth tax's negative impact on financial possibilities.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the wealth tax-rates will have a <u>direct</u> impact on the revenue from wealth tax.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is fact-based, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the OECD countries.	A
	<i>b) Availability over Time</i> The indicator is register based and is available for years 1979-2002. The data will be updated every year.	A
<b>Source</b>	Source OECD, Revenue Statistics. Available online: <a href="http://thesius.sourceoecd.org/vl=7366043/cl=22/nw=1/rpsv/~4018/v55n1/s13/p1">http://thesius.sourceoecd.org/vl=7366043/cl=22/nw=1/rpsv/~4018/v55n1/s13/p1</a> .	

Revenue from Net Wealth Tax





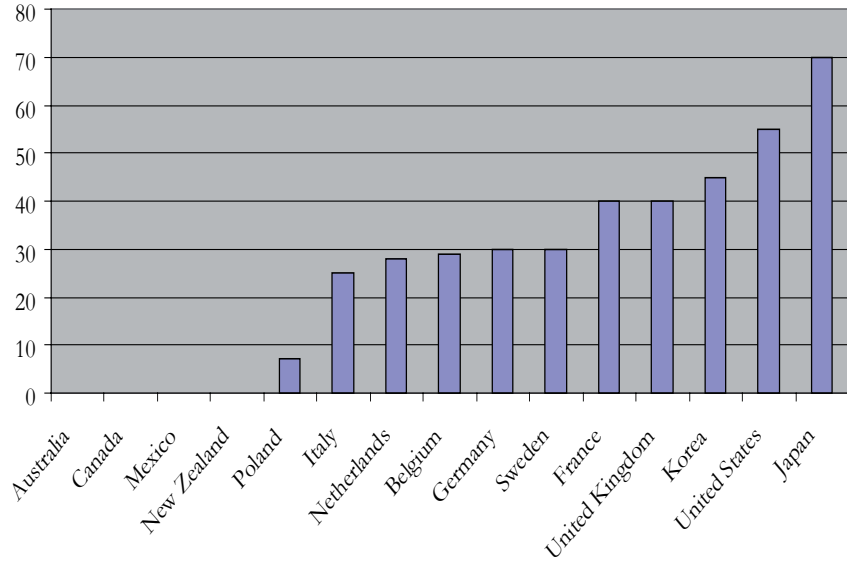
### 3.20 Top Marginal Bequest Tax Rates

**Definition:**

The indicator measures the top marginal bequest tax rates for spouses or children to the deceased.

Assessment	Grade
<b>Overall</b>	<b>B</b>
<b>1. Relevance</b> <i>a) Assesment of Relevance</i> The tax rate from bequest tax is a <u>proxy</u> measure of bequest tax's negative impact on financial possibilities. The indicator does not take into consideration tax rebates, etc.	B
	A
<b>2. Accuracy</b> <i>a) Data Collection Method</i> The indicator is <u>fact</u> -based, originating from OECD statistics.	A
<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b> <i>a) Availability across Countries</i> The indicator is available for 16 OECD countries.	B
<i>b) Availability over Time</i> The indicator is available for 1998. The data will not be updated.	B
<b>Source</b> The data is published by the OECD, Industry Issues Taxation, SMEs and Entrepreneurship, p.22. Available online: <a href="http://www.oilis.oecd.org/olis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF">http://www.oilis.oecd.org/olis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF</a> .	

Top Marginal Bequest Tax Rates



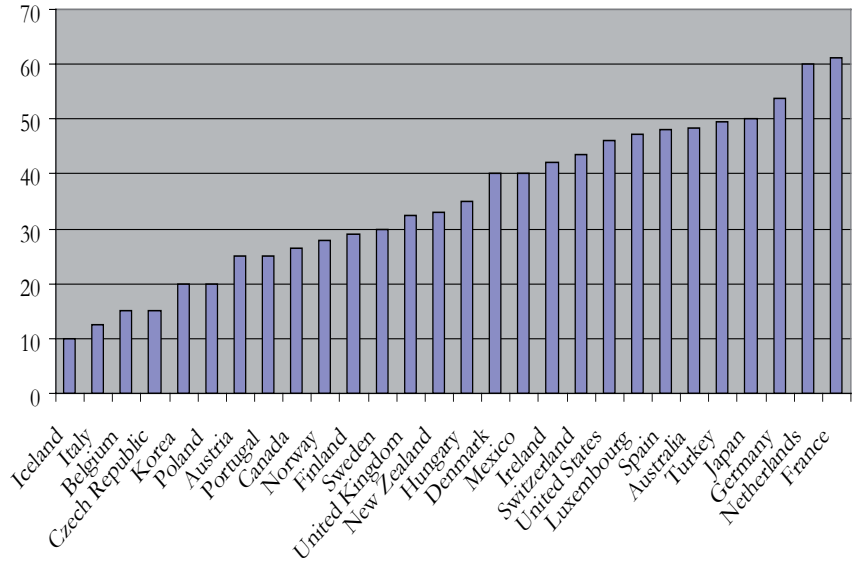
### 3.21 Taxation of Dividends - Top Marginal Tax Rate

**Definition:**

The indicator measures the top marginal tax rate of dividend income.

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The top marginal tax rate of dividend income is a <u>proxy</u> measure of the tax-rates negative impact on financial possibilities. The indicator does not take into consideration tax rebates, etc.	B
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the top marginal tax rate will have a <u>direct</u> impact on the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>fact</u> -based, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is fact-based and available for 2000, but data will not be updated annually.	B
<b>Source</b>	The data is published by the OECD, Taxation, SMEs and Entrepreneurship, 2002, p.16. Available online: <a href="http://www.oecd.org/olis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF">http://www.oecd.org/olis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF</a> .	

Taxation of Dividends – Top Marginal Tax Rate



## 3.22 Taxation of Dividends

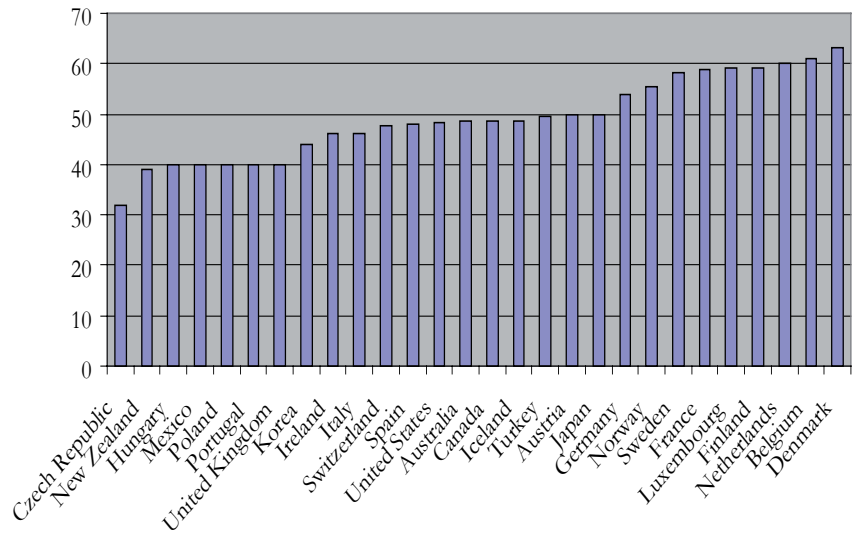
### - Top Marginal Tax Rate for the Self-employed

#### Definition:

The indicator measures the top marginal tax rates of dividend income for the self-employed.

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The top marginal tax rate of dividend income for the self-employed is a <u>proxy</u> measure of the tax rate's negative impact on financial possibilities. The indicator does not take into consideration tax rebates, etc.	B
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the top marginal tax rate will have a direct impact on the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is fact-based, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is available for the year 2000, but will not be updated annually.	B
<b>Source</b>	The data are published by OECD, Taxation, SMEs and Entrepreneurship, 2002, p.16. Available online: <a href="http://www.oilis.oecd.org/oilis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF">http://www.oilis.oecd.org/oilis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF</a> .	

Taxation of Dividends – Top Marginal Tax Rate for the Self-employed



### 3.23 Taxation of Stock Options

#### Definition:

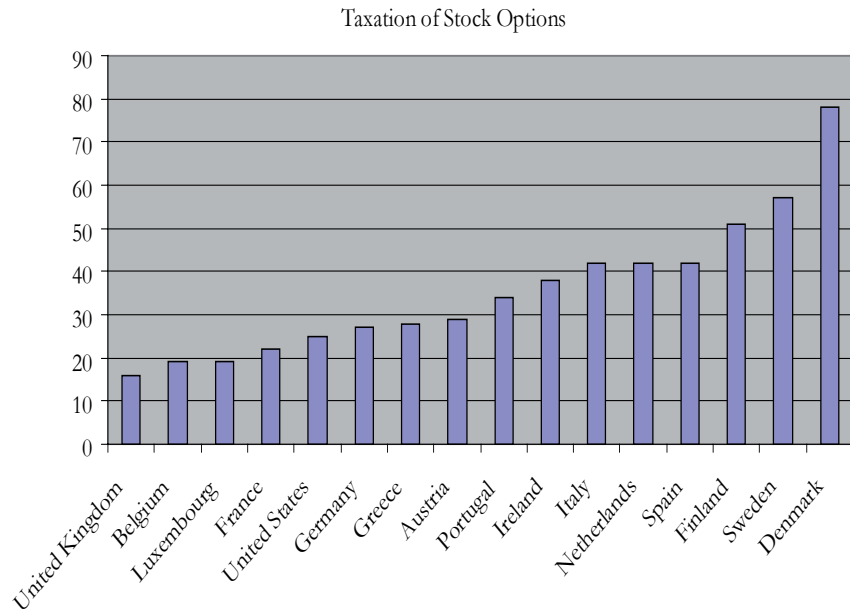
The indicator measures the effective tax rate of stock options for a hypothetical taxpayer with certain assumptions regarding income, family situation and portfolio development (Exhibit 1).

#### Exhibit 1

The effective tax rates are calculated for a married person with two children, earning 50 000 € a year and with a grant element of face value equal to 33 % of his salary. The special rates refer to promotional schemes. The calculation is based on the assumption that the employee exercises the options three years after they have been granted and keeps the shares for another two years afterwards. The calculation supposes further an average increase in the stock price of 10 % and an interest rate of 5 %. The estimated annual gross income of options is EUR 50 000. Furthermore, the employee is granted stock options representing a (at grant) stock worth of EUR 16 500.

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i></p> <p>The indicator measuring is a <u>proxy</u> measure of the negative impact of taxes on new firms' financial possibilities.</p>	B
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>Policy focused indicator. Policy initiatives reducing the taxation of stock options will have a <u>direct</u> impact on the indicator.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is a <u>fact</u>-based estimate based on Taxation of Stock Options in the EU and the US , a study prepared by Price Waterhouse Coopers for the European Commission, Enterprise Directorate-General, 2002; the estimates are still preliminary.</p>	A

	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the EU member states and US.	B
	<i>b) Availability over Time</i> The indicator is available for 2002. The data will not be updated.	B
<b>Source</b>	The data is published in Benchmarking Enterprise Policy, 2002, EU Commission. Available online: <a href="http://europa.eu.int/comm/enterprise/enterprise_policy/better_environment/doc/enterprise_policy_scoreboard_2002_en.pdf">http://europa.eu.int/comm/enterprise/enterprise_policy/better_environment/doc/enterprise_policy_scoreboard_2002_en.pdf</a> .	





## 3.24 Taxation of Capital Gains on Shares

### - Short Term

#### Definition:

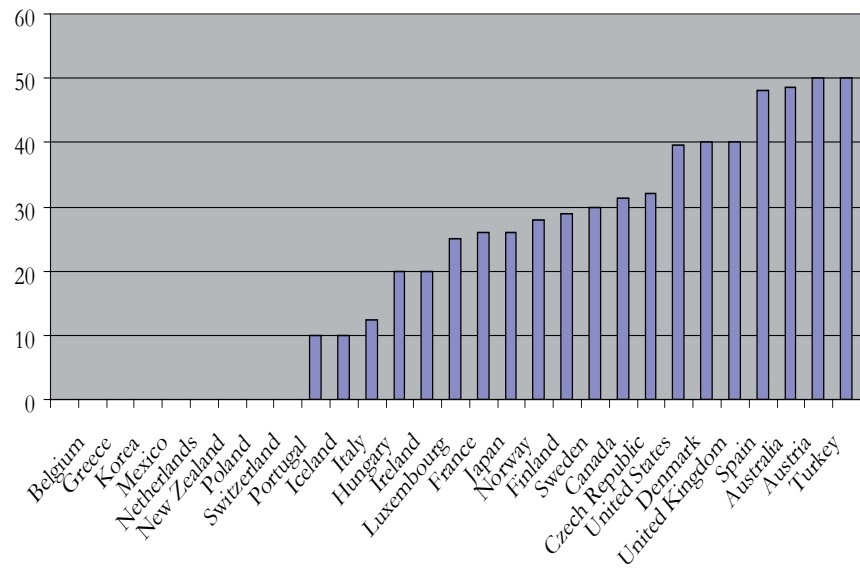
The indicator measures the level of the tax rate when shares are issued and sold in the short term.

The indicator consists of two lower level indicators: one tax rate for companies and one tax rate for individuals (both short term taxation).

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The tax rate of capital gains on shares is a <u>proxy</u> for the tax rates negative impact on financial possibilities.	B
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the taxation of capital gains on shares will have a direct impact on the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> Fact-based indicator, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Comparable to some extent. The taxation may vary across different asset types. Holding periods for short term assets differ across countries as do other conditions.	B
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is available for 2002. The data will not be updated.	B

<b>Source</b>	The data are published by OECD, Taxation, SMEs and Entrepreneurship, 2002, p. 23. Available online: <a href="http://www.oelis.oecd.org/olis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4ea738a5c1256c10004e37ec/\$FILE/JT00130282.PDF">http://www.oelis.oecd.org/olis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4ea738a5c1256c10004e37ec/\$FILE/JT00130282.PDF</a> .
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Taxation of Capital Gains on Shares – Short Term



## 3.25 Taxation of Capital Gains on Shares

### - Long Term

#### Definition:

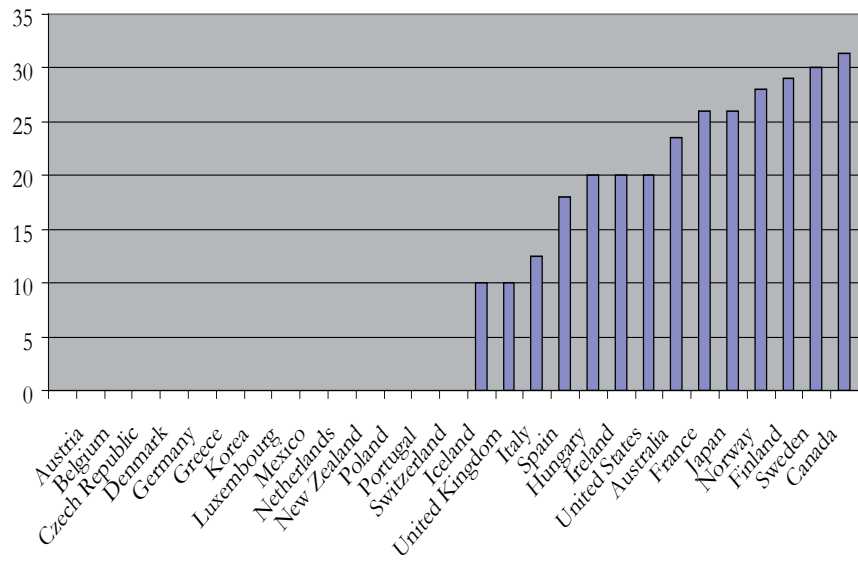
The indicator measures the level of the tax rate when shares are issued and sold in the long term.

The indicator consists of two lower level indicators: one tax rate for companies and one tax rate for individuals (both long term taxation).

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The tax rate of capital gains on shares is a <u>proxy</u> for the tax rates' negative impact on financial possibilities.	B
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the taxation of capital gains on shares will have a <u>direct</u> impact on the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact</u> -based indicator, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Comparable to some extent. The taxation may vary across different asset types. Holding periods for short term assets differ across countries as do other conditions.	B
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is fact based and available for 2000. The data will not be updated annually.	B

<b>Source</b>	The data are published by OECD, Taxation, SMEs and Entrepreneurship, 2002, p. 23. Available online: <a href="http://www.oilis.oecd.org/oilis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4ea738a5c1256c10004e37ec/\$FILE/JT00130282.PDF">http://www.oilis.oecd.org/oilis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4ea738a5c1256c10004e37ec/\$FILE/JT00130282.PDF</a> .
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Taxation of Capital Gains on shares – Long Term



## 3.26 Claims on a Bankruptee's Assets

### - Length of Time

#### Definition:

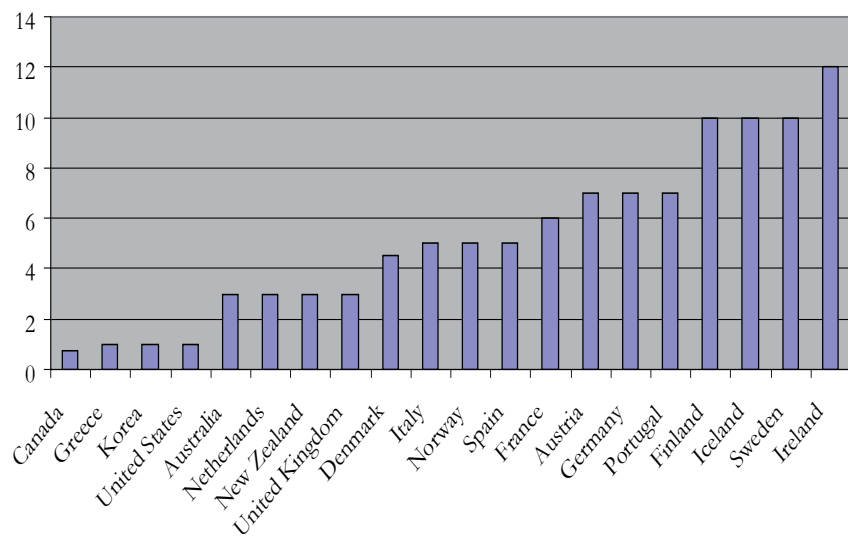
The indicator measures the time it takes to settle old debt after bankruptcy (the minimum length of time from a range of different bankruptcy cases or circumstances).

The indicator is measured for number of years. The primary source for the data is not specified.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>proxy</u> measure for the number of bankrupted entrepreneurs who are willing and able to restart. The time it takes to settle old debt will influence the number of re-starters negatively. The more years it takes to get rid of old debt the higher is the negative influence on the number of re-starters.	B
	<i>b) Assessment of Policy Indicator Typology</i> Political initiatives will have a <u>direct</u> influence of the size of the indicator as changed bankruptcy regulation may shorten the time.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> Not clear. In theory, the indicator is action-based (=B). The data comes from an OECD publication (=A), but the indicator's primary source is not specified.	A
	<i>b) Cross-country Comparability</i> Not clear. The primary source for the data is not specified.	B
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for 20 OECD countries.	B

	<i>b) Availability over Time</i> The indicator is available for year 2000.	B
<b>Source</b>	OECD report: Science, Technology and Industry Outlook, Drivers of Growth, Special Edition, 2001 p.107. Primary source: UNICE and DTI, UK. Available online: <a href="http://www1.oecd.org/publications/e-book/9201131e.pdf">http://www1.oecd.org/publications/e-book/9201131e.pdf</a> .	

Claims on a Bankruptee's Assets – Length of Time



### 3.27 Entrepreneurship Education at Primary and Secondary Levels

**Definition:**

The indicator measures the perception of entrepreneurial experts of the quantity and quality of entrepreneurship education in primary and secondary levels of the educational system.

The indicator is based on three questions that the experts are asked to answer. The ranking of the questions go from 1 (strongly disagree) to 5 (strongly agree). The indicator is a simple average of the questions (Exhibit 1).

**Exhibit 1:**

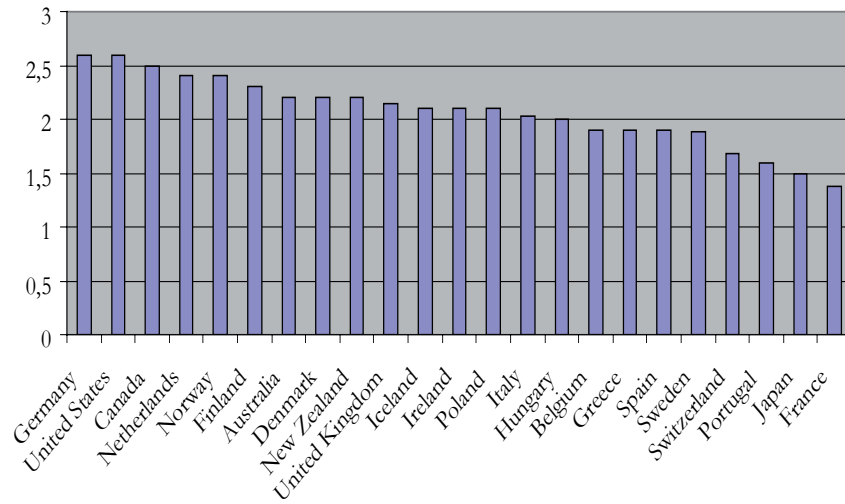
- Teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative.
- Teaching in primary and secondary education provides adequate instruction in market economic principles.
- Teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation.

Assessment		Grade
Overall		C
1. Relevance	<i>a) Assesment of Relevance</i> The quantity and quality of entrepreneurship education in higher levels of the educational system is a <u>proxy</u> measure of the quality and quantity of entrepreneurial motivated pupils in primary and secondary levels of the educational system.	B

	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>The quantity and quality of entrepreneurship education is an important <i>outcome</i> of an effective educational system and thus not a direct measure of regulation per se. Furthermore, the indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of entrepreneurial experts.</p>	B
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>opinion</u>-based. The information is provided by entrepreneurial experts' answers to a list of questions in an expert survey, which is part of the GEM/GERA project.</p>	C
	<p><i>b) Cross-country Comparability</i></p> <p>Fully comparable because the same methodology is used in all countries.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all GEM countries (the list varies from year to year; approximately, 30 countries on average).</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 1997-2004. In this time span, some divergence exists in the exact stating of the questions. The data may be updated in the future.</p>	A
<b>Source</b>	<p>The indicator is published by GEM/GERA in specific reports. Not available on the net. GEM/GERA website: <a href="http://www.gemconsortium.org">http://www.gemconsortium.org</a>.</p>	



Entrepreneurship Education at Primary and Secondary Levels



### 3.28 Entrepreneurship Education at Higher Levels

**Definition:**

The indicator measures entrepreneurial experts' perception of the quantity and quality of entrepreneurship education at higher levels of the educational system.

The indicator is based on three questions that the experts are asked to answer. The ranking of the questions go from 1 (strongly disagree) to 5 (strongly agree). The indicator is a simple average of the questions (exhibit 1).

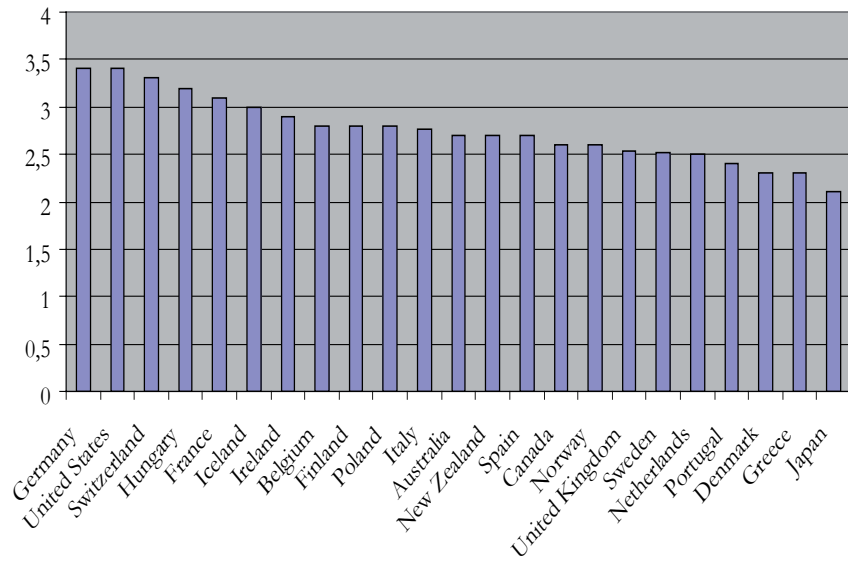
**Exhibit 1:**

- Colleges and universities have enough courses and programs on entrepreneurship.
- The level of business and management education is truly world-class.
- The business and post-graduate educations prepare the students adequately to start their own business.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The quantity and quality of entrepreneurship education in higher levels of the educational system is a <u>proxy</u> measure of the quality and quantity of entrepreneurial motivated students in higher levels of the educational system.	<b>B</b>

	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>The quantity and quality of entrepreneurship education is an important <i>outcome</i> of an effective educational system and, thus, not a direct measure of regulation <i>per se</i>. Furthermore, the indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of entrepreneurial experts.</p>	B
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>opinion</u>-based. The information is provided by entrepreneurial experts' answers to a list of questions in an expert survey, which is part of the GEM/GERA project.</p>	C
	<p><i>b) Cross-country Comparability</i></p> <p>Fully comparable because the same methodology is used in all countries.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all GEM countries (the list varies from year to year; approximately, 30 countries on average).</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 1997-2004. Some divergence exists in the exact stating of the questions through the years. The indicator may be updated.</p>	A
<b>Source</b>	<p>The indicator is published by GEM/GERA in specific reports. Not available on the net. GEM/GERA website: <a href="http://www.gemconsortium.org">http://www.gemconsortium.org</a>.</p>	

Entrepreneurship Education at Higher Levels



### 3.29 Quality of Management Schools

**Definition:**

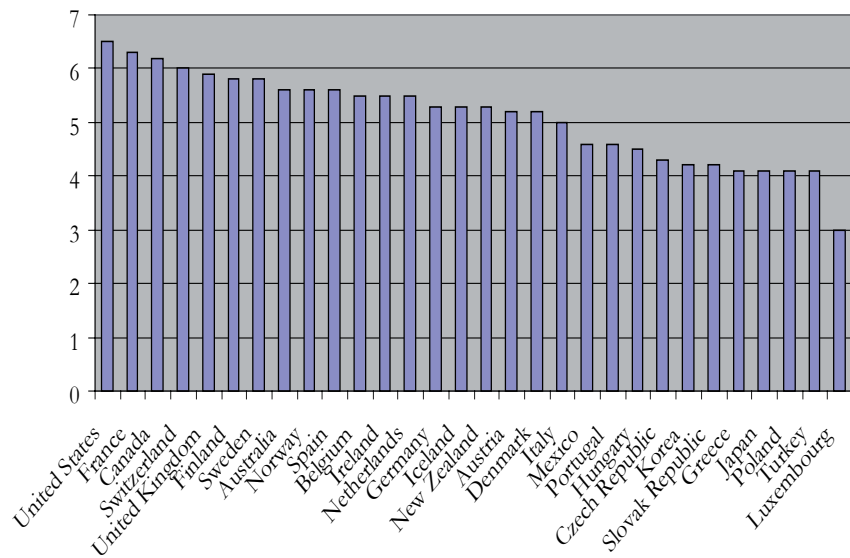
The indicator measures business executives' perception of the quality of management/ business schools.

The indicator is based on the Executive Opinion Survey, which is part of the Global Competitiveness Report. Business executives are asked to state their opinion on the quality of business schools. The ranking goes from 1 (limited or poor quality) – 7 (the best in the world).

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> High quality of management or business schools is a <u>proxy</u> measure of the quality and quantity of management and business schools students.	B
	<i>b) Assessment of Policy Indicator Typology</i> The quality of management or business schools is an important <i>outcome</i> of an effective educational system and, thus, not a direct measure of regulation <i>per se</i> . Furthermore, the indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of business executives.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>opinion</u> -based. The information is provided by leading business executives and entrepreneurs based on the Executive Opinion Survey, which is part of the Global Competitiveness Report 2003-2004.	C
	<i>b) Cross-country Comparability</i> Fully comparable because the same methodology is used in all countries.	A

<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all GEM countries (the list varies from year to year; approximately, 30 countries on average).	A
	<i>b) Availability over Time</i> The indicator is available for 1997-2004. Some divergence exists in the exact stating of the questions through the years. The indicator may be updated.	A
<b>Source</b>	<i>The Global Competitiveness Report 2003-2004, World Economic Forum, no 10.16 page 545.</i>	

Quality of Management Schools



### 3.30 Government Programmes

**Definition:**

The indicator measures entrepreneurial experts' perception of government programmes created at all levels of government (national, regional, municipal level) in order to assist new and growing firms.

The indicator is based on five questions that the experts are asked to answer. The ranking of the questions go from 1 (strongly disagree) to 5 (strongly agree). The indicator is a simple average of the questions (exhibit 1).

**Exhibit 1:**

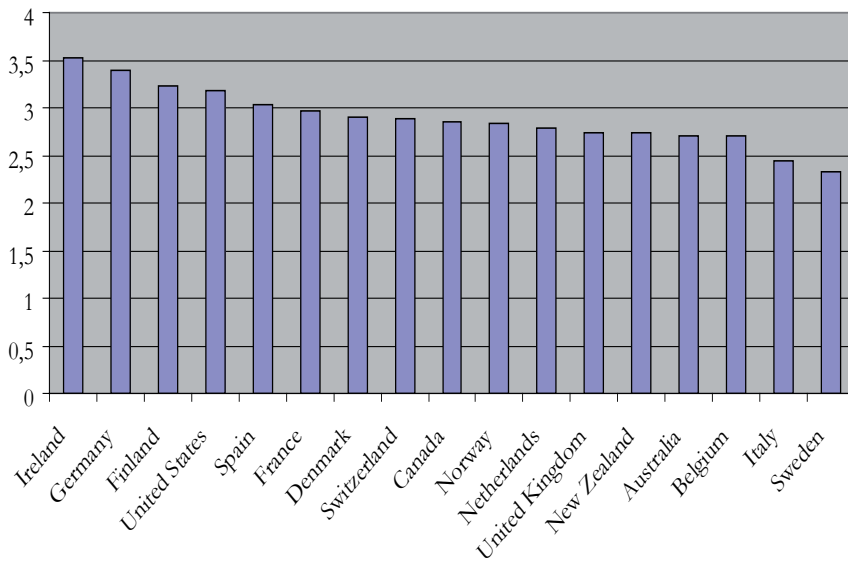
- The range of government assistance for new and growing firms can be obtained through contact with a single agency.
- Government sponsored incubators provide effective support for new and growing firms.
- There is an adequate number of government programs for new or growing businesses.
- The people working for government agencies are competent and effective in supporting new and growing firms.
- Persons who need help can find the necessary support.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The quantity and quality of governmental support programs is a <u>proxy</u> measure of the quality and supply of tightly stitched regional networks of skilled, experienced and specialised advisors.	B

	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>The quantity and quality of governmental programs is an important <i>outcome</i> of an effective public and market-based entrepreneurship-assistance system and, thus, not a direct measure of regulation <i>per se</i>. Furthermore, the indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of entrepreneurial experts.</p>	B
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The data is <u>opinion</u>-based. The information is provided by entrepreneurial experts' answers to a list of questions in an expert survey which is part of the GEM/GERA project.</p>	C
	<p><i>b) Cross-country Comparability</i></p> <p>Fully comparable because the same methodology is used in all countries.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all GEM countries (the list varies from year to year; approximately 30 countries on average).</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 1997-2004. Some divergence exists in the exact stating of the questions through the years. The indicator may be updated.</p>	A
<b>Source</b>	<p>The indicator is published by GEM/GERA in specific reports. Not available on the net. GEM/GERA website: <a href="http://www.gemconsortium.org">http://www.gemconsortium.org</a>.</p>	



Government Programmes



### 3.31 Highest Marginal Income Tax

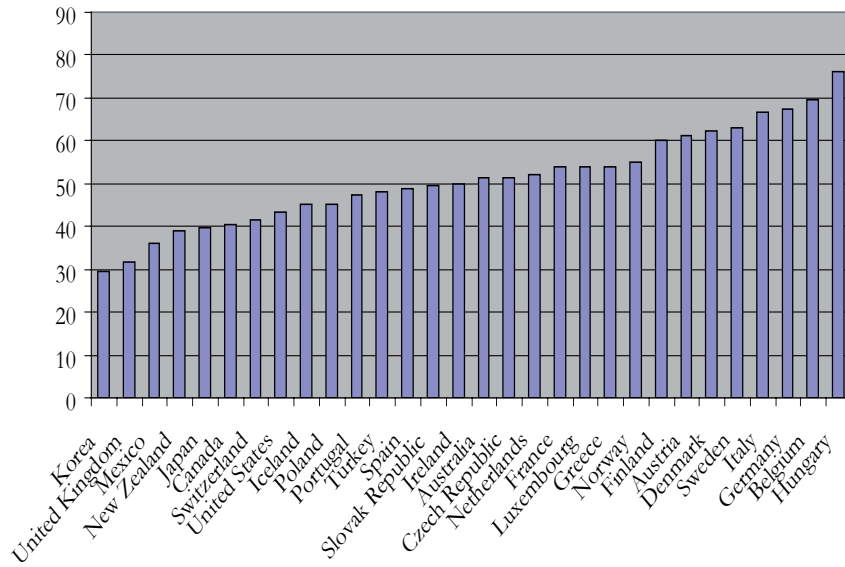
#### plus Social Contributions

##### Definition:

The indicator measures the highest rate of taxation in percentage of the gross wage. The indicator is based on a standard case: single (without children) with high income.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The level of personal income taxes are expected to have a <u>direct</u> influence on the benefit side of the cost/benefit equation as entrepreneurs will reap a larger share of the benefit with lower tax rates.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the rate will have a <u>direct</u> impact on the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact</u> -based indicator, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries.	A
	<i>b) Availability over Time</i> The indicator is based on a registry and is available for 2002. The data will be updated every year.	A
<b>Source</b>	The data is published by the OECD, <i>Taxing wages 2001-2002</i> , p. 85.	

Highest Marginal Income Tax plus Social Contributions



## 3.32 Average Income Tax

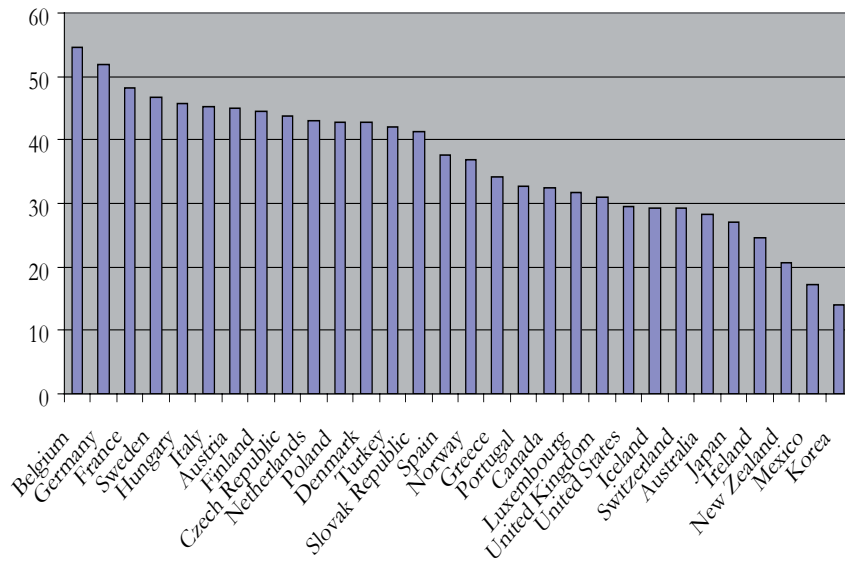
### plus Social Contributions

#### Definition:

The indicator measures the average rate of taxation in percentage of the gross wage. The indicator is based on a standard case: single (without children) with high income.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The level of personal income taxes are expected to have a <u>direct</u> influence on the benefit side of the cost/benefit equation as entrepreneurs will reap a larger share of the benefit in case lower tax rates.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Policy initiatives reducing the rate will have a <u>direct</u> impact on the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact</u> -based indicator, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries.	A
	<i>b) Availability over Time</i> The indicator is based on a registry and is available for 2002. The data will be updated every year.	A
<b>Source</b>	The data is published by the OECD, <i>Taxing wages 2001-2002</i> , p. 85.	

Average Income Tax plus Social Contributions



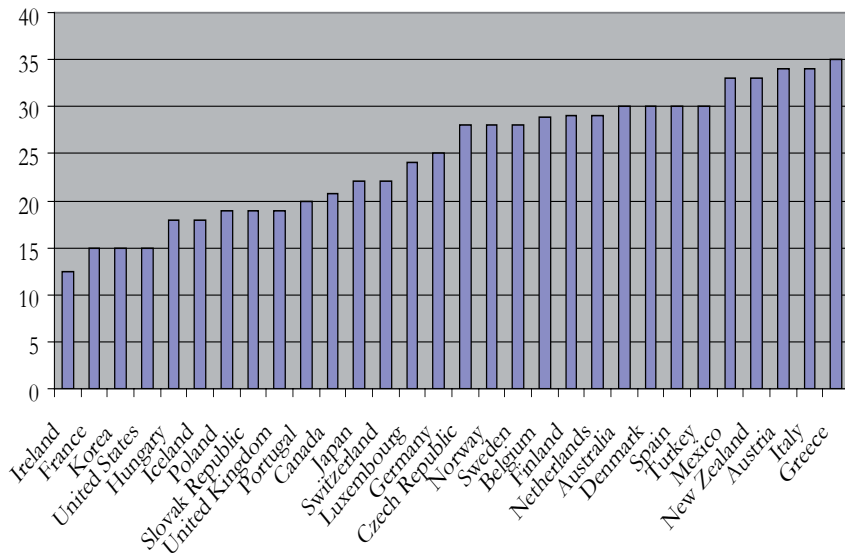
### 3.33 SME Tax Rates

**Definition:**

The indicator measures the corporate SME tax rate.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The corporate SME tax rate is a <u>direct</u> measure of the incentives to create companies as entrepreneurs will reap a larger share of the benefit in the case of lower tax rates. The indicator measures the tax level for SMEs and not for new companies.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Political initiatives will have a direct influence on the tax rate for SMEs.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is fact-based, originating from OECD <u>statistics</u> .	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries.	A
	<i>b) Availability over Time</i> The indicator is available for 2000 and 2004. It is unclear if the indicator will be updated in the future.	B
<b>Source</b>	The data is published by the OECD, <i>Industry Issues Taxation, SMEs and Entrepreneurship</i> , p 13. Available online: <a href="http://www.oilis.oecd.org/oilis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF">http://www.oilis.oecd.org/oilis/2002doc.nsf/43bb6130e5e86e5fc12569fa005d004c/2137ebc4eaa738a5c1256c10004e37ec/\$FILE/JT00130282.PDF</a> .	

SME Tax Rates



### 3.34 Taxation of Corporate Income Revenue

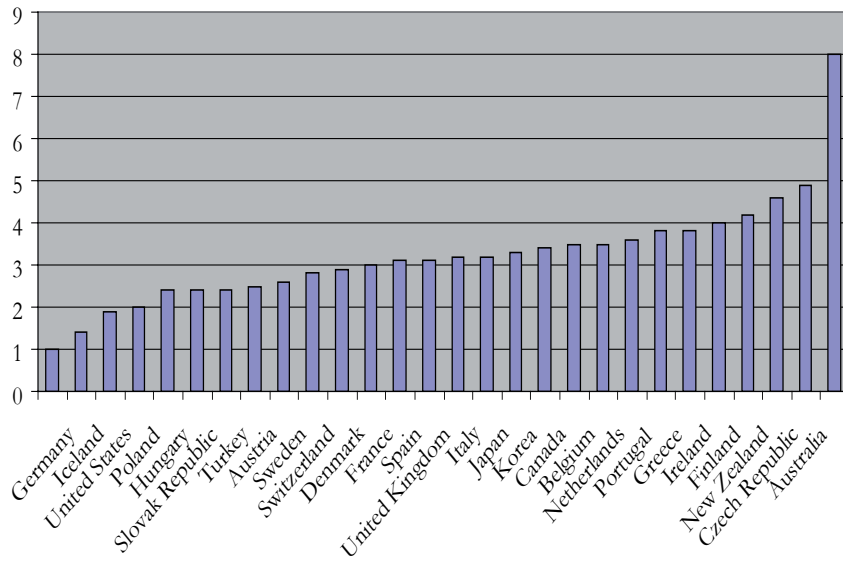
#### Definition:

The indicator measures the revenue from corporate income tax as percentage of GDP on a three year moving average.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The amount of corporate tax revenue is a <u>direct</u> measure of one of the incentives to create high growth companies as entrepreneurs will reap a larger share of the benefit in the case of lower tax rates.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing formal regulation concerning corporate tax rates will have a <u>direct</u> influence of the size of the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>fact</u> - based, originating from OECD statistics.	A
	<i>b) Cross-country Comparability</i> Fully comparable.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the OECD countries.	A
	<i>b) Availability over Time</i> The indicator is based on a registry and is available for years 1979-2002. The data will be updated every year.	A
<b>Source</b>	The data is published by the OECD: <i>Tax Revenue as Percent of GDP-3 year Moving Average</i> , Vol. 2004. Available online: <a href="http://juno.sourceoecd.org/vl=641507/cl=40/nw=1/rpsv/~4018/v55n1/s13/p1">http://juno.sourceoecd.org/vl=641507/cl=40/nw=1/rpsv/~4018/v55n1/s13/p1</a> .	



Taxation of Corporate Income Revenue



### 3.35 Actual Cost to Close a Business

**Definition:**

The indicator measures the actual cost to close a business. The cost is measured in percent of estate, based on a standard business closure (Exhibit 1).

**Exhibit 1**

This indicator assumes that the business:

- is a limited liability company;
- operates in the country's most populous city;
- is 100 percent domestically-owned, of which 51 percent is owned by its founder, who is also the chairman of the supervisory board (aside from the founder, there is no other shareholder who has above 1 percent of shares);
- has downtown real estate as its major asset, on which it runs a hotel;
- has a professional general manager;
- has average annual revenue of 1,000 times income per capita over the last three years;
- has 201 employees, and 50 suppliers, each supplier is owed money for the last delivery;
- borrowed from a domestic bank five years ago (the loan has 10 years to full repayment) and bought real estate (the hotel building), using it as a security for the bank loan;
- has observed the payment schedule and all other conditions of the loan up to now; and
- has a mortgage with the current value of the mortgage principal being exactly equal to the market value of the hotel.

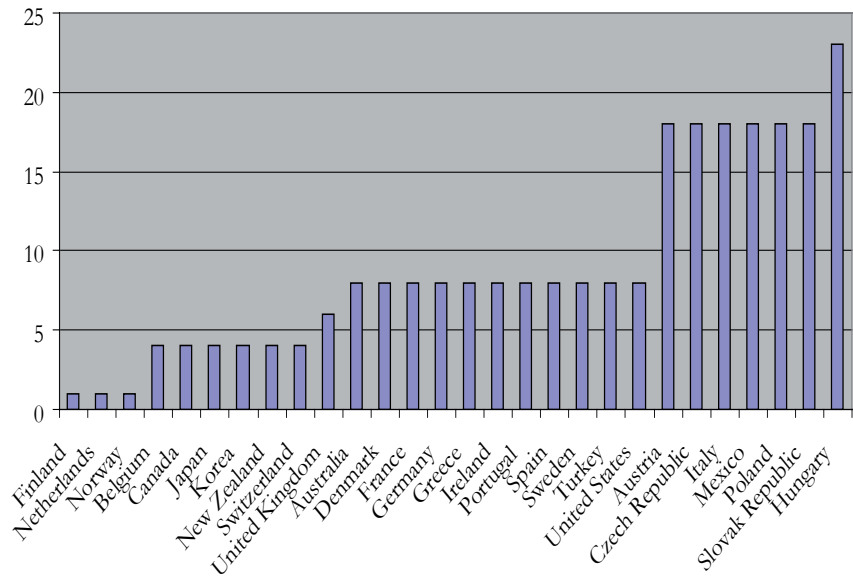
It also assumes the following with regard to business closure

- In January 2004, the business experiences liquidity problems. The company's loss in 2003 brought its net worth to a negative figure. There is no cash to pay the bank either through interest or principal in full, due on January 2, 2004. Therefore, the business defaults on its loan. Management believes that losses will be incurred in 2004 and 2005 as well.
- The bank holds a floating charge against the hotel in countries where floating charges are possible. If the law does not permit a floating charge, some contracts may nevertheless use some other provision to that effect. This provision would be specified in the lending contract.
- The business has too many creditors to renegotiate out of court. Its options are: a procedure aimed at rehabilitation or any procedure that will reorganise the business to permit continue operation; a procedure aimed at liquidation; or selling the hotel, either as a going concern or piecemeal, either enforced through a court (or a government authority like a debt collection agency) or through out of court procedure (receivership).

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The indicator measures the potential costs of closing a business based on a standard case with a company with 201 employees. The indicator can thus only be a <u>proxy</u> measure for the potential costs for an entrepreneurial company as such companies seldom have more that 200 employees.	B
	<i>b) Assessment of Policy Indicator Typology</i> Policy implication focused indicator. A <u>direct</u> measure for policy instrument. Changing formal regulation will have a direct influence of the costs of closing a company.	A

<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i>  <u>Action</u>-based indicator coming from the World Bank. The cost figures are averages of the estimates in a multiple-choice question. Respondents are required to choose among the following options: 0-2 percent, 3-5 percent, 6-10 percent, 11-15 percent, 16-20 percent, 21-25 percent, 26-50 percent, and more than 50 percent of the estate value of the bankrupt business.</p>	B
	<p><i>b) Cross-country Comparability</i>  The same methodology is used in every country.  The data are derived from survey responses by local law firms, all members of the International Bar Association. Answers were provided by a senior partner at each firm, in co-operation with one or two junior associates.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i>  The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i>  The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p>The data is published by the World Bank <i>Doing Business, 2004</i>. Efficiency in Bankruptcy, an ongoing research project by Simeon Djankov, Oliver Hart, Tatiana Nenova, and Andrei Schleifer. Available online: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/ClosingBusiness/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/ExploreTopics/ClosingBusiness/CompareAll.aspx</a>.</p>	

Actual Cost to Close a Business



### 3.36 Actual Time to Close a Business

**Definition:**

The indicator measures the time it takes to close a business. Time is recorded in calendar years. The indicator is based on a standard business closure (Exhibit 1).

**Exhibit 1**

This indicator assumes that the business:

- is a limited liability company;
- operates in the country's most populous city;
- is 100 percent domestically owned, of which 51 percent is owned by its founder, who is also the chairman of the supervisory board (aside from the founder, there is no other shareholder who has above 1 percent of shares);
- has downtown real estate as its major asset, on which it runs a hotel;
- has a professional general manager;
- has average annual revenue of 1,000 times income per capita over the last three years;
- has 201 employees, and 50 suppliers, each supplier is owed money for the last delivery;
- borrowed from a domestic bank five years ago (the loan has 10 years to full repayment) and bought real estate (the hotel building), using it as a security for the bank loan;
- has observed the payment schedule and all other conditions of the loan up to now; and
- has a mortgage with the current value of the mortgage principal being exactly equal to the market value of the hotel.

It also assumes the following with regard to business closure

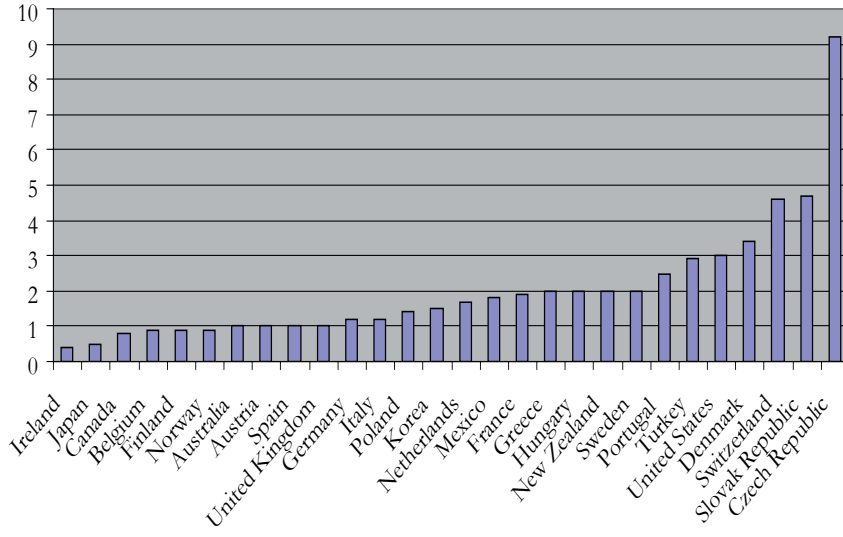
- In January 2004, the business experiences liquidity problems. The company's loss in 2003 brought its net worth to a negative figure. There is no cash to pay the bank either through interest or principal in full, due on January 2, 2004. Therefore, the business defaults on its loan. Management believes that losses will be incurred in 2004 and 2005 as well.
- The bank holds a floating charge against the hotel in countries where floating charges are possible. If the law does not permit a floating charge, some contracts may nevertheless use some other provision to that effect. This provision would be specified in the lending contract.
- The business has too many creditors to renegotiate out of court. Its options are: a procedure aimed at rehabilitation or any procedure that will reorganise the business to permit continue operation; a procedure aimed at liquidation; or selling the hotel, either as a going concern or piecemeal, either enforced through a court (or a government authority like a debt collection agency) or through out of court procedure (receivership).

Assessment		Grade
<b>Overall</b>		<b>B</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The indicator measures the time of closing a business based on a standard case with a company with 201 employees. The indicator can thus only be a <u>proxy</u> measure for the potential costs for an entrepreneurial company as entrepreneurial companies seldom have more that 200 employees.	B
	<i>b) Assessment of Policy Indicator Typology</i> Policy implication focused indicator. A <u>direct</u> measure for policy instrument. Changing formal regulation will have a direct influence of the time it takes to close a company.	A

<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p><u>Action</u>-based indicator, stemming from the World Bank.</p> <p>The cost of the bankruptcy proceedings is calculated based on answers by practicing insolvency lawyers. If several respondents report different estimates, the median reported value is used.</p>	B
	<p><i>b) Cross-country Comparability</i></p> <p>In every country the same methodology is used.</p> <p>The data are derived from survey responses by local law firms, all members of the International Bar Association. Answers were provided by a senior partner at each firm, in co-operation with one or two junior associates.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p>The data is published by the World Bank, <i>Doing Business, 2004: Efficiency in Bankruptcy</i>, an ongoing research project by Simeon Djankov, Oliver Hart, Tatiana Nenova, and Andrei Schleifer. Available online: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/ClosingBusiness/CompareAll.aspx">http://rru.worldbank.org/DoingBusiness/ExploreTopics/ClosingBusiness/CompareAll.aspx</a>.</p>	



Actual Time to Close a Business



### 3.37 Number of Procedures for Starting a Business

#### **Definition:**

The Number of procedures indicator records all generic procedures that are officially required for an entrepreneur to start an industrial or commercial business. These include obtaining all necessary licenses and permits, and completing any required notifications, verifications or inscriptions with relevant authorities for a new company (Exhibit 1).

#### **Exhibit 1**

The indicator assumes the following with regard to procedures:

- A procedure is any interaction between the company founder and external parties (government agencies, lawyers, auditors, notaries, etc.). Interactions between company founders or company officers and employees are not considered separate procedures.
- The founders complete all procedures themselves, without middlemen, facilitators, accountants, lawyers, etc., unless law mandates the use of third parties.
- Procedures that are not required by law for starting a business are ignored. For example, obtaining exclusive rights over the company name is not counted in a country where businesses may use a number as identification.
- Shortcuts are counted only if they fulfil three criteria: they are legal and available to the general public, and are used because avoiding them causes substantial delays.
- Only procedures required of all businesses are covered. Industry-specific procedures are excluded. For example, procedures to comply with environmental regulations are included only when they apply to all businesses.
- Procedures that the company undergoes to connect to electricity, water, gas, and waste-disposal services are not included, unless they entail inspections required prior to starting operations.

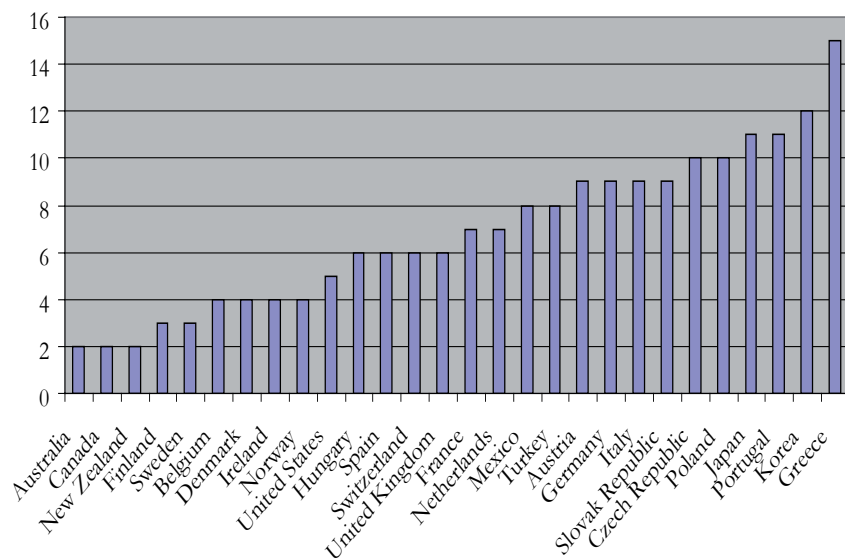
The indicator assumes that the new business:

- is a limited liability company. If there is more than one type of limited liability company in the country, the most popular limited liability form among domestic firms is chosen. Information on the most popular form is obtained from incorporation lawyers or the statistical office,
- operates in the country's most populous city,
- is 100 percent domestically owned and has five owners, none of whom is a legal entity,
- has a start-up capital of 10 times income per capita at the end of 2003, paid in cash,
- performs general industrial and/or commercial activities, such as producing or selling products or services to the public. It does not perform activities related to foreign trade and does not handle products subject to a special tax regime, for example liquor or tobacco. The business does not use heavily polluting production processes,
- leases the commercial plant and offices and is not a proprietor of real estate,
- does not qualify for investment incentives or any special benefits,
- has up to 50 employees one month after the commencement of operations, all of them nationals,
- has a turnover at least 100 times income per capita, and
- has a company deed 10 pages long

Assessment		Grade
Overall		A
1. Relevance	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure of the administrative burdens resulting from the process of becoming an entrepreneur.	A

	<p><i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing formal regulation will have a <u>direct</u> impact on the number of procedures for starting a company.</p> <p>Policies easing the administrative burdens include initiatives relaxing the legal requirements needed to start and run a company including the legal regulations related to hiring employees, meeting environmental standards, exporting, making annual accounts and other types of compulsory duties.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i> The indicator is <u>fact</u>-based. In every country the same methodology is used.</p>	A
	<p><i>b) Cross-country Comparability</i> Fully comparable.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i> The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p>World Bank, Doing Business: Starting a Business (2004). Available online: <a href="http://rru.worldbank.org/Doing-Business/ExploreTopics/StartingBusiness/Compare-All.aspx">http://rru.worldbank.org/Doing-Business/ExploreTopics/StartingBusiness/Compare-All.aspx</a>, with citing to Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer in <u>The Regulation of Entry (PDF)</u>, Quarterly Journal of Economics, 117, pp. 1-37, Feb. 2002.</p>	

Number of Procedures for Starting a Business



### 3.38 Number of Days for Starting a Business

#### Definition:

This indicator measures the average time spent during each enterprise start-up procedure. Time is recorded in calendar days based on standard assumptions about time; the company and procedure (see description of number of procedures for starting a business indicator for at description of assumptions, etc.).

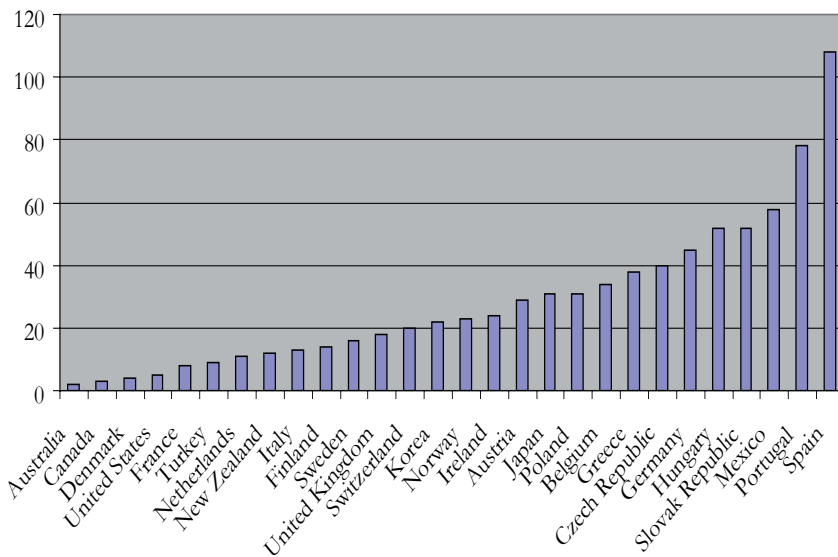
Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure of the administrative burdens resulting from the process of becoming an entrepreneur.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing formal regulation will have a <u>direct</u> impact on the amount of time needed to fulfill each procedure in the business start-up stage.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>fact</u> -based.	A
	<i>b) Cross-country Comparability</i> Fully comparable. The same methodology is used in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.	A
	<i>b) Availability over Time</i> The indicator is available for 2004 and will be updated annually.	A

**Source**

World Bank, Doing Business: Starting a Business (2004).

Available online: <http://rru.worldbank.org/Doing-Business/ExploreTopics/StartingBusiness/Compare-All.aspx>, with citing to Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer in The Regulation of Entry (PDF), Quarterly Journal of Economics, 117, pp. 1-37, Feb. 2002.

Number of Days for Starting a Business



### 3.39 Costs Required to Start a Business

#### Definition:

The indicator measures the official cost of each procedure in percentage of GNI per capita based on formal legislation and standard assumptions about business and procedure (see description of Number of procedures for starting a business indicator for at description of assumptions, etc.).

The indicator measures only the politically influenced costs of starting a business.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure of the administrative burdens resulting from the process of becoming an entrepreneur.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing formal regulation will have a <u>direct</u> impact on the costs to fulfill each procedure for starting a company.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>fact</u> -based.	A
	<i>b) Cross-country Comparability</i> Fully comparable. The same methodology is used in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.	A
	<i>b) Availability over Time</i> The indicator is available for 2004 and will be updated annually.	A

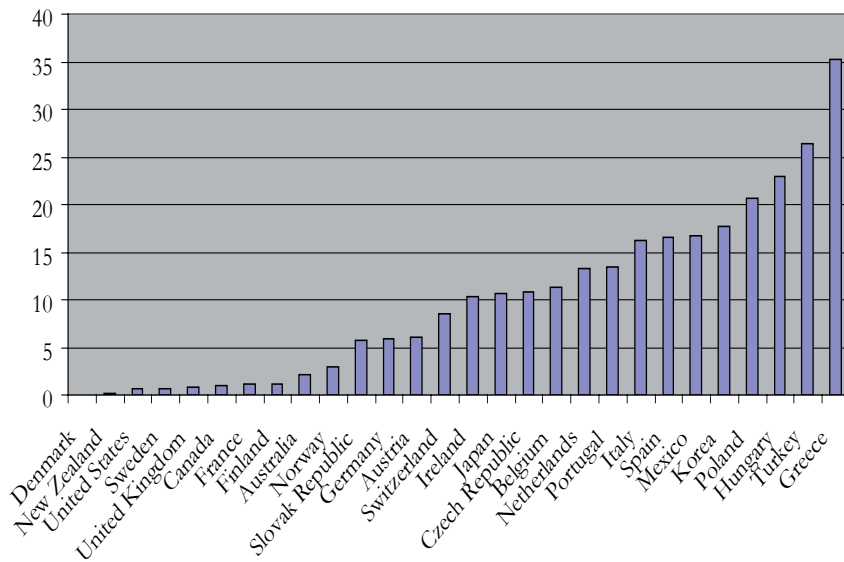


**Source**

World Bank, Doing Business: Starting a Business (2004).

Available online: <http://rru.worldbank.org/Doing-Business/ExploreTopics/StartingBusiness/Compare-All.aspx>, with citing to Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer in The Regulation of Entry (PDF), Quarterly Journal of Economics, 117, pp. 1-37, Feb. 2002.

Costs Required to Start a Business



### 3.40 Regulatory and Administrative Opacity

#### Definitions:

The *regulatory and administrative opacity index* consists of two components: information on licenses and permits system, and communication and simplification of rules and procedures in at least some markets in 24 manufacturing and service sectors.

*Information on Licenses and permits systems* reflects the use of ‘one-stop shops’ and ‘silence is consent’ rules for getting information on and issuing licenses and permits. This component is based on fact-based questions (Exhibit 1).

#### Exhibit 1 Low-level Indicator: Licenses and Permits System

Licenses and Permits System	Question Weights (c <sub>k</sub> )	Coding of answers	
		Yes	No
The ‘silence is consent’ rule (i.e. that licenses are issued automatically if the competent licensing office has not acted by the end of the statutory response period) is used.	1/3	0	6
There are single contact points (one-stop-shops) for getting information on notifications and licenses.	1/3	0	6
There are single contact points (one-stop shops) for issuing or accepting on notifications and licenses.	1/3	0	6

*Communication and simplification of rules and procedures* reflects a government’s communication strategy and efforts to reduce and

simplify the administrative burden of interacting with government.

**Exhibit 2. Low-level Indicators: Communication and Simplification of Rules and Procedures**

Respondents are asked if:	Question Weights (c <sub>k</sub> )	Coding of answers	
		Yes	No
<b>Communication</b>	1/2		
There are systematic procedures for making regulations known and accessible to affected parties.	2/12	0	6
There is a general policy requiring plain language drafting of regulation.	1/3	0	6
There are enquiry points where affected or interested foreign parties can get information on the operation and enforcement of regulations.	3/12	0	6
Affected parties have the right to appeal against adverse enforcement decisions in individual cases.	4/12	Yes or in all cases 0	In some cases 3 No 6
Government policy imposes specific requirements in relation to transparency/freedom of information throughout public administration.	2/12	Go-vern-ment Wide 0	For some sectors 3 No 6

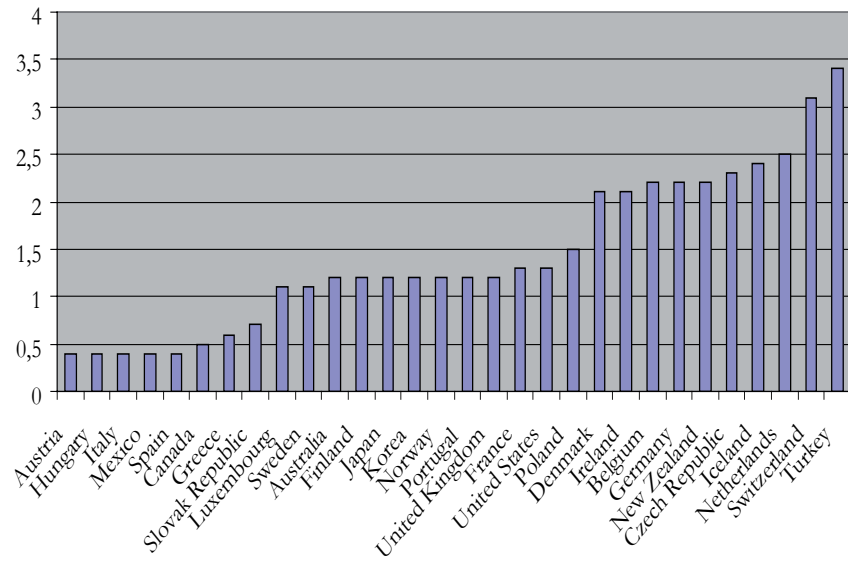
Simplification	$\frac{1}{2} * W_i / \text{Max}W_{98}$		
National government (all ministries and agencies) keeps a complete count of the number of permits and licenses required.	1/3	0	6
There is an explicit programme to reduce the administrative burdens imasked by government on enterprises and/or citizens.	1/3	0	6
There is a programme underway to review and reduce the number of licenses and permits required by the national government.	1/3	0	6

*Licenses and permits system and communication* is allocated a weight of 0,55 in the regulatory and administrative opacity, which is indexed against 0,45 for the indicator of *simplification of rules and procedures* (OECD, ECO/WPK(2005)6, p. 8).

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The lack of opacity in the administrative legislation concerning starting and managing a business is a <u>direct</u> measure of the administrative burdens resulting from starting of a business.	A

	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. A <u>direct</u> measure for a policy instrument. Changing formal regulation concerning licenses and permits system, and communication and simplification of rules and procedures will have <u>direct</u> influence of the size of the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact</u> based indicator. It does not focus on informal regulatory practices or enforcement practices.	A
	<i>b) Cross-country Comparability</i> Fully comparable – fact-based questions collected and computed using the same methodology for all countries.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most of the OECD countries (30 countries).	A
	<i>b) Availability over Time</i> The indicator is available for years 1998 and 2003. The data will not be updated annually; however some of the data may be updated at a later stage.	B
<b>Source</b>	The data is published in the OECD report, ECO/WKP(1999)18. Available online: <a href="http://www.oilis.oecd.org/oilis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF">http://www.oilis.oecd.org/oilis/1999doc.nsf/c16431e1b3f24c0ac12569fa005d1d99/5ef586bbe13dd52ac125684a003a8da0/\$FILE/00075836.PDF</a> .  New data: ECO/WKP(2005)6.	

Regulatory and Administrative Opacity



### 3.41 Enforcing Contracts - Number of Procedures

#### **Definition:**

The indicator measures the number of procedures mandated by law or court regulation that require interaction between the concerned parties or between them and the judge, administrator or court officer (Exhibit 1).

Exhibit 1

#### **Exhibit 1**

The data is built following the step-by-step evolution of a payment dispute either before local courts or through an administrative process, if such a process is available and preferred by creditors. The data is collected through research of the codes of civil procedures and other court regulations, as well as surveys to local litigation lawyers. At least two lawyers participate in each country and in a quarter of the countries judges complete the survey as well. To ensure comparability, survey respondents are provided with significant detail, including the amount of the claim, the location and main characteristics of the litigants, the presence of city regulations, the nature of the remedy requested by the plaintiff, the merit of the plaintiff's and the defendant's claims, and the social implications of the judicial outcomes.

The following assumptions are made about the case:

- The debt value equals 200 percent of the country's income per capita.
- The plaintiff has fully complied with the contract (the plaintiff is 100 percent right).
- The case presents a lawful transaction between businesses residing in the country's most populous city.
- The bank refuses payment for lack of funds in the borrower's account.
- The plaintiff attempts to recover the debt by filing a lawsuit or going through an administrative process, if such a process is available and preferred by creditors.

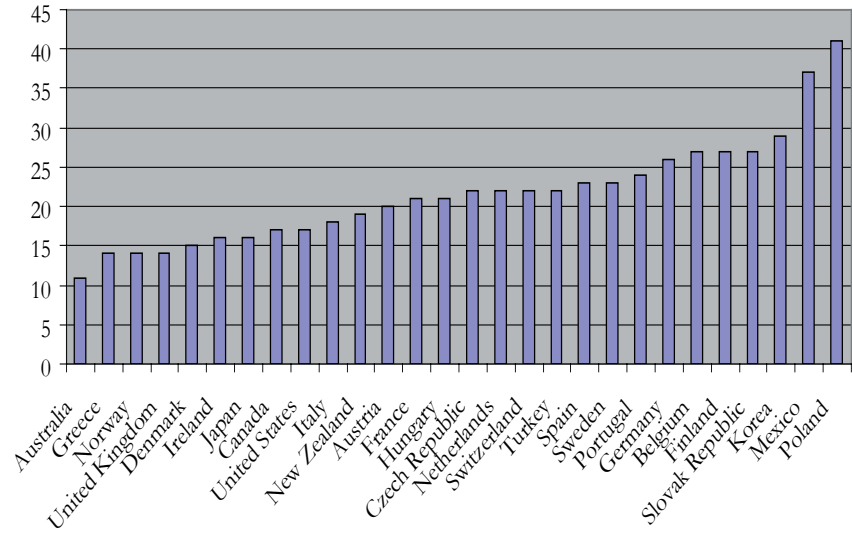
- The debtor attempts to delay the service of process, but it is finally accomplished.
- The debtor opposes the complaint (default judgment is not an option).
- The judge decides every motion for the plaintiff.
- The plaintiff attempts to introduce documentary evidence and to call one witness. The debtor attempts to call one witness. Neither party presents objections.
- The judgment finds in favour of the plaintiff.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i></p> <p>The enforcing a contract indicator is a <u>direct</u> measure of some of the potential administrative burdens resulting from the process of becoming an entrepreneur, namely the burdens connected to the enforcement of a contract between the entrepreneur and another company.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>Policy focused indicator. Changing formal regulation will have a <u>direct</u> impact on the administrative (judicial) burdens resulting from the enforcement of a contract.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>fact</u>-based; data comes from the World Bank. The approach uses factual information and allows for multiple interactions with local respondents, to clarify potential misinterpretations of questions.</p>	A



	<p><i>b) Cross-country Comparability</i></p> <p>In every country the same methodology is used. Standard templates/questionnaires have been developed. The data is based on research of laws and regulations, with input and verification from more than 3,000 local government officials, lawyers, business consultants, and other professionals who routinely administer or advise on legal and regulatory requirements.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p>World Bank Doing Business: Hiring and Firing Workers, 2004. Available online: <a href="http://rru.worldbank.org/DoingBusiness/Methodology/Starting-Business.aspx">http://rru.worldbank.org/DoingBusiness/Methodology/Starting-Business.aspx</a>.</p> <p>The methodology was originally developed in Courts, by Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, Quarterly Journal of Economics, 118, pp. 453-517, May 2003.</p>	

Enforcing Contracts - Number of Procedures



### 3.42 Enforcing Contracts - Time

**Definition:**

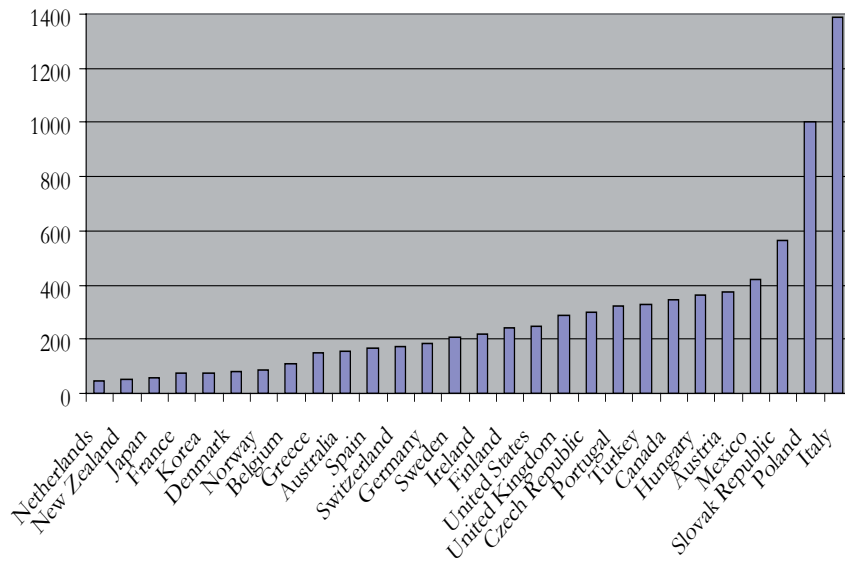
The indicator measures the time of dispute resolution in calendar days counted from the moment the plaintiff files the lawsuit in court until the settlement or payment.

This includes both the days where actions take place and waiting periods between actions. The respondents are asked to make separate estimates of the average duration of different stages of the dispute resolution: time until the completion of service of process, the issuance of judgment (duration of trial or administrative process), and the moment of payment or repossession (duration of enforcement) (see the indicator above “Enforcing contracts – number of procedures” for at description of assumptions etc).

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assesment of Relevance</i>            This indicator is a <u>direct</u> measure of some of the potential administrative burdens resulting from being an entrepreneur, namely the burdens connected to the enforcement of a contract between the entrepreneur and another company.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i>            Policy focused indicator. Changing formal regulation will have a <u>direct</u> impact on the administrative (judicial) burdens resulting from the enforcement of a contract.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i>            The indicator is <u>fact</u>-based, data originating from the World Bank. The approach uses factual information and allows for multiple interactions with local respondents, to clarify potential misinterpretations of questions.</p>	A

	<p><i>b) Cross-country Comparability</i></p> <p>In every country the same methodology is used. Standard templates/questionnaires have been developed. The data is based on research of laws and regulations, with input and verification from more than 3,000 local government officials, lawyers, business consultants, and other professionals who routinely administer or advise on legal and regulatory requirements.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p><u>World Bank Doing Business: Hiring and Firing Workers</u>, 2004. Available online: <a href="http://rru.worldbank.org/DoingBusiness/Methodology/Starting-Business.aspx">http://rru.worldbank.org/DoingBusiness/Methodology/Starting-Business.aspx</a>.</p> <p>The methodology was originally developed in Courts (PDF, 691 KB), by Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, <i>Quarterly Journal of Economics</i>, 118, pp. 453-517, May 2003.</p>	

Enforcing Contracts - Time



### 3.43 Enforcing Contracts

#### - Cost in Percentage of Debt

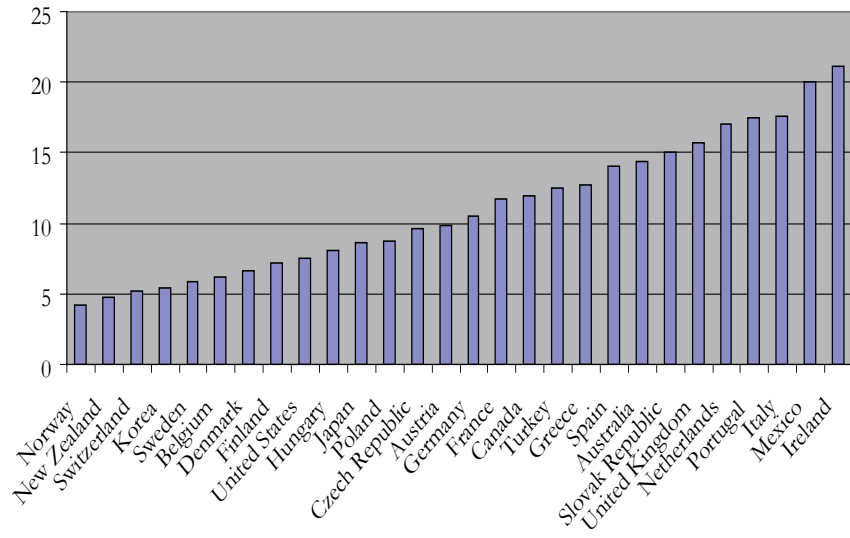
##### Definition:

The indicator measures the official cost of going through court procedures, including court costs and attorney fees, where the use of attorneys is mandatory or common, and the costs of an administrative debt recovery procedure, which is expressed as a percentage of the debt value (see the indicator above “Enforcing contracts – number of procedures” for at description of assumptions etc).

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assesment of Relevance</i></p> <p>The indicator is a <u>direct</u> measure of some of the potential administrative burdens resulting from the process of becoming an entrepreneur, namely the burdens connected to the enforcement of a contract between the entrepreneur and another company.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>Policy focused indicator. Changing formal regulation will have a <u>direct</u> impact on the administrative (judicial) burdens resulting from the enforcement of a contract.</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>fact</u>-based, data originating from the World Bank. The approach uses factual information and allows for multiple interactions with local respondents, to clarify potential misinterpretations of questions.</p>	A

	<p><i>b) Cross-country Comparability</i></p> <p>In every country the same methodology is used. Standard templates/questionnaires have been developed The data is based on research of laws and regulations, with input and verification from more than 3,000 local government officials, lawyers, business consultants, and other professionals who routinely administer or advise on legal and regulatory requirements.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p><i>World Bank Doing Business :Hiring and Firing Workers</i> (2004). Available online: <a href="http://rru.worldbank.org/DoingBusiness/Methodology/Starting-Business.aspx">http://rru.worldbank.org/DoingBusiness/Methodology/Starting-Business.aspx</a>.</p> <p>The methodology was originally developed in Courts (PDF, 691 KB), by Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, <i>Quarterly Journal of Economics</i>, 118, pp. 453-517, May 2003.</p>	

Enforcing Contracts - Cost in Percentage of Debt





### 3.44 Difficulty of Hiring

#### Definition:

The index measures whether laws or other regulations have implications for the difficulties of hiring a standard worker in a standard company (Exhibit 1).

Based on fact-based (yes/no) questions but remodelled into a 0-100 index.

#### Exhibit 1

The index measures:

- whether term contracts can only be used for temporary tasks. (*A country is assigned a score of 1 if term contracts can only be used for temporary tasks and a score of 0 if term contracts can be used for any task*);
- the maximum duration of term contracts (*A score of 1 is assigned if the duration of term contracts is 3 years or less; 0.5 if the duration is between 3 and 5 years; and 0 if term contracts can last more than 5 years*);
- the ratio of the mandated minimum wage (or apprentice wage, if available) to the average value-added per working population. (*A score of 1 is assigned if the ratio of minimum wage to average value added per worker ratio is higher than 0.75; 0.67 for ratios between 0.50 and 0.75; 0.33 for ratios between 0.25 and 0.50; and a score of 0 if the ratio is below 0.25*).

The score is based on regulatory implications on a standard worker and company. Regulative implications may vary among workers and companies. The indicator is based on several assumptions about worker and company:

The worker

- is a non-executive, full-time male employee who has worked in the same company for 20 years;
- earns a salary plus benefits equal to the country's average wage during the entire period of his employment;

- has a non working wife and two children and the family resides in the country's most populous city;
- is a lawful citizen who belongs to the same race and religion as the majority of the country's population;
- is not a member of the labor union, unless membership is mandatory.

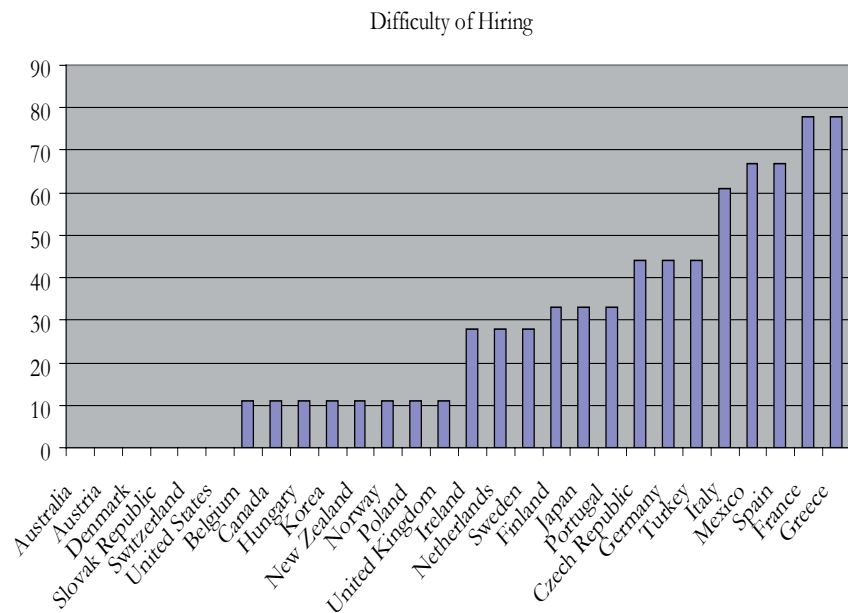
The business:

- is a limited liability company that operates in the country's most populous city;
- is a 100 percent domestically owned that operates in the manufacturing sector;witness. Neither party presents objections.
- has 201 employees, and abides by every law and regulation, but does not grant workers more benefits than legally mandated.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The indicator is a <u>direct</u> measure of some of the potential administrative burdens resulting from one becoming a high growth entrepreneur, namely the burdens connected to hiring employees.	A

	<p><i>b) Assessment of Policy Indicator Typology</i>  Changing formal labor market regulation will have a direct impact of the size of the indicator.</p> <p>Note that in some countries some of the regulations are based on agreements between the parties on the labour market, who have no tradition for political interference.</p> <p>The indicator has been remodelled into index 0 – 100, which makes the indicator an <u>indirect</u> measure (it is <i>a priori</i> unclear what is needed to change a country from 70 to 35).</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i>  The indicator is <u>fact</u>-based. It measures formal regulation for an standard company and worker. In every country the same methodology is used.</p> <p>The score is based on regulatory implications on a standard worker and company. Regulative implications may vary among workers and companies. The indicator will not catch specific difficulties of hiring differences related to different sectors or in special cases.</p>	A
	<p><i>b) Cross-country Comparability</i>  Comparable to some extent. To be fully comparable the assumptions about worker and company has to encompass the majority of workers and companies in the countries compared. The typical size of companies varies substantially between compared countries.</p>	B

<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.	A
	<i>b) Availability over Time</i> Data available for 2004 and will be updated annually.	A
<b>Source</b>	<p>World Bank “Doing Business :Hiring and Firing Workers” (2004). Available online: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/Hiring-FiringWorkers/CompareAll.aspx?direction=asc">http://rru.worldbank.org/DoingBusiness/ExploreTopics/Hiring-FiringWorkers/CompareAll.aspx?direction=asc</a>.</p> <p>Note: The index is shown on the previous page.</p>	



### 3.45 Difficulty of Firing

**Definition:**

The index measures whether laws or other regulations have implications for the difficulties of firing a standard worker in a standard company (Exhibit 1).

Based on fact based (yes/no) questions but remodelled to 0-100 index.

Exhibit 1

**Exhibit 1**

The index measures:

- (i) whether redundancy is not grounds for dismissal;
- (ii) whether the employer needs to notify the labor union or the labor ministry for firing one redundant worker;
- (iii) whether the employer needs to notify the labor union or the labor ministry for group dismissals;
- (iv) whether the employer needs approval from the labor union or the labor ministry for firing one redundant worker;
- (v) whether the employer needs approval from the labor union or the labor ministry for group dismissals;
- (vi) whether the law mandates training or replacement prior to dismissal;
- (vii) whether priority rules apply for dismissals; and
- (viii) whether priority rules apply for re-employment

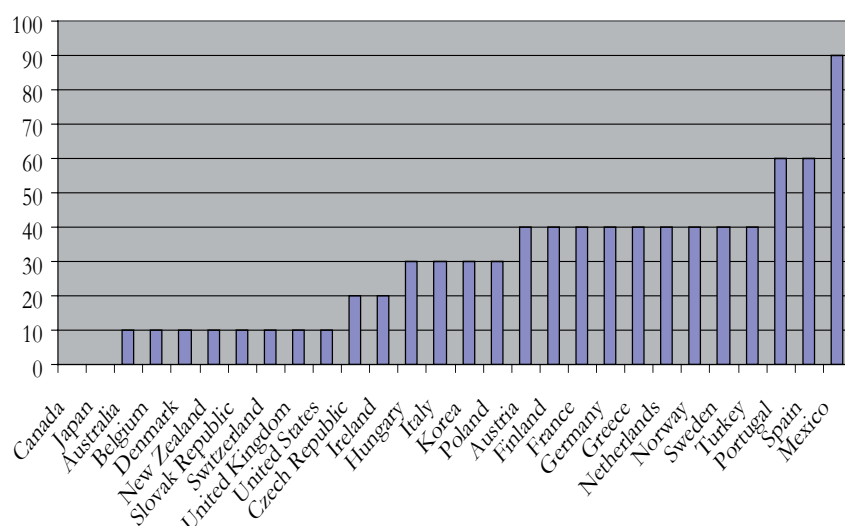
If the answer to any question is yes, a score of 1 is assigned; otherwise a score of 0 is given. Questions (i) and (iv) have double-weight in the construction of the final index.

The score is based on regulatory implications on a standard worker and company.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assessment of Relevance</i></p> <p>The indicator is a <u>direct</u> measure of some of the potential administrative burdens resulting from being an entrepreneur, namely the burdens connected to firing employees.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>Changing formal labor market regulation will have a <u>direct</u> impact of the size of the indicator.</p> <p>Note that in some countries some of the regulations are based on agreements between the parties on the labour market, with no tradition for political interference.</p> <p>The Indicator has been remodeled into index 0-100, which makes the indicator an indirect measure (it is <i>a priori</i> unclear what is needed to change a country from 70 to 35).</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>fact</u>-based. Measures formal regulation for an ideal-type company and worker. The same methodology is used in every country.</p> <p>The score is based on regulatory implications on a standard worker and company. Regulative implications may vary among workers and companies. The indicator will not catch hiring differences in specific sectors or in special cases.</p>	A

	<i>b) Cross-country Comparability</i> Comparable to some extent. In order to be fully comparable, the assumptions about the worker and company have to encompass the majority of workers and companies in the countries compared. The typical size of companies varies substantially between compared countries.	B
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for all OECD countries and for most World Bank countries.	A
	<i>b) Availability over Time</i> The indicator is available for 2004 and will be updated annually.	A
<b>Source</b>	World Bank Doing Business: Hiring and Firing Workers (2004). Available online: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/Hiring-FiringWorkers/CompareAll.aspx?direction=asc">http://rru.worldbank.org/DoingBusiness/ExploreTopics/Hiring-FiringWorkers/CompareAll.aspx?direction=asc</a> . The index is shown on the previous page.	

Difficulty of Firing



### 3.46 The Rigidity of Hours

**Definition:**

The indicator measures the rigidity of working overtime.

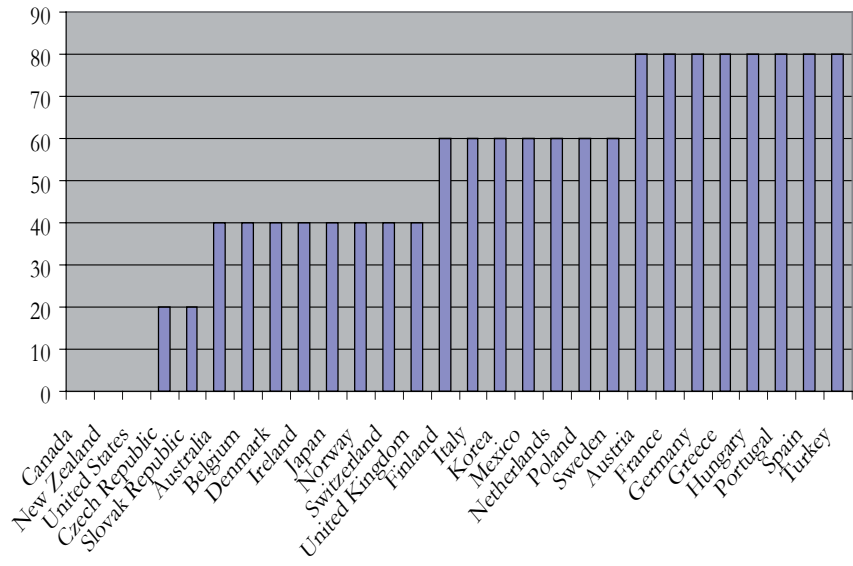
The indicator is an index with five components: (i) whether night work is restricted; (ii) whether weekend work is allowed; (iii) whether the work week consists of five and a half days or more; (iv) whether the workday can extend to 12 hours or more (including overtime); and (v) whether the annual paid vacation days are 21 days or less. If the answer is no on any of these questions, the country is assigned a score of 1, otherwise a score of 0 is assigned. The questions are based on standard assumptions on worker and company (See the indicator above “Difficulty of Hiring” for a description of the assumptions).

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure of some of the potential administrative burdens resulting from becoming an entrepreneur, namely the rigidity connected to having employees working more that standard.	A
	<i>b) Assessment of Policy Indicator Typology</i> Changing formal regulation will have a <u>direct</u> impact on the size of the indicator. Note that in some countries some of the regulations are based on agreements between the parties on the labour market with no tradition for political interference Indicator has been remodelled into index 0 – 100, which makes the indicator an indirect measure (it is a priori unclear what is needed to change a country from 70 to 35).	A



<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>fact</u>-based. Measures formal regulation for an ideal-type company and worker. In every country the same methodology is used.</p> <p>The score is based on regulatory implications on a standard worker and company. Regulative implications may vary among workers and companies. The indicator will not catch difficulty of hiring differences in specific sectors or in special cases.</p>	A
	<p><i>b) Cross-country Comparability</i></p> <p>Comparable to some extent. To be fully comparable the assumptions about worker and company have to encompass the majority of workers and companies in the countries compared. The typical size of companies varies substantially between compared countries.</p>	B
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p>World Bank Doing Business :Hiring and Firing Workers (2004) Available online:  <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/HiringFiringWorkers/CompareAll.aspx?direction=asc">http://rru.worldbank.org/DoingBusiness/ExploreTopics/HiringFiringWorkers/CompareAll.aspx?direction=asc</a>  This methodology is originally developed in The Regulation of Labor (PDF, 1.1 MB), by Juan Botero, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, Quarterly Journal of Economics, forthcoming, November 2004, and adopted with changes here.</p>	

The Rigidity of Hours



### 3.47 Number of Administrative Procedures when Recruiting First Employee

**Definition:**

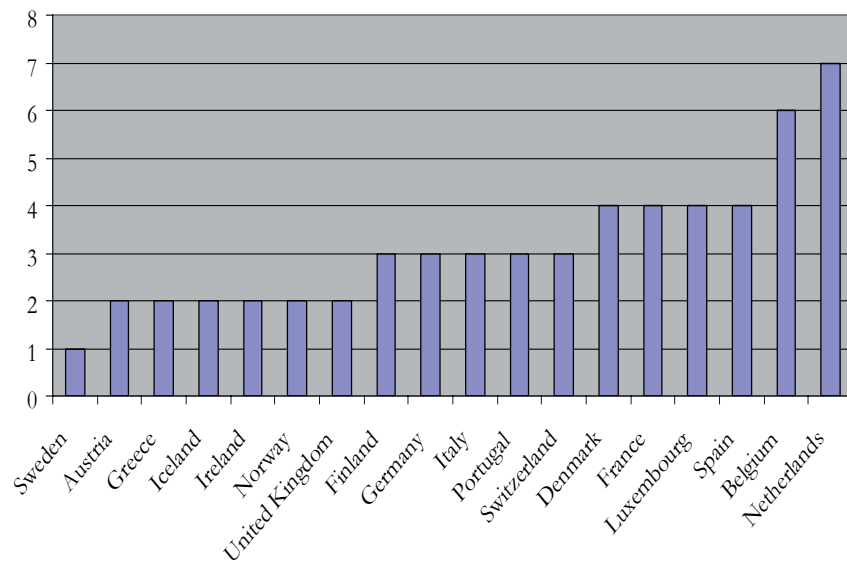
The indicator measures all obligatory contacts that employers have to make with administrative offices in the recruitment process of the first employee.

Procedures relevant to specific groups of enterprises are omitted.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure for the administrative burdens resulting from hiring of the first employee.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing the legislation for hiring the first employee will have <u>direct</u> influence of the size of the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact</u> -based indicator. The same methodology is used In every country.	A
	<i>b) Cross-country Comparability</i> Fully comparable although procedures relevant to specific groups of enterprises are omitted.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most the EU countries.	A
	<i>b) Availability over Time</i> The indicator is available for 2001. The data will not be updated annually.	B

<b>Source</b>	<p>European Commission (2002): “Hiring Employees: Administrative Burdens on SMEs in Europe”, footnote 23. Available online: <a href="http://europa.eu.int/comm/enterprise/enterprise_policy/better_environment/doc/enterprise_policy_scoreboard_2002_en.pdf">http://europa.eu.int/comm/enterprise/enterprise_policy/better_environment/doc/enterprise_policy_scoreboard_2002_en.pdf</a>.</p>
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Number of Administrative Procedures when Recruiting First Employee



### 3.48 Number of Administrative Procedures when Recruiting Additional Employees

**Definition:**

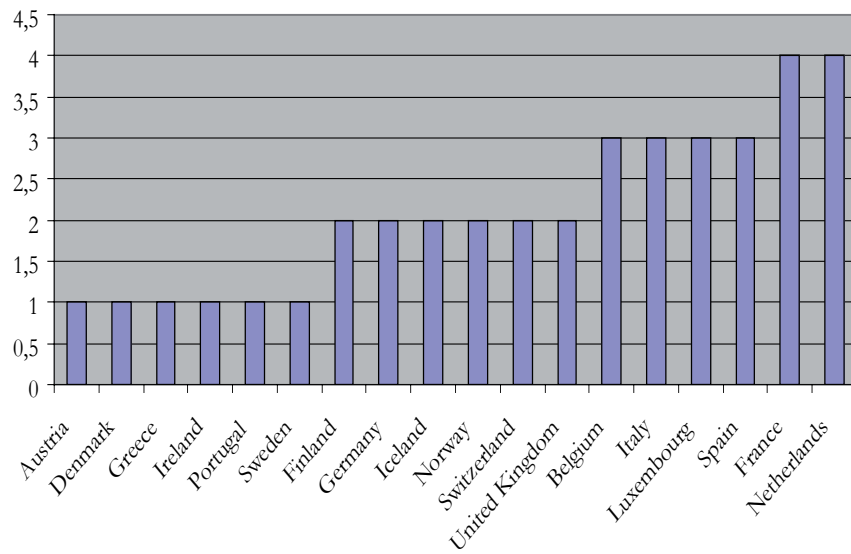
The indicator measures all obligatory contacts that employers have to make with administrative offices in the recruitment process.

Procedures relevant to specific groups of enterprises are omitted.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The indicator is a <u>direct</u> measure for the administrative burdens resulting from hiring of additional employees.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy focused indicator. Changing the legislation for hiring additional employees will have <u>direct</u> influence of the size of the indicator.	A
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> <u>Fact-based</u> indicator. The same methodology is used In every country.	A
	<i>b) Cross-country Comparability</i> Fully comparable although procedures relevant to specific groups of enterprises are omitted.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for most the EU countries.	A
	<i>b) Availability over Time</i> The indicator is available for 2001. The data will not be updated annually.	B

<b>Source</b>	<p>European Commission (2002): “Hiring Employees: Administrative Burdens on SMEs in Europe”, footnote 23. Available online: <a href="http://europa.eu.int/comm/enterprise/enterprise_policy/better_environment/doc/enterprise_policy_scoreboard_2002_en.pdf">http://europa.eu.int/comm/enterprise/enterprise_policy/better_environment/doc/enterprise_policy_scoreboard_2002_en.pdf</a>.</p>
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Number of Administrative Procedures when Recruiting Additional Employees



### 3.49 The Cost of Firing

**Definition:**

The indicator measures the cost related to firing employees: advance notice requirements, severance payments and penalties due, expressed in terms of weekly wages in a standard company (Exhibit 1).

Exhibit 1

**Exhibit 1**

The index assumes that:

The worker

- is a non-executive, full-time male employee who has worked in the same company for 20 years;
- earns a salary plus benefits equal to the country's average wage during the entire period of his employment;
- has a non working wife and two children and the family resides in the country's most populous city;
- is a lawful citizen who belongs to the same race and religion as the majority of the country's population;
- is not a member of the labor union, unless membership is mandatory.

The business:

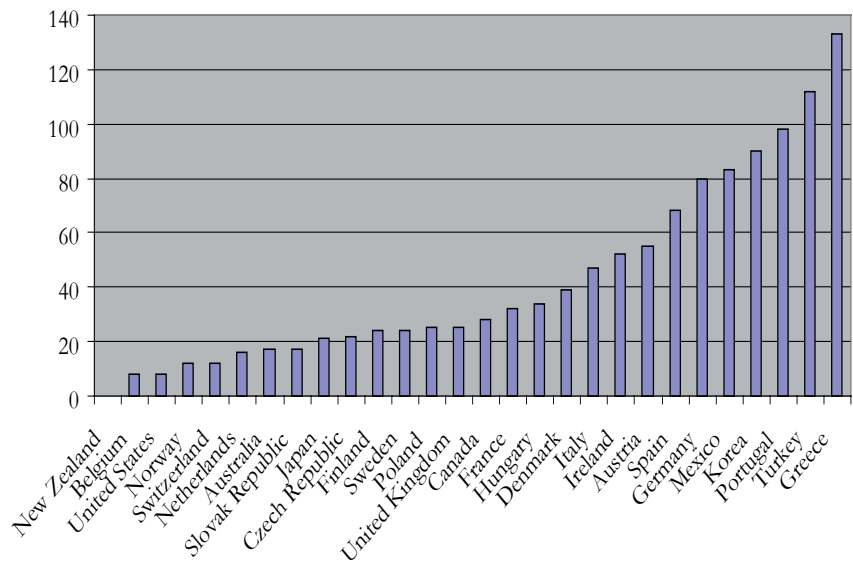
- is a limited liability company that operates in the country's most populous city;
- is a 100 percent domestically owned that operates in the manufacturing sector;witness. Neither party presents objections.
- has 201 employees, and abides by every law and regulation, but does not grant workers more benefits than legally mandated.

Assessment		Grade
<b>Overall</b>		<b>A</b>
<b>1. Relevance</b>	<p><i>a) Assesment of Relevance</i></p> <p>The indicator is a direct measure of some of the potential administrative burdens resulting from being an entrepreneur, namely the burdens connected to firing employees.</p> <p>However, the indicator is based on a standard company with 201 employees, which makes it only a <u>proxy</u> indicator for an entrepreneurial company.</p>	A
	<p><i>b) Assessment of Policy Indicator Typology</i></p> <p>Changing formal labor market regulation will have a <u>direct</u> impact of the size of the indicator.</p> <p>Note that in some countries some of the regulations are based on agreements between the parties on the labour market, with no tradition for political interference.</p> <p>The Indicator has been remodeled into index 0- 100, which makes the indicator an indirect measure (it is a priori unclear what is needed to change a country from 70 to 35).</p>	A
<b>2. Accuracy</b>	<p><i>a) Data Collection Method</i></p> <p>The indicator is <u>fact</u> based. Measures formal regulation for a standard company and worker. The same methodology is used in every country.</p> <p>The score is based on regulatory implications on a standard worker and company. Regulative implications may vary among workers and companies. The indicator will not catch hiring differences in specific sectors or in special cases.</p>	A



	<p><i>b) Cross-country Comparability</i></p> <p>Comparable to some extent. In order to be fully comparable, the assumptions about worker and company has to encompass the majority of the workers and companies in the countries compared. The typical size of companies varies substantially between compared countries.</p>	A
<b>3. Availability</b>	<p><i>a) Availability across Countries</i></p> <p>The indicator is available for all OECD countries and for most World Bank countries.</p>	A
	<p><i>b) Availability over Time</i></p> <p>The indicator is available for 2004 and will be updated annually.</p>	A
<b>Source</b>	<p>World Bank "Doing Business :Hiring and Firing Workers (2004). Available online: <a href="http://rru.worldbank.org/DoingBusiness/ExploreTopics/HiringFiringWorkers/CompareAll.aspx?direction=asc">http://rru.worldbank.org/DoingBusiness/ExploreTopics/HiringFiringWorkers/CompareAll.aspx?direction=asc</a>.</p> <p>This methodology is originally developed in <i>The Regulation of Labor</i> (PDF, 1.1 MB), by Juan Botero, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, Quarterly Journal of Economics, forthcoming, November 2004, and adopted with changes here.</p>	

The Cost of Firing



### 3.50 Cultural and Social Norms

**Definition:**

The indicator measures entrepreneurial experts' perception of the cultural and social norms related to entrepreneurship.

The indicator is based on five questions that the experts are asked to answer. The ranking of the questions go from 1 (strongly disagree) to 5 (strongly agree). The indicator is a simple average of the questions (Exhibit 1).

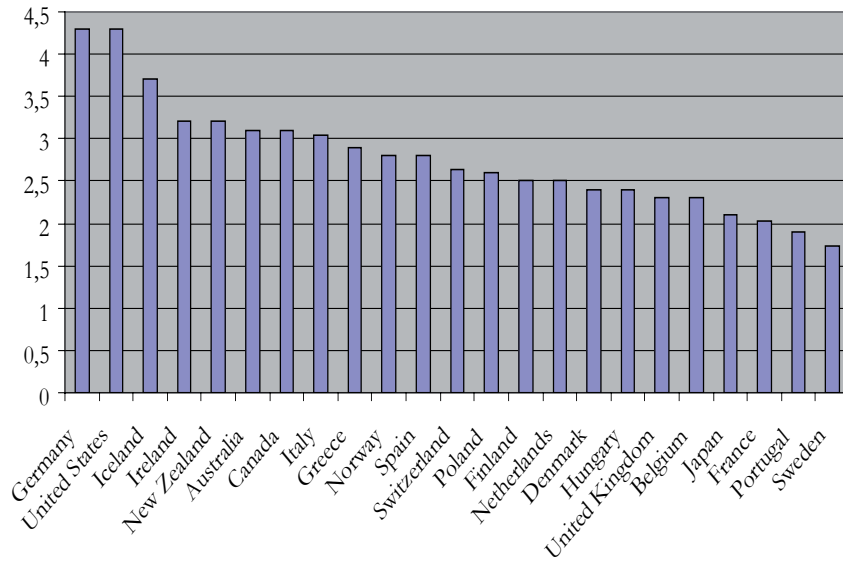
**Exhibit 1**

- The national culture is highly supportive of individual success achieved through own personal efforts.
- The national culture emphasizes self-sufficiency, autonomy, and personal initiative.
- The national culture encourages entrepreneurial risk-taking.
- The national culture encourages creativity and innovativeness.
- The national culture emphasizes the responsibility that the individual (rather than the collective) has in managing his or her own life.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The cultural and social norms related to entrepreneurship are a <u>direct</u> measure of the degree in which national culture and norms support entrepreneurship and, consequently, the starting up of new business.	A

	<i>b) Assessment of Policy Indicator Typology</i> Political initiatives will have an indirect influence of the national culture and the national norms towards entrepreneurship. Furthermore, the indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of entrepreneurial experts.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is <u>opinion</u> -based. The information is provided by entrepreneurial experts' answers to a list of questions in an expert survey, which is part of the GEM/GERA project.	C
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the OECD countries.	A
	<i>b) Availability over Time</i> The indicator is available for 1997-2004. Some divergence exists in the exact stating of the questions through the years. The indicator may be updated in the future.	B
<b>Source</b>	The indicator is published by GEM/GERA in specific reports. Not available on the net. <a href="http://www.gemconsortium.org">http://www.gemconsortium.org</a> .	

Cultural and Social Norms



### 3.51 Entrepreneurial Motivation

**Definition:**

The indicator measures entrepreneurial experts’ perception of entrepreneurial motivation.

The indicator is based on four questions that the experts are asked to answer. The ranking of the questions go from 1 (strongly disagree) to 5 (strongly agree). The indicator is a simple average of the questions (Exhibit 1).

**Exhibit 1**

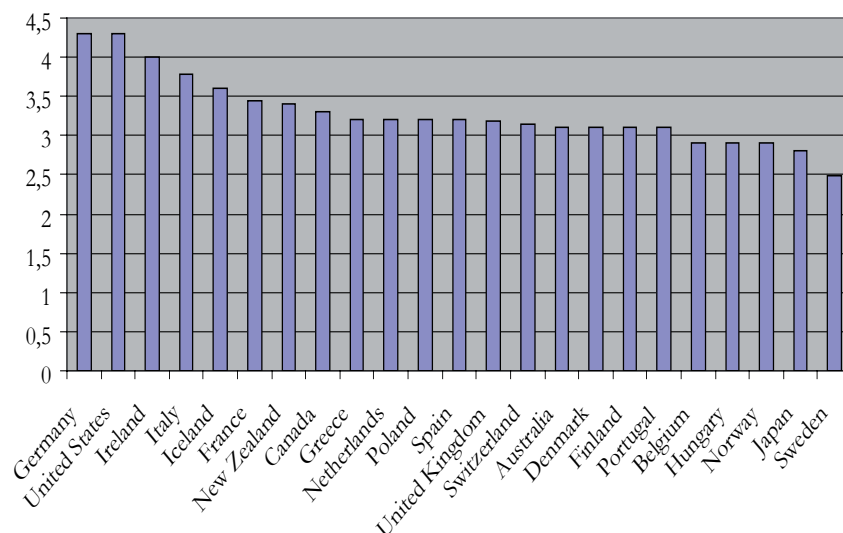
Experts were asked if:

- the creation of new ventures is considered an appropriate way to become rich.
- people consider becoming an entrepreneur as a desirable career choice.
- successful entrepreneurs have a high level of status and respect.
- is a lawful citizen who belongs to the same race and religion as the majority of the country’s population;
- you will often see stories in the public media about successful entrepreneurs, etc.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The indicator is a <u>direct</u> measure of the degree in which the national culture and norms supports entrepreneurship and consequently the starting up of new business.	A
	<i>b) Assessment of Policy Indicator Typology</i> Political initiatives will have an indirect influence of the national motivation to become entrepreneur. Furthermore, the indicator is opinion-based. Policy measures can only have an <u>indirect</u> impact on the opinions of entrepreneurial experts.	B

<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is opinion-based. The information is provided by entrepreneurial experts' answers to a list of questions in an expert survey, which is part of the GEM/GERA project.	C
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the OECD countries.	A
	<i>b) Availability over Time</i> The indicator is available for 1997-2004. Some divergence exists in the exact stating of the questions through the years. The indicator may be updated in the future.	B
<b>Source</b>	The indicator is published by GEM/GERA in specific reports. Not available on the net. <a href="http://www.gemconsortium.org">http://www.gemconsortium.org</a> .	

Entrepreneurial Motivation



### 3.52 Self-employment Preferences

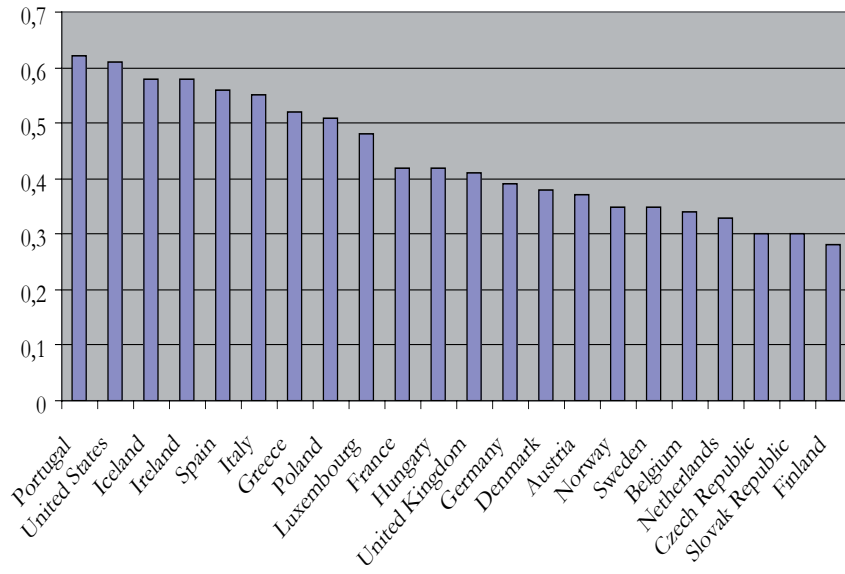
**Definition:**

The indicator measures individual's preferences towards being self-employed or being an employee.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assesment of Relevance</i> The cultural and social norms for entrepreneurship is a <u>direct</u> measure of the degree in which the national culture and norms supports entrepreneurship and consequently the starting up of new business.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy measures may have an <u>indirect</u> impact on the national preference to become entrepreneur. Furthermore, the indicator is opinion-based.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is opinion-based.	C
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for 25 countries of the EU and for the USA, Norway, Iceland and Lichtenstein.	B
	<i>b) Availability over Time</i> The indicator is survey-based for 2004 and will be updated annually	A
<b>Source</b>	The data is published by European Commission "Flash Euro Barometer: Entrepreneurship", June 2004, page 7. Available online : <a href="http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf">http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf</a> .	



Self-employment Preferences



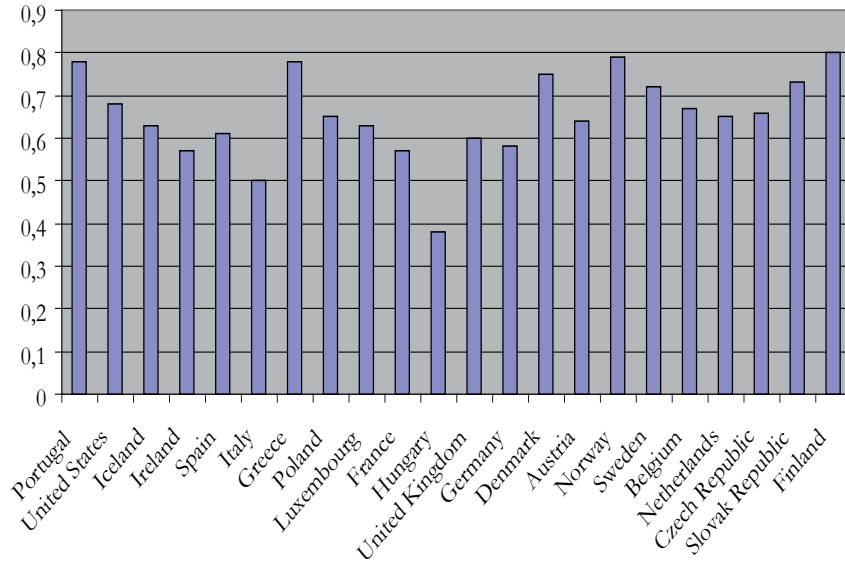
### 3.53 "The Wish to own one's own Business"

#### Definition:

The indicator measures people's preferences to own their own business. Respondents who expressed a preference for self-employment were also asked whether they would prefer to own their own business or work for themselves, without necessarily owning a company.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The cultural and social norms for entrepreneurship are a <u>direct</u> measure of the degree in which the national culture and norms support entrepreneurship and consequently the starting up of new business.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy measures may have an <u>indirect</u> impact on the national preference to become entrepreneur. Furthermore, the indicator is opinion-based.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is opinion-based.	C
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the 25 countries of the EU and for the USA, Norway, Iceland and Lichtenstein.	B
	<i>b) Availability over Time</i> The indicator is survey based for 2004 and will be updated annually.	A
<b>Source</b>	The data is published by European Commission "Flash Euro Barometer: Entrepreneurship" June 2004, page 19. Available online : <a href="http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf">http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf</a> .	

“The Wish to own one’s own Business”



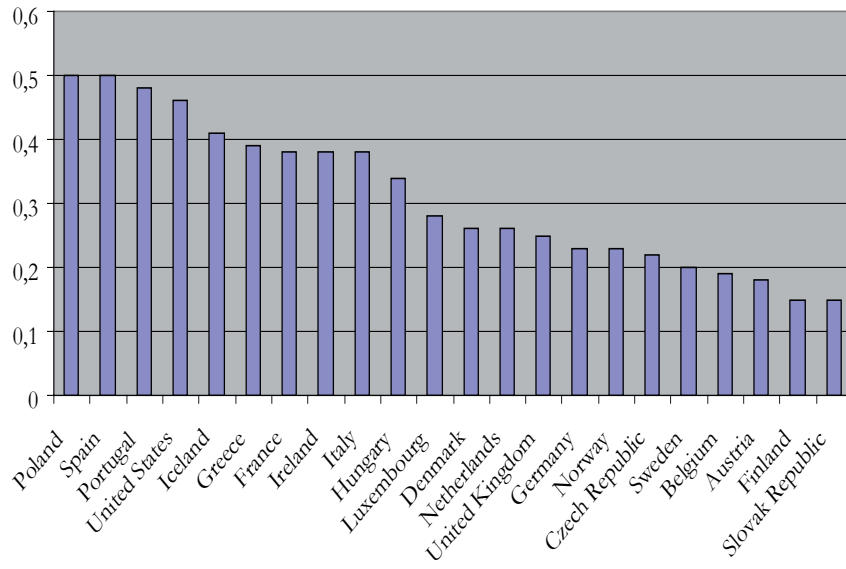
### 3.54 Desirability of Becoming Self-employed

#### Definition:

The indicator measures people's desire to become self-employed within the next 5 years. This question was asked only to non-self-employed individuals.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The cultural and social norms for entrepreneurship is a <u>direct</u> measure of the degree in which the national culture and norms supports entrepreneurship and consequently the starting up of new business.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy measures may have an <u>indirect</u> impact on the national preference to become entrepreneur. Furthermore, the indicator is opinion based.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is opinion-based.	C
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the 25 countries of the EU and for the USA, Norway, Iceland and Lichtenstein.	B
	<i>b) Availability over Time</i> The indicator is survey based for 2004 and will be updated annually.	A
<b>Source</b>	The data is published by European Commission "Flash Euro Barometer: Entrepreneurship", June 2004, page 22. Available online : <a href="http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf">http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf</a> .	

Desirability of Becoming Self-employed



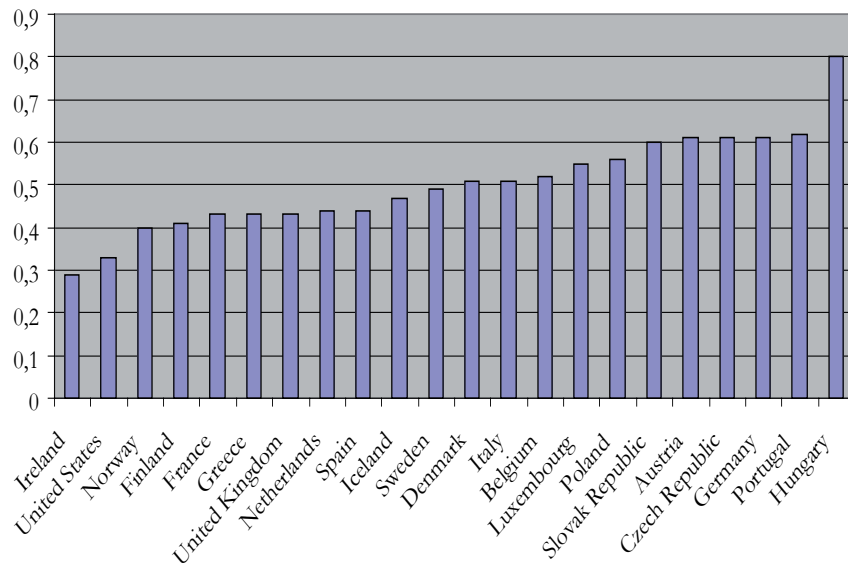
### 3.55 Risk for Business Failure

#### Definition:

The indicator measures people's perception of being willing to start a business if a risk exists that it might fail.

Assessment		Grade
<b>Overall</b>		<b>C</b>
<b>1. Relevance</b>	<i>a) Assessment of Relevance</i> The cultural and social norms for entrepreneurship is a <u>direct</u> measure of the degree in which the national culture and norms supports entrepreneurship and consequently the starting up of new business.	A
	<i>b) Assessment of Policy Indicator Typology</i> Policy measures may have an <u>indirect</u> impact on the national preference to become entrepreneur. Furthermore, the indicator is opinion based.	B
<b>2. Accuracy</b>	<i>a) Data Collection Method</i> The indicator is opinion-based.	C
	<i>b) Cross-country Comparability</i> The same question was asked in every country.	A
<b>3. Availability</b>	<i>a) Availability across Countries</i> The indicator is available for the 25 countries of the EU and for the USA, Norway, Iceland and Lichtenstein.	B
	<i>b) Availability over Time</i> The indicator is survey based for 2004 and will be updated annually.	A
<b>Source</b>	The data is published by European Commission "Flash Euro Barometer: Entrepreneurship", June 2004, page 52. Available online : <a href="http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf">http://europa.eu.int/comm/public_opinion/flash/fl160_en.pdf</a> .	

Risk for Business Failure



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- #12 Userdriven Innovation in the Electronics Industry. October 2005  
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*Anders Hertz Larsen, Lotte Langkilde*
- #5 A Benchmarkstudy of Venture Markets - What can Denmark learn? June 2004  
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- #4 InnovationMonitor 2004. August 2004  
*Marie Degn Bertelsen, Jørgen Rosted*



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*Anders Hoffmann, Morten Larsen, Niels May Nielsen*

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*Marie Degn Bertelsen*

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