



# Entrepreneurship Under Pressure

**Global Entrepreneurship Monitor 2002  
The Netherlands**

Niels Bosma

Sander Wennekers

Zoetermeer, November, 2002



ISBN: 90-371-0870-9

Order number: A200205

Price: € 40.-

This report is part of the research programme SMEs and Entrepreneurship which is financed by the Netherlands Ministry of Economic Affairs.

Most recent EIM reports and much more on SMEs and Entrepreneurship can be found at:  
[www.eim.nl/smes-and-entrepreneurship/](http://www.eim.nl/smes-and-entrepreneurship/).

*The responsibility for the contents of this report lies with EIM. Quoting numbers or text in papers, essays and books is permitted only when the source is clearly mentioned. No part of this publication may be copied and/or published in any form or by any means, or stored in a retrieval system, without the prior written permission of EIM.*

*EIM does not accept responsibility for printing errors and/or other imperfections.*

# Contents

	<b>Samenvatting</b>	<b>5</b>
	<b>Summary</b>	<b>9</b>
<b>1</b>	<b>Introduction</b>	<b>13</b>
1.1	Objectives	13
1.2	Participating countries	13
1.3	Model and methodology	14
1.4	Content of this report	16
<b>2</b>	<b>Entrepreneurial Activity in 2002</b>	<b>17</b>
2.1	Introduction	17
2.2	Dutch Entrepreneurial Activity in global perspective	17
2.3	Development of Entrepreneurial Activity	23
2.4	Conclusion	27
<b>3</b>	<b>Characteristics of Dutch Entrepreneurs</b>	<b>29</b>
3.1	Introduction	29
3.2	General features	29
3.3	Start-up motives and perceived bottle-necks	34
3.4	Market expansion orientation	35
3.5	Conclusion	37
<b>4</b>	<b>The Dutch Entrepreneurial Climate; A Brief Update</b>	<b>39</b>
4.1	Introduction	39
4.2	Strengths	40
4.3	Weaknesses	41
4.4	Conclusion	43
<b>5</b>	<b>Conclusion</b>	<b>45</b>
	<b>References</b>	<b>47</b>
	<b>Annexes</b>	
I	Adult Population Survey Questions	49
II	Interviewees for GEM 2002	51



# Samenvatting

## *Inleiding*

De Global Entrepreneurship Monitor (GEM) geeft jaarlijks een vergelijking van de ondernemersdynamiek én de institutionele voorwaarden voor ondernemerschap voor vele landen. Ondernemerschap is een fundamentele kracht achter economische groei. Echter, tot voor kort ontbrak het aan kennis voor onderzoekers en beleidsmakers om ondernemerschap internationaal te vergelijken, wegens gebrek aan internationaal vergelijkbare data. GEM komt hieraan tegemoet. In alle 37 deelnemende landen zijn in het afgelopen jaar gestandaardiseerde enquêtes onder de beroepsbevolking gehouden om nieuwe informatie te verzamelen over het niveau van ondernemersactiviteiten. De landen omvatten 60% van de totale wereldbevolking. Gebaseerd op de uitkomsten van dit onderzoek waren in 2002 over de hele wereld meer dan 450 miljoen mensen bezig met ondernemerschap.

Bezig zijn met ondernemerschap houdt in dat men, alleen of met anderen, momenteel betrokken is bij activiteiten om een eigen bedrijf op te zetten, dan wel dat men eigenaar is van een jong bedrijf. De index voor de mate van ondernemerschap per land wordt gelijkgesteld aan het percentage van deze mensen ten opzichte van de bevolking tussen 18 en 64 jaar.

Nederland participeert dit jaar voor de tweede keer in de Global Entrepreneurship Monitor. Dit rapport concentreert zich op het perspectief voor Nederland in het kader van GEM. Hierbij wordt het volgende bestudeerd:

- Het niveau en de ontwikkeling van de mate van ondernemerschap in Nederland, gezien in internationaal perspectief.
- Kenmerken van Nederlandse personen die met ondernemerschap bezig zijn.
- Het ondernemersklimaat in Nederland.

## *Niveau en ontwikkeling van de mate van ondernemerschap*

In 2002 werden (potentiële) ondernemers geconfronteerd met een economische terugslag. Economische tegenspoed betekent minder kansen voor nieuwe ondernemingen en gaat daarom gepaard met een vermindering in het aantal startende bedrijven. Voor de 28 landen die zowel in 2001 als in 2002 in GEM participeerden is de index voor de mate van ondernemerschap gedaald van gemiddeld 9.9 naar 7.6, een relatieve daling van 23 procent. Ook de mate waarin mensen investeren in de start van nieuwe bedrijven heeft te lijden gehad. Deze index daalde met 13 procent.

In Nederland daalde de index voor de mate van ondernemerschap van 6.4 naar 4.6, een daling van 29 procent. Deze daling is sterker dan het wereldwijde gemiddelde, maar minder sterk dan de daling in de tien overige EU-landen die aan GEM meedoen (gemiddeld 37 procent). In Oost-Europa was de daling zelfs 52 procent. Het aantal mensen dat betrokken is bij activiteiten om (alleen of met anderen) een eigen bedrijf op te richten bleek opmerkelijk stabiel. Echter, het aantal eigenaren van jonge bedrijven is hard achteruitgegaan. Dit kan betekenen dat het startproces enigszins stagneert; de mensen die momenteel bezig zijn met het opzetten van de onderneming hadden wellicht in een meer voorspoedige periode het bedrijf al van de grond gekregen. Hiernaast lijkt een hoger sterftecijfer onder jonge bedrijven waarschijnlijk.

De rangschikking van landen naar de mate van ondernemerschap bleek behoorlijk stabiel, ondanks de veelal grote wijzigingen per land. Dit duidt op een grote invloed van cultuur en nationale instituties. De Nederlandse index voor de mate van ondernemerschap bevindt zich nog steeds in de onderste helft van de deelnemende landen. Wel is in het afgelopen jaar de relatieve positie enigszins verbeterd. Maar nog steeds is het zo dat de mate van ondernemerschap beduidend lager ligt dan in vele Engelssprekende landen als Nieuw-Zeeland, Australië, Canada en de Verenigde Staten. Ook is de markt voor informele investeerders ondermaats in internationaal perspectief.

#### *Kenmerken van ondernemende Nederlanders*

Ongeveer de helft van de Nederlanders die de oprichting van een bedrijf voorbereiden of sinds kort een eigen bedrijf hebben zijn actief in de diensten. Nederlanders geven als belangrijkste motief om een bedrijf te beginnen vooral aan dat ze eigen baas willen zijn en het een interessante uitdaging vinden. In Nederland is ruim een derde van de mensen die betrokken zijn bij ondernemerschap van het vrouwelijke geslacht, wat wereldwijd gezien gemiddeld is. Vrouwen zijn met name in de leeftijd tussen 35 en 45 jaar bezig met ondernemerschap, terwijl voor mannen de meest voorkomende leeftijd tussen de 25 en 35 jaar ligt. Verder worden mensen die bezig zijn met ondernemerschap gekenmerkt door hogere huishoudeninkomens.

Ongeveer vier procent van de (toekomstige) ondernemers kan als innovatief aangeduid worden in de zin dat ze in elk geval enige marktvernieuwing verwachten te bewerkstelligen. Het vergelijkbare gemiddelde over de wereld is zeven procent. Hiernaast blijkt dat de belangrijkste knelpunten die de mensen ondervonden tijdens het proces om hun bedrijf op te starten te maken hebben met regelgeving; het financieren van de start en het vinden van goede huisvesting waren andere vaakgenoemde problemen.

#### *Ondernemersklimaat in Nederland*

De Global Entrepreneurship Monitor bestudeert per land negen themavelden om het klimaat voor ondernemerschap in beeld te brengen. Door middel van interviews met 18 experts, het laten invullen van gestandaardiseerde vragenlijsten door 30 experts en raadpleging van secundaire bronnen kan in beeld gebracht worden hoe Nederland er voor staat op elk van deze negen gebieden.

In het algemeen kan gesteld worden dat het klimaat voor ondernemerschap positief is in Nederland. Op de meeste themavelden scoort Nederland boven het wereldwijde gemiddelde. De prestaties wijken niet substantieel af van de beschrijving van het ondernemersklimaat zoals deze in het GEM-rapport van 2001 beschreven is<sup>1</sup>. In dit rapport wordt beknopt weergegeven op welke gebieden Nederland zichzelf sterk kan noemen en op welke gebieden de meeste zorgen bestaan onder de geïnterviewde experts.

De kleine verbetering die voor Nederland waargenomen is in de rangschikking voor ondernemerschap kan ten dele in verband gebracht worden met het feit dat gedurende de afgelopen vijftien jaar een consistent beleid is gevoerd, gericht op het wegnemen van obstakels, het bevorderen van flexibiliteit op de arbeidsmarkt en het bevorderen de houding ten opzichte van ondernemerschap. Dit wordt veelal als sterk punt aangege-

<sup>1</sup> Zie Bosma, Stigter en Wennekers (2002), *The long road to the entrepreneurial society*; Global Entrepreneurship Monitor the Netherlands, EIM: Zoetermeer. Deze publicatie is ook te downloaden op [www.gemconsortium.org](http://www.gemconsortium.org) en [www.eim.nl/smes-and-entrepreneurship](http://www.eim.nl/smes-and-entrepreneurship)

ven. Ook de kwaliteit van de professionele infrastructuur (telecommunicatie, nutsvoorzieningen en transport) kreeg goede rapportcijfers.

De experts die voor dit rapport geïnterviewd zijn, gaven te kennen dat de negatieve houding ten opzichte van mislukking alsook het nemen van risico's een belangrijk zwak punt is. Hiernaast kwamen de vorig jaar reeds gesignaleerde zorgen met betrekking tot de geringe aandacht voor ondernemerschap in het onderwijs en de beperkte kennisoverdracht naar kleine bedrijven opnieuw naar voren<sup>1</sup>.

### *Conclusie*

Concluderend kunnen we stellen dat ondernemerschap over de gehele wereld in het nauw zit vanwege de huidige economische tegenspoed. Hierbij heeft de mate van ondernemerschap in Nederland, alhoewel van bescheiden niveau in internationaal perspectief, redelijk standgehouden. Op korte termijn zijn het verder wegnemen van knelpunten op het gebied van regelgeving, het verbeteren van de financiële markt rond het opstarten van bedrijven en het verhogen van kennisoverdracht naar deze bedrijven belangrijke aandachtspunten voor beleid. Op langere termijn is het verbeteren van de houding ten aanzien van ondernemerschap en mislukking, alsook het bewustzijn via het onderwijssysteem een belangrijke zorg.

<sup>1</sup> De GEM-resultaten die betrekking hebben op de kennistransfer naar startende ondernemingen worden uitgebreid behandeld in een andere publicatie: EZ/EIM, 2003, *Entrepreneurship in the Netherlands*, te verschijnen.





# Summary

## *Introduction*

The Global Entrepreneurship Monitor (GEM) describes and analyzes entrepreneurial activity across a wide range of nations. By so doing, GEM focuses on one of the most fundamental forces driving and carrying economic change, one that has hitherto remained elusive for researchers and policy-makers due to lack of reliable, internationally comparable data.

*Over four hundred and fifty million people across the globe were engaged in entrepreneurial activity in 2002.*

This dramatic finding reflects the scope of the fourth Global Entrepreneurship Monitor (GEM) assessment of entrepreneurial activity. The 37 countries involved in GEM 2002 cover three-fifths of the world's population with 286 million active in the entrepreneurial process; the other two-fifths probably contain an additional 174 million that are entrepreneurially active.

Being entrepreneurially active is defined as currently being (i) involved in a start-up (also known as 'nascent entrepreneur') or (ii) the owner and manager of a young business (not older than 42 months). National entrepreneurial activity rates are the proportion of entrepreneurially active individuals in the population 18-64 years of age.

The present GEM report focuses on the Netherlands' perspective within this global assessment of entrepreneurial activity. The present report investigates:

- Entrepreneurial activity in the Netherlands, in global and European perspective
- Characteristics of Dutch individuals involved in entrepreneurial activities
- Entrepreneurial climate in the Netherlands.

## *Entrepreneurial activity*

In the year 2002 entrepreneurship has run into increasing adversity. The worldwide setback in economic growth rates signals diminishing opportunities for new enterprises, and is thus accompanied by a strong decline in business start-up activity. For the 28 countries participating in the Global Entrepreneurship Monitor in both 2001 and 2002, the total entrepreneurial activity index declined from on average 9.9 to 7.6. This is a relative decline of 23%. Informal investments in new business start-ups have suffered likewise; worldwide it decreased with 13%.

In the Netherlands the decline of the total entrepreneurial activity rate was 29%, which compares favorably with the ten other EU Member States participating in GEM (37%) In Eastern Europe the decline was even more dramatic (52%). Nascent entrepreneurial activity in the Netherlands however proved remarkably stable over the business cycle, but the young firms ownership rate suffered heavily. We conjecture that this primarily signals a stagnation in the start-up process of new enterprises, although an increased failure rate of new firms cannot be ruled out.

At the same time the ranking of countries by degree of entrepreneurial activity is remarkably stable, reflecting enduring cultural values and national institutions. The Netherlands' TEA-rate is still in the second lowest quartile of the global distribution, although slightly improving its relative position. Dutch entrepreneurial activity compares

particularly unfavorably with that in many English-speaking countries such as New Zealand, Australia, Canada and the USA. In the Netherlands, the market for informal investments in new businesses started by someone else is also weakly developed by international comparison.

#### *Characteristics of entrepreneurs in the Netherlands*

In the Netherlands, two in three persons entrepreneurially active are male in our country, which is also the worldwide average. The prevalence of entrepreneurial activity peaks between the ages of 25 and 35 for men and between 35 and 45 for women. Not only are male business starters younger than their female counterparts, they are also more prone to have followed a post secondary education (more than 50% versus around 33%). Furthermore, people involved in entrepreneurial activity have access to relatively high household incomes.

As far as their (prospective) businesses are concerned, about 4% are innovative in the sense that they expect to provide at least some new market niche creation, while the comparable average figure for all countries represented in GEM is 7%. Most of the entrepreneurial activities (over 50%) take place in Services. Additionally, the interviews held with Dutch nascent and young entrepreneurs indicate that dealing with regulatory matters is the number one bottleneck encountered during the start-up phase, while financing the enterprise and finding adequate accommodation are other frequently mentioned concerns.

#### *Entrepreneurial climate in the Netherlands*

In general, the Netherlands has a favorable entrepreneurial climate. On most of the nine framework conditions GEM identifies for making up the entrepreneurial climate, the Netherlands scores above average. In order to be aware of the Dutch strong and weak points, scores are attached on different aspects of all these framework conditions. Examining the scores for all countries, combining them with strengths and weaknesses put forward by the interviewed Dutch experts and using supporting harmonized data from various sources enables to derive strengths and weaknesses of the Dutch entrepreneurial climate.

There is reason to believe that the modest improvement in the relative position of Dutch entrepreneurship in the Netherlands may be the fruit of continued efforts put into improving societal conditions for entrepreneurship. During the past 15 years, successive Dutch governments have conducted a consistent policy to reduce entry barriers, to improve labor market flexibility and to enhance entrepreneurial awareness. Undoubtedly, it will take more time to fully modernize all relevant institutions, and it may take several generations to create a deeply rooted entrepreneurial culture. The experts consulted for this report suggest that negative attitudes towards failure and risk as well as scant attention for entrepreneurship in the educational system are among the major weaknesses of the Dutch entrepreneurial environment. The problem of limited R&D transfer towards small firms, seen last year, is also still pregnant<sup>1</sup>.

<sup>1</sup> The GEM findings relating to knowledge transfer to start-ups will, along with other supporting research material, be dealt with in-depth in a separate publication: EZ/EIM, 2003, *Entrepreneurship in the Netherlands*, forthcoming.

### *Conclusion*

In conclusion, entrepreneurship across the world is in a fix, at least temporarily. Entrepreneurial activity in the Netherlands, although modest by international comparison, has held out relatively well under the present unfavorable economic circumstances. In the short run, regulatory bottlenecks and the financing of new businesses are important policy areas in the Netherlands. For the longer run, improving the prevailing attitude towards risk and failure and raising entrepreneurial awareness through the educational system remain the major concerns.



# 1 Introduction

## 1.1 Objectives <sup>1</sup>

GEM is a unique, unprecedented effort to describe and analyze entrepreneurial activity across a wide range of nations. In so doing, GEM focuses on one of the most fundamental forces driving and bearing economic change, one that has hitherto remained elusive for researchers and policy-makers due to lack of reliable, internationally comparable data.

Even though many influential economists have, for well over a century, maintained that entrepreneurship is one of the most important dynamic forces shaping the economies of nations, the causes and effects of entrepreneurship are still only poorly understood. Consequently, policy-makers have lacked the means to design effective and appropriate policies to nurture this phenomenon for national economic benefit.

The distinctive benefit of GEM is that it provides the only internationally comparable and direct measures of individual-level, grassroots entrepreneurial processes. It represents a revolutionary development in data collection because individuals are the primary agents of entrepreneurial activity. No other measure exists that could be used as a basis for reliable international comparisons or for monitoring worldwide trends in entrepreneurship.

GEM is a collaborative effort in every sense of the word, in terms of financial resources (national teams provide 60% of the financial resources), intellectual resources, as well as design and analysis. GEM is coordinated by professor Paul Reynolds and his staff at the London Business School. A GEM wide assessment and planning meeting is held early in January of each year. Over 150 scholars from 34 countries assist the ten-person coordination team. The primary data collection associated with the adult population surveys is carried out by survey research firms in each country, which involves 37 more sets of trained professionals.

As GEM expands and improves it will continue to provide new insights into the scope and significance of the entrepreneurial processes and as to how public policy can facilitate entrepreneurial contributions to national economic well-being. New developments, and all national reports, can be found at [www.gemconsortium.org/](http://www.gemconsortium.org/).

## 1.2 Participating countries

This is the fourth annual GEM cross-national assessment of the level of entrepreneurial activity. The program has expanded from ten countries in 1999, 21 in 2000, 28 in 2001, to 37 in 2002. Another 10-12 national teams are expected to join the GEM consortium for 2003, bringing the total to about 50 countries. The Netherlands took part in GEM for the first time in 2001. The countries included in the 2002 assessment are:

<sup>1</sup> See also Reynolds, Bygrave, Autio and Hay, 2002, Global Entrepreneurship Monitor 2002 Executive Report.

### Western Europe

Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom.

### Eastern Europe

Croatia, Hungary, Poland, Russia and Slovenia

### Asia Developed

Chinese Taipeh (Taiwan), Hong Kong, Japan and Singapore

### Asia Developing

China, Korea, India and Thailand

### Latin America

Argentina, Brazil, Chile and Mexico

### Former British Empire

Australia, Canada, New Zealand, South Africa and the United States

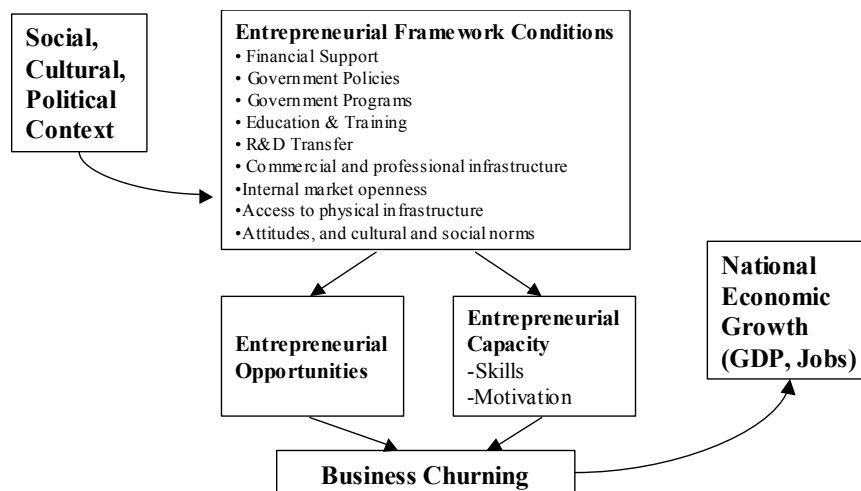
## 1.3 Model and methodology

### *Conceptual model GEM*

The GEM research program has been derived from an underlying conceptual model summarizing the major causal mechanisms affecting national economies. The model has three primary features:

- it focuses on explaining why some national economies are stronger than others;
- it assumes that all economic processes take place in a relatively stable political, social and historical context;
- two distinct but complementary mechanisms are considered to be the primary sources of national economic progress (i.e. the role of large established firms that provide national representation in international trade and the role of entrepreneurship as the creation and growth of new firms). The latter mechanism is set out in figure 1.

figure 1 The role of entrepreneurship through the creation and growth of new firms



Source: GEM 2002.

A more elaborate discussion of the relationship between entrepreneurship and economic growth in the setting of the GEM framework is provided by Thurik and Wennekers (2001)<sup>1</sup>.

#### *Data*

Four types of data have been collected for the GEM 2002 assessment:

- 1 Representative population surveys of adults in each GEM 2002 country;
- 2 Detailed personal interviews with national experts on entrepreneurship;
- 3 Standardized questionnaires completed by 36 experts in each country;
- 4 Standardized data collected.

#### Ad1)

In each country at least 2,000 adults took part in a telephone interview. One part of the questionnaire consisted of items related to participation in entrepreneurial activities. These activities referred to starting a new firm, owning and managing a new firm and informally investing in another's new firm (informal investors). The other part of the questionnaire aimed to assess attitudes toward and knowledge of the entrepreneurial climate. In the Netherlands, 3,500 adults were surveyed in 2002. The extended sample provides a basis for more profound analysis of entrepreneurial involvement in the Netherlands

#### Ad2)

The face-to-face interviews were held with experts chosen by reputation and referrals to represent the nine entrepreneurial framework dimensions in the GEM model. These nine dimensions are:

- Financial support,
- Government policies,
- Government programs,
- Education and training,
- R&D transfer,
- Commercial and professional infrastructure,
- Internal market openness,
- Access to physical infrastructure,
- Attitudes, and cultural and social norms.

A list of interviewees can be found in Appendix II.

First the experts were asked to describe the importance of the framework dimension in their own field and, in particular, its contribution to entrepreneurial activity. Furthermore the three most important successes and three most important problems facing entrepreneurship with respect to that particular framework dimension were discussed in the interviews, as were suggestions for improvement. Finally the experts were asked to consider all other framework dimensions and discuss their importance for entrepreneurial development.

#### Ad3)

The experts were also asked to fill in a questionnaire, which contained a series of almost 70 statements concerning the nine entrepreneurial framework dimensions. With

<sup>1</sup> Thurik and Wennekers (2001), Entrepreneurship, economic growth and the significance of the GEM project, Global Entrepreneurship Monitor 2001 Summary Report, Appendix I.

respect to these statements experts were asked to assess national conditions influencing entrepreneurial activity in the Netherlands.

Ad4)

The GEM 2002 co-ordination team collected standardized cross-national data on a variety of national characteristics and attributes (e.g. growth in GDP) from a wide range of harmonized international sources.

#### *Sources for the Netherlands' country report*

The country report for the Netherlands draws on two major sources. First, many new data and insights were collected from the adult population surveys, the key informant interviews and the harmonized international sources of GEM, as described above. Second, the Dutch report draws upon the extensive knowledge resources within EIM, developed through many earlier projects in the framework of EIM's public research program on SMEs and entrepreneurship (see box 1) and through EIM's contract research in this field.

#### **box 1 EIM's Research Program on SMEs and Entrepreneurship**

EIM carries out a longstanding research program on small and medium sized enterprises (SMEs) and entrepreneurship, which is being financed by the Dutch Ministry of Economic Affairs. Over the years this research program has created a unique, authoritative and publicly available knowledge base regarding the economic performance of small and new enterprises, with special focus on the Netherlands. Main activities are the collection and processing of survey data and statistics, scientific analysis, publication of research findings and various activities to distribute the findings to a greater public. The scientific analyses into entrepreneurship are carried out in cooperation with academic researchers from the CASBEC-group of the Erasmus University Rotterdam, and with many other distinguished scholars. The findings are published in working papers, research reports, strategic studies, and in articles in academic journals. In the past years a major effort has been devoted to gain more insight in the process of entrepreneurial venture creation and the role of entrepreneurship at the macro-economic level. EIM's research reports and strategic studies published since 1998 can be downloaded free of charge from [www.eim.nl/smes-and-entrepreneurship/](http://www.eim.nl/smes-and-entrepreneurship/).

## **1.4 Content of this report**

This report focuses on the rate of entrepreneurial activity in the Netherlands, compared to other countries participating in GEM. Chapter 2 presents the GEM 2002 global results and describes any observed, marked differences with the results from 2001. Chapter 3 sets out the characteristics of the Dutch adults involved in entrepreneurial activity. Chapter 4 gives an update of the assessment of the Dutch entrepreneurial climate that was extensively presented in the GEM 2001 country report for the Netherlands<sup>1</sup>. This report ends with a conclusion in chapter 5.

<sup>1</sup> See Bosma, Stigter and Wennekers (2002), The long road to the entrepreneurial society; Global Entrepreneurship Monitor the Netherlands, EIM: Zoetermeer. Also downloadable at [www.gemconsortium.org](http://www.gemconsortium.org) and <http://www.eim.nl/smes-and-entrepreneurship>.



## 2 Entrepreneurial Activity in 2002

### 2.1 Introduction

*Over four hundred and fifty million people across the globe were engaged in entrepreneurial activity in 2002.*

GEM: monitoring entrepreneurial activity worldwide ...

This dramatic finding reflects the scope of the fourth Global Entrepreneurship Monitor (GEM) assessment of entrepreneurial activity. The 37 countries involved in GEM 2002 cover three-fifths of the world's population with 286 million active in the entrepreneurial process; the other two-fifths of the population probably include an additional 174 million that are entrepreneurially active.

... enables comparison of countries at different levels of development and study the roles for and diverse consequences of entrepreneurial activity.

This report then, reflects the activity and contribution of 450 million individuals. A global assessment that reflects a global phenomenon. While the original focus of the GEM research program was on cross-national comparisons in entrepreneurial activity, the current global level of activity suggests that the phenomena is considerably more significant than expected. Not only may entrepreneurship be a major feature of national economic growth, but it also appears to involve a substantial portion of adults at some time in their work career. The capacity to compare countries at different levels of development and in different types of transitions suggests multiple roles for and diverse consequences of entrepreneurial activity.

This chapter focuses on measuring entrepreneurial activity worldwide, indicating national differences in kinds of entrepreneurial activity. The findings for 2002 are presented in section 2.2, focusing on the position of the Netherlands in a global perspective. In section 2.3, recent developments of entrepreneurial activity are demonstrated. The chapter ends with a conclusion.

### 2.2 Dutch Entrepreneurial Activity in global perspective

TEA index: nascent entrepreneurial activity plus young business owners activity

A principal (and unique) objective in the GEM project is to measure entrepreneurial activity for each country, in such a harmonized manner that comparisons between countries can be made. To this end, a pre-defined Total Entrepreneurial Activity (TEA) index is calculated. The TEA index is a combination of identifying:

- nascent entrepreneurs: people currently involved in concrete activities to set-up a new business; and
- owners of young businesses: people currently owning a business that is less than 42 months old.

These people are identified by means of randomly telephoning at least 2,000 adults per country<sup>1</sup>. The TEA index is the number of entrepreneurially active individuals in the two categories above, per 100 (people) in the adult population 18-65 years of age.

<sup>1</sup> The methodology used for calculating Total Entrepreneurial Indices is explained in Reynolds, Bygrave, Autio Hay, 2002, Global Entrepreneurship Monitor 2002 Summary Report.

### 2.2.1 Total Entrepreneurial Activity

The TEA index of the Netherlands is relatively low in global perspective ...

The TEA indices for 2002 are depicted in figure 2. We see that the Netherlands is ranked in the second lowest quartile of the countries involved in GEM. The 2002 TEA rate for the Netherlands equals 4.6. In contrast: the average of all countries involved in GEM equals 8, while the average among OECD countries is 7.2. The relatively low TEA of many developed economies is partly related to a lower 'urgency'.

... but about average in the European Union.

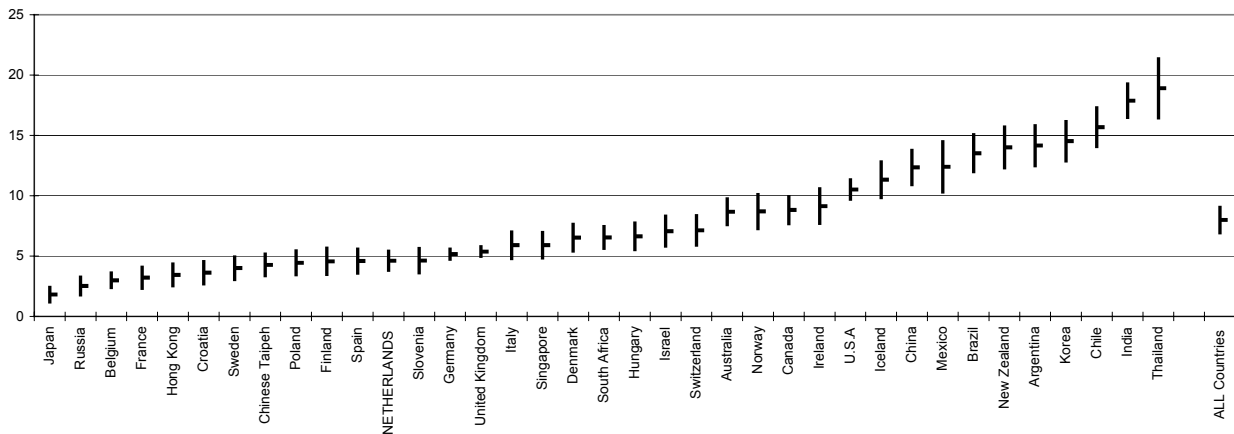
In figure 2 we also see that the Netherlands is placed in a large group consisting of mainly European countries. Figure 3 shows the average position of the Netherlands in European perspective. The (non-weighted) average for the 11 EU countries participating in GEM equals 5.1. A separate assessment of the EU countries is provided in section 2.2.3. Figure 3 also groups the TEA indices by (other) world regions. The patterns in this figure suggest that there are various systematic factors at play, such as the level of development (see below) and institutional characteristics.

#### *Necessity entrepreneurship and opportunity entrepreneurship*

Most entrepreneurial activities in the Netherlands are related to opportunities rather than to necessity.

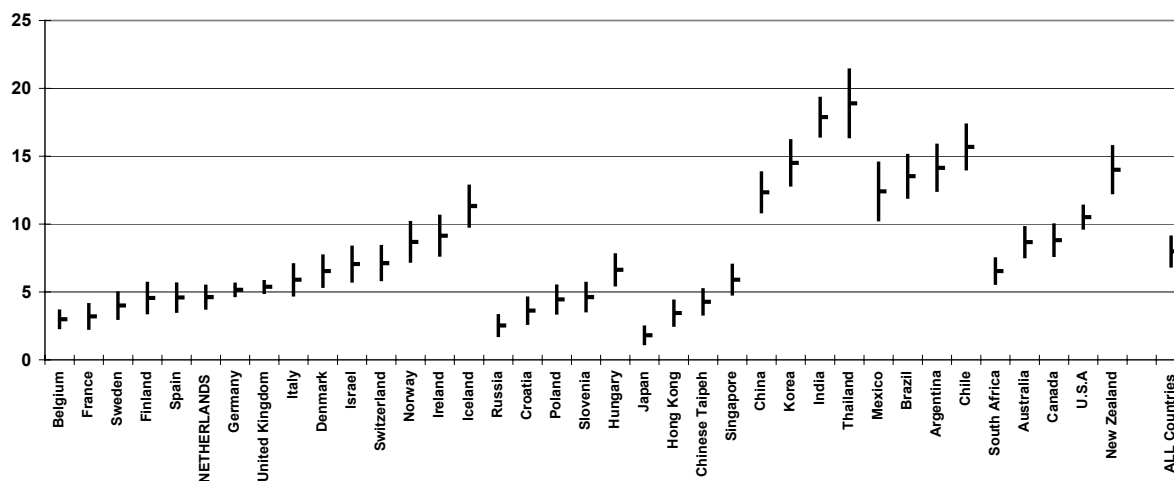
It is known that - especially in some underdeveloped countries - the alternatives to self-employment are considerably worse. Therefore, to gain a clearer insight, a distinction is also made in opportunity entrepreneurship and necessity entrepreneurship. Roughly speaking, a person engaged in entrepreneurial activities will pursue these activities out of necessity (no better alternatives) or out of opportunity. If we select only those people who claim to have chosen for entrepreneurship out of opportunity, the Netherlands also outperforms Slovenia, Germany, Italy, South Africa and Hungary. These countries have higher TEA-indices than the Netherlands, because there is more necessity entrepreneurship in poorer areas.

figure 2 Total Entrepreneurial Activity (TEA) indices by country, 2002



Source: GEM (2002). The vertical bars represent the 95 percent confidence interval.

figure 3 Total Entrepreneurial Activity (TEA) indices by world regions and country, 2002



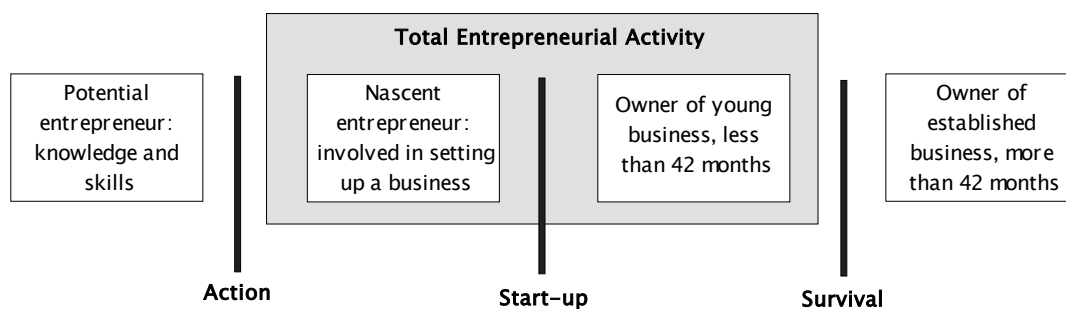
Source: GEM (2002). The vertical bars represent the 95 percent confidence interval.

### 2.2.2 Total Entrepreneurial Activity as part of the business start-up cycle

Entrepreneurial activity is situated at the heart of the entire business start-up cycle

The business start-up process can be split-up in different phases. GEM identifies these phases. The business start-up process is pictured in figure 4. If the entire adult population would provide the source for entrepreneurs, only a share of these could be considered as potential entrepreneurs. Of these potential entrepreneurs, a fraction will actually be involved in setting up a business. These are the nascent entrepreneurs. If the attempts to set up a business succeed (start-up of the business), then this entrepreneur is the owner of a young business. In the GEM project an explicit distinction is made between the owner of a young business (up to 42 months old) and the owner of an established business (more than 42 months old). This distinction is also crucial for determining entrepreneurial activity, as the GEM project focuses on entrepreneurial activity leading to business churning (see figure 1). Thus, the Total Entrepreneurial Activity Index comprises the nascent entrepreneurs and the owners of young businesses (see figure 4). Below, we discuss the phases that are distinguished in this figure.

figure 4 Business start-up cycle and Total Entrepreneurial Activity



Source: GEM / EIM.

Currently, about two in five Dutch adults think he or she has the knowledge and skills to start a business.

### Potential entrepreneurs

Almost forty percent of the Dutch adult population thinks he or she has the knowledge and skills to start-up a business. We indicate these people as the potential entrepreneurs. There is great diversity among the GEM countries regarding this indicator. For example, around 60 percent of the US and New Zealand population consider themselves qualified for entrepreneurship. In Japan, only one in ten gives an affirmative response to this indicator. The percentage is 25 for France. The transition from potential entrepreneur to a nascent entrepreneur is partly determined by risk attitude and the perception of business opportunities.

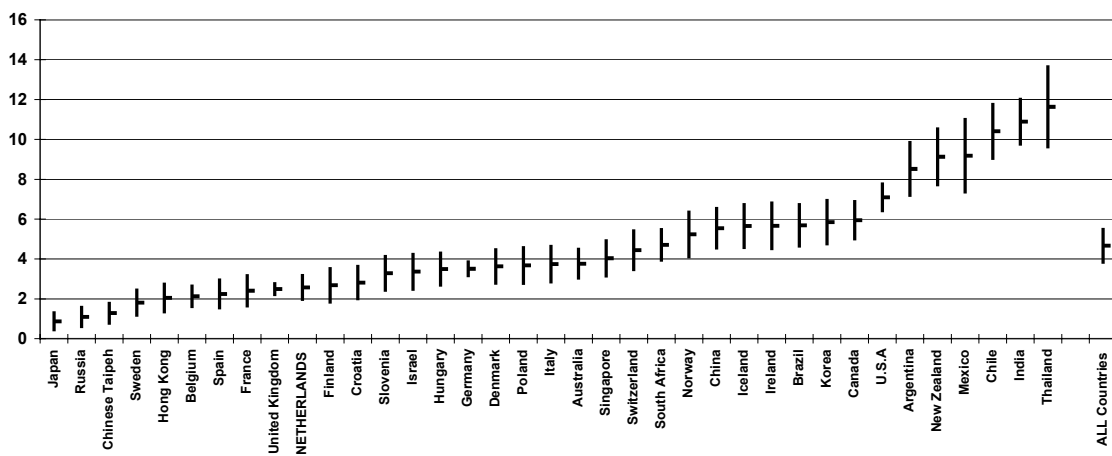
The aversion of Dutch citizens in general to risk is, according to the risk uncertainty index created by Hofstede, somewhat below average<sup>1</sup>. However, when the Dutch respondent was asked whether fear of failure would prevent him or her from setting-up a business, only one in four answered the affirmative. This share is slightly above that of the United States population. In Germany and Spain for example, about half of the adult population appeared to be risk averse in this respect.

One in forty adults is, at certain point of time, actively involved in setting up a new business ...

### Nascent entrepreneurs

As indicated above, the total entrepreneurial activity index comprises both people currently involved in a start-up and people owning a young firm. In figure 5, the percentage of nascent entrepreneurs is shown. The Netherlands is situated in a block of European countries. The Dutch 'nascent entrepreneur' index equals 2.4, a result that seems to be stable, at least over the past few years<sup>2</sup>.

figure 5 Proportion of nascent entrepreneurs in the 19-64 population, by country, 2002



Source: GEM (2002). The vertical bars represent the 95 percent confidence interval.

<sup>1</sup> See Hofstede, 2001. Dutch people are more risk averse than people from, amongst others, New Zealand, Canada, USA, UK, Ireland, and most Scandinavian countries. However, people from Belgium, Japan, France and Italy are more risk averse.

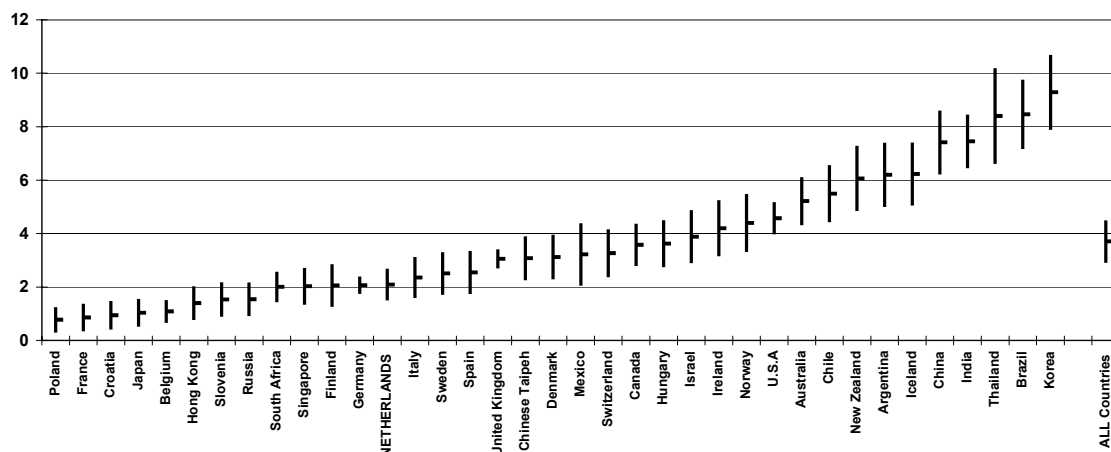
<sup>2</sup> Section 2.3 deals with the development of entrepreneurial activity.

... while one in fifty actually owns and manages a young business.

### Owners of young businesses

The percentages of owners of young businesses in the adult population are shown in figure 6. The Dutch prevalence rate of owners of young firms (2.1) is, like the nascent prevalence rate, quite low in global perspective (3.7). However, the countries accompanying the Netherlands at the lower end of the figure are - in general - Western countries that are commonly used for benchmarking purposes. The share of the number of people owning a young firm in the total number of people that are engaged in entrepreneurial activities - according to the definition used - is 45 percent for the Netherlands, which compares with the European (47%) and the global (46%) average.

figure 6 Proportion of owners of young businesses in the 19-64 population, by country, 2002



Source: GEM (2002). The vertical bars represent the 95 percent confidence interval.

Established businesses are very evident in the European stock of firms.

### Owners of established businesses

The share of owners of established businesses in the GEM 2002 sample of Dutch adults equals 4.5<sup>1</sup>. This is somewhat below European average. Highest established business rates are observed in developing Asian countries, as well as in Brazil, Iceland and New Zealand. Lowest are found in Russia and South Africa; these countries also have a small share of established businesses in total businesses. Owners of established businesses make up about 70 percent of all individuals owning a (running) business in the Netherlands. This is rather typical for the EU member countries (ranging from 60 to 80 percent). In the U.S. this share equals 55 percent.

#### 2.2.3 European Union focus

Level of entrepreneurial activity in the Netherlands is comparable to other EU-countries

Earlier, we mentioned that, considering the 11 EU countries participating in GEM, the Netherlands has an average TEA performance. The TEA indices for EU countries are shown in figure 7. Entrepreneurial activity is comparable to that of Finland and Spain, two countries that can be characterized as opposites (both in spatial and in cultural perspective) compared to the Netherlands. The Dutch TEA index is somewhat below the indices for Germany and the United Kingdom. However, these differences are not significant.

<sup>1</sup> Note that these individuals are not counted for deriving the TEA indices.

*Opportunity and necessity entrepreneurship*

In Western Europe, the number of entrepreneurial activities out of necessity is markedly low.

In section 2.2.1, we mentioned the important distinction between entrepreneurial activity originating from necessity and entrepreneurship originating through opportunity. In figure 8, these differences are pictured. It is seen that, necessity entrepreneurship is particularly low in Western Europe. Some minor differences do exist within the European Union. Germany and Spain have highest necessity entrepreneurship. Focusing on opportunity entrepreneurship, the Netherlands is level with Germany and above Italy.

figure 7 TEA indices for EU countries and World Regions

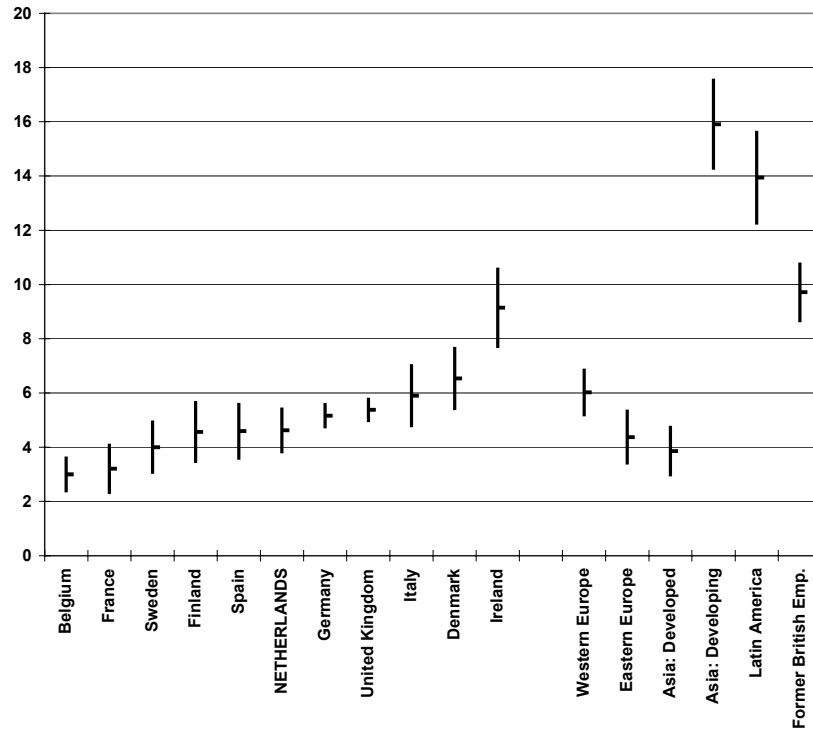
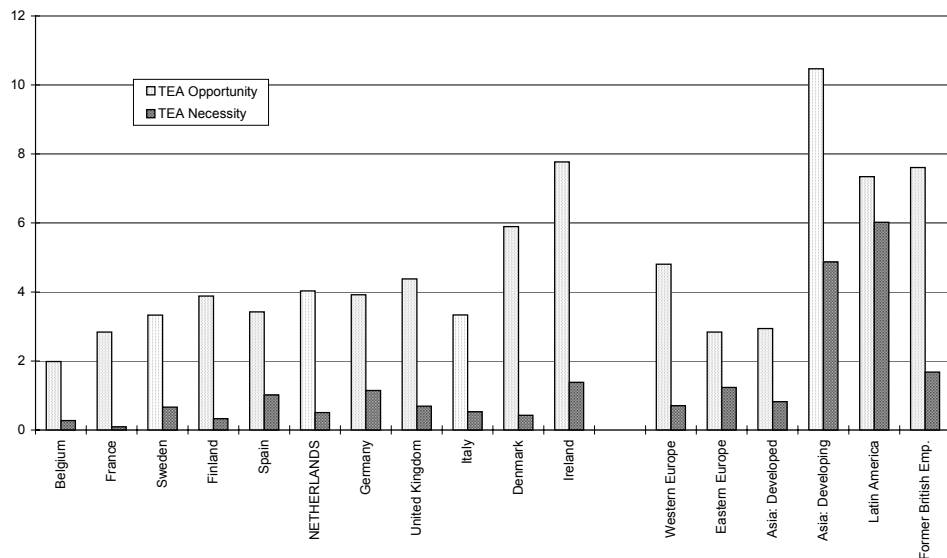


figure 8 Opportunity TEA indices and Necessity TEA indices for EU countries and World Regions



EU Candidates: more necessity entrepreneurship ...

### *EU Candidates*

The European Union is soon expected to allow the entrance of ten new member states. Three of these countries are currently also involved in GEM: Hungary, Poland and Slovenia. It is of course very interesting to explore whether there are any significant differences in entrepreneurial activities between the EU candidates and the current EU members.

It appears that the TEA indices are slightly lower in the candidate countries. However, the prevalence rate of people involved in entrepreneurial activities out of necessity is more than twice as large.

... and skills, resources and other necessary conditions seem to be lagging behind.

Another finding is that there seems to be sufficient nascent entrepreneurial activity, but also that there seems to be a reduced number of entrepreneurs owning a young business. This especially goes for Poland and Slovenia<sup>1</sup>. It indicates that the skills, resources and other conditions needed for achieving a start-up in these candidate countries are lagging behind.

## **2.3 Development of Entrepreneurial Activity**

### *2.3.1 Introduction*

The effects of general macroeconomic conditions on entrepreneurial activity are essentially different from cultural and social effects.

The extent of year-to-year stability in the level of entrepreneurial activity is not well documented. Two major factors are often mentioned as affecting entrepreneurial activity; general macro-economic conditions and enduring cultural and social norms and national institutions. If general macroeconomic conditions have a major impact, then some year-to-year variation in entrepreneurial activity reflecting shifts in these conditions would be expected. If enduring cultural and social norms and national institutions are the overriding causal mechanism, relatively stable year-to-year levels of activity would be expected. The most reasonable expectation is that both of these two external mechanisms may have an impact.

### *2.3.2 Macro economic conditions and the development of entrepreneurial activity<sup>2</sup>*

Previous analysis indicated that most of the factors with stable and significant correlations with the level of entrepreneurial activity - such as income disparity, the population structure, levels of educational attainment, social security programs, mechanisms for registering new businesses - change rather slowly, over decades rather than years.

The development of entrepreneurial activity between 200 and 2001 pointed at year-to-year stability.

Evidence for year-to-year stability - and entrepreneurial activity as reflecting slow-to-change cultural and social norms and institutions - was found in the GEM 2001 assessment. The TEA index for twenty GEM 2000 countries was unchanged for 17 of them in GEM 2001. There was a statistically significant drop for only three countries between the year 2000 and 2001 (Brazil, Norway, and the US). Among the 20 GEM 2000 countries, the average change in growth in GDP (not GDP itself) from 1998-1999 to 1999-2000, just prior to the 2000 to 2001 period, was essentially zero, or 0.82 percent. There

<sup>1</sup> The percentage of owners of young firms in TEA involvement is 17 for Poland, 33 for Slovenia and 55 for Hungary.

<sup>2</sup> This section is based upon Reynolds, Bygrave, Autio and Hay, 2002, Global Entrepreneurship Monitor 2002 Summary Report.

was no change in the annual growth rate. The average change in the TEA rate for these 20 countries from 2000 to 2001 was also about zero (-.37 %). Stable national economic growth seems to be associated with stable levels of entrepreneurial activity.

However, between 2001 and 2002 entrepreneurial activity has dropped worldwide.

The situation has changed dramatically for the 2001-2002 period. The overall TEA index levels for 28 of the GEM 2001 countries are presented in table 1 for 2001 and 2002. There has been a statistically significant drop for 17 countries, no significant change for 9, and a significant increase for two - Argentina and India. There was a change in survey firms in India and an expansion of the sample; some of the increase in India may reflect these methodological adjustments. The increase in Argentina reflects a dramatic rise in necessity entrepreneurship - the prevalence rate doubled, which more than offset a decline in opportunity entrepreneurship. This appears to reflect the major crisis in Argentine financial institutions that began in the autumn of 2001.

The decline observed in entrepreneurial activity follows the worldwide drop in national economic growth.

In the same period, from 1999-2000 to 2000-2001, there was also a systematic decline in the annual rate of growth in each GEM 2001 country, as shown in table 1. This represents an average absolute decline of 3.28% in the growth of GDP. Only four of these 27 countries had an absolute decline in GDP itself - Argentina, Japan, Israel and Mexico. This was followed by an average absolute drop of 2.29 % (or a relative drop of 33%) in the TEA rates from 2001 to 2002. As mentioned above, this was statistically significant in 17 of 28 countries. As the decline in GDP growth was uniform, present among virtually all GEM 2001 countries, it is not possible to compare countries with increases and decreases in the annual rate of economic growth. A worldwide drop in national economic growth seems to be followed by a worldwide decline in entrepreneurial activity.

table 1 Average change in growth in GDP 199/2000 to 2000/2001, Prior to change in TEA rates, 2001-2002

<i>Country</i>	<i>GDP% growth change</i>	<i>TEA rates change</i>	<i>Country</i>	<i>GDP% growth change</i>	<i>TEA rates change</i>
India	-1.28	6.32*	South Africa	-1.14	-2.90*
Argentina	-3.62	3.05*	Ireland	-5.61	-3.09*
Israel	-8.30	1.39	Finland	-4.85	-3.10*
Brazil	-2.85	0.78	Japan	-2.69	-3.38*
Norway	-1.00	-0.08	Spain	-1.51	-3.58*
Korea	-6.30	-0.37	New Zealand	-1.33	-4.06*
Singapore	-12.30	-0.67	France	-2.36	-4.17*
United States	-3.50	-1.10	Italy	-1.09	-4.26*
Denmark	-2.07	-1.48	Russia	-3.99	-4.41*
Belgium	-3.01	-1.54*	Hungary	-1.44	-4.79*
NETHERLANDS	-2.14	-1.82	Poland	-3.00	-5.53*
Canada	-3.03	-2.16	Australia	-0.58	-6.83*
United Kingdom	-1.15	-2.43*	Mexico	-6.91	-8.33*
Sweden	-2.40	-2.68*			
Germany	-2.28	-2.83*	<i>Average</i>	<i>-3.28</i>	<i>-2.29</i>

\* Significant at 95% confidence level.

Source: GEM 2001, 2002.



Two factors discussed above help to illuminate the impact of changes in national growth rates with the level of entrepreneurial activity. First, about two thirds of entrepreneurial activity reflects the desire to take advantage of a business opportunity. Second, three-fourths or more of opportunity-based entrepreneurship involves replication of existing business activity - little or no new markets are created. The primary 'opportunity' is an unmet demand for goods and services; such unsatisfied demands are likely to increase with general growth in a national economy. If the national growth rate declines, there is likely to be a reduction in the demand for goods and services and less opportunity for market replication new businesses. And indeed, the impact on a reduction in opportunity entrepreneurship was widespread, particularly in those countries - about half of the group - where only a small fraction of the activity reflected necessity entrepreneurship. However, while global changes in economic growth may affect the level of entrepreneurial activity across all countries, the country-to-country differences appear to be stable.

In conclusion, this natural occurrence - a universal drop in national economic growth rates - provides evidence that both macro-economic conditions and enduring national characteristics have an impact on the level of entrepreneurial activity. A uniform drop in economic growth followed immediately by an almost universal drop in entrepreneurial activity suggests that macro-economic conditions have an effect. On the other hand, the relative stability in the rank order of the countries suggests that stable national characteristics may also have an effect. As the GEM research program continues it may be possible to provide more precise evidence of the relative impact of these disparate sources of influence.

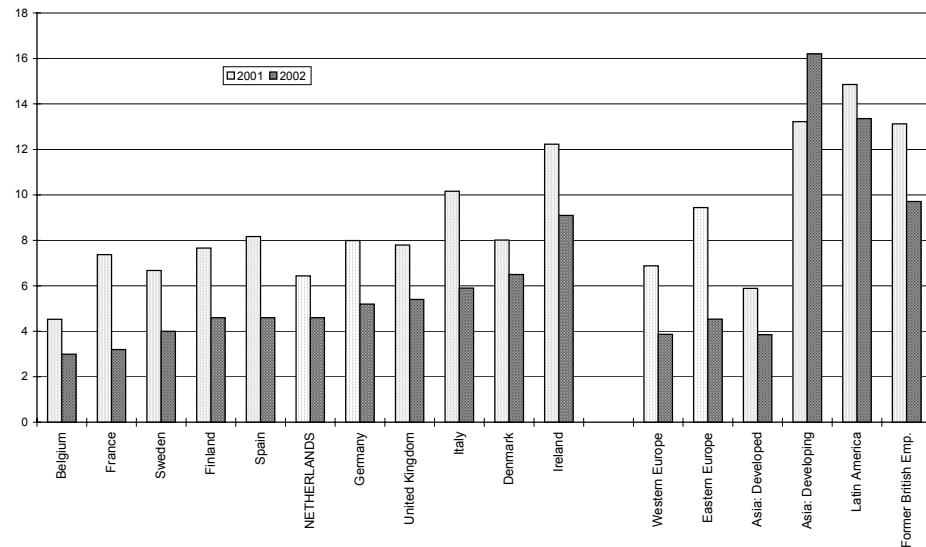
### 2.3.3 *Development of Entrepreneurial Activity from the Netherlands perspective*

Declining entrepreneurial activity in the Netherlands, but the relative position has improved.

In figure 9, we see that the Dutch TEA decreased in the past year. As mentioned earlier, the decrease is common for all EU countries. The Netherlands and Denmark are the only EU countries for which the decrease is not significant statistically<sup>1</sup>. The Dutch TEA-value has decreased in value by about 30 percent, from 6.4 in 2001 to 4.6 in 2002. A decrease is seen in most other countries. In fact, the relative position of the Netherlands has improved at the cost of Russia, France, Sweden, Finland and Spain. However, Israel and Singapore, in turn, overtook the Netherlands. Hong Kong, Croatia Chinese Taipei and Poland are new in GEM, and have TEA rates lower than the Dutch rate. Below, we further examine developments considering owners of young businesses and nascent entrepreneurs separately.

<sup>1</sup> The development of decreasing entrepreneurial activity is observed in 24 (of which 17 significant) out of the 28 countries involved in GEM 2001 and 2002). See also table 1.

figure 9 TEA indices for EU countries and world regions in 2001 and 2002



Source: GEM 2002.

#### Owners of young businesses

There is a decrease in the share of young business owners...

The most remarkable change observed for the Netherlands (however quite in conformance with the global picture) is the decrease in the number of young business owners, relative to the adult population. Where this rate was 3.8 in 2001, estimated value for 2002 is significantly lower at 2.1. There are two possible explanations for this development:

- Young firms have experienced more adversity leading to exits. Due to the less favorable economic environment. It is observed that the number of bankruptcies among baby businesses has increased significantly last year. However, overall the number of registered exits in the Netherlands still remained at the same level.<sup>1</sup>
- The 2001 and 2002 nascent entrepreneurs experienced more difficulties in getting their business started. Indeed, there is supporting evidence that the number of start-ups in the Netherlands decreased.<sup>2</sup>

Given the relative stability of total business exits, we must take into account the possibility that our figures, due to sample fluctuation, somewhat overestimate the true decrease in the number of young business owners.

#### Nascent entrepreneurs

...while the share of nascent activity remains stable

Despite the negative development in the share of owners of young firms, which is observed in almost every country involved in GEM, there is also a positive note. While entrepreneurial activity in young business dropped, the nascent activity remained at the

<sup>1</sup> Kleinschalig Ondernemen (Small-scaled entrepreneurship), 2002, EIM: Zoetermeer.

<sup>2</sup> EZ, 2002, Ondernemerschapsmeter, Najaar 2002 (Entrepreneurship Monitor, Fall 2002). Downloadable at [www.ez.nl](http://www.ez.nl).

same level<sup>1</sup>. While the rate in the Netherlands remains stable, most other countries demonstrate decreasing nascent participation rates. The Dutch nascent participation rate, ranked second lowest in 2001, it rose in rank above seven other OECD countries<sup>2</sup>. This finding may be seen as a combination of two effects:

- The finding that the number of nascent entrepreneurs remains at the same level as in 1998 and 2001, although fewer start-up attempts could be expected in the current economic circumstances, may be caused by the fact that nascent entrepreneurs have more difficulties in getting the business started. In other words, when the economic circumstances had been more favorable, there would have been more owners of young firms and fewer nascent entrepreneurs<sup>3</sup>.
- The relative increase shown by international comparison could be the result of the outspoken, pervasive policy to reduce legal and administrative entry barriers and to stimulate entrepreneurial awareness among the people in the Netherlands. In this line of reasoning, the proportion of nascent activity can be considered as an indicator for new business activity in the near future.

## 2.4 Conclusion

The Global Entrepreneurship Monitor measures entrepreneurial activity worldwide. This enables comparison of countries at different levels of development and permits the study of roles for and diverse consequences of entrepreneurial activity. Entrepreneurial activity is measured by the Total Entrepreneurial Activity (TEA) index, derived from the results of national adult population surveys among at least 2,000 adults per country.

The TEA index is based on identifying:

- nascent entrepreneurs: people currently involved in concrete activities to set-up a business; and
- owners of young businesses: people currently owning and managing a business that is less than 42 months old.

Entrepreneurial activity dropped worldwide between 2000 and 2001. This was also observed for the Netherlands. However, the decrease in entrepreneurial activity observed was less pronounced than in most other countries. Consequently, the relative position of the Netherlands improved in the past year.

Entrepreneurial activity in the Netherlands appears to be relatively low in global perspective, but about average in EU-perspective. Entrepreneurial activities in the Netherlands are mostly opportunity-based rather than necessity-based. This is also common for the other EU countries. Opportunity-based entrepreneurship development follows eco-

<sup>1</sup> In 1998, EIM conducted an extensive study on nascent entrepreneurs, encompassing a large representative sample of 21,993 Dutch inhabitants between 18 and 64 years old. Depending on the definition used, the nascent participation rate found in this study ranged from 2.5 to 3.2. See Van Gelderen, 1999, Oogluikend Ondernemerschap, EIM: Zoetermeer. The Dutch nascent participation rate for GEM 2001 equaled 2.6.

<sup>2</sup> These countries are Japan, Russia, Sweden, Belgium, Spain, France and the United Kingdom. Differences between the countries are small, and in most of the cases not significant at the 95 percent confidence level.

<sup>3</sup> This is, in fact, a trade-off between the number of nascent entrepreneurs and that of owners of young businesses. Total entrepreneurial activity is not affected in this line of reasoning.

conomic growth development, as the primary opportunity is an unmet demand for goods and services.

The decrease in the prevalence of owners of young businesses reflects the abovementioned development and thus follows the decline in economic growth. The argument would also predict a negative development of nascent activity, which is indeed observed for most countries involved in GEM. The prevalence of nascent entrepreneurs in the Netherlands, however, appears to be quite stable. This result can be seen as a combination of two effects:

- First, nascent entrepreneurs have more difficulties in getting the business started and some of them would have managed to start the business if the conditions had been as favorable as last year. This reason would be relevant for all countries experiencing a decline in economic growth.
- Second, and this might then also explain the improvement in position in international comparison, a further upward effect could be caused by the outspoken, pervasive policy to reduce legal and administrative entry barriers and to stimulate entrepreneurial awareness.

## 3 Characteristics of Dutch Entrepreneurs

### 3.1 Introduction

Having assessed the Dutch entrepreneurial activity index and its position in global perspective, it is interesting to explore how the individuals behind the index can be characterized. As the Dutch people involved in entrepreneurial activity are retrieved from a random telephone survey throughout the country, we are able to explore the entire Dutch entrepreneurial landscape. The samples of 2001 and 2002 were merged to allow us to draw reliable conclusions on subsets. The number of people interviewed who are involved in entrepreneurial activity then amounts to 229.

### 3.2 General features

This is the second year that the Netherlands has taken part in the Global Entrepreneurship Monitor consortium. The adult population surveys, encompassing in sum over 5,500 adults (of whom 4,750 between 18-65 years), yielded 229 persons that can be considered entrepreneurial active. About one third of these people (85) are female. Some characteristics that relate to attitudes towards setting-up a business are presented in table 2. Compared to individuals that are not involved in entrepreneurial activities, the people that classify for total entrepreneurial activity more often have contacts with other entrepreneurs, recognize opportunities and have the knowledge and skills to start a business (according to themselves). Considering these topics, male individuals demonstrate stronger affinity to entrepreneurship.

People involved in entrepreneurial activities demonstrate stronger affinity to entrepreneurship

table 2 Attitudes to entrepreneurship, in percentages<sup>a)</sup>

		<i>Involved in TEA<sup>b)</sup></i> <i>(n=229)</i>		<i>Not involved in TEA</i> <i>(n=5294)</i>	
		<i>Female</i>	<i>Male</i>	<i>Female</i>	<i>Male</i>
You know someone personally who started a business in the past 2 years.	yes	42	67	18	32
	no	56	33	80	67
	dk <sup>c)</sup>	2	-	2	1
In the next six months there will be good opportunities for starting a business in the area where you live.	yes	44	59	29	37
	no	36	28	41	39
	dk	20	13	31	25
You have the knowledge, skill, and experience required to start a new business.	yes	78	93	20	44
	no	18	6	78	53
	dk	4	1	2	3
Fear of failure would prevent you from starting a business.	yes	18	12	23	21
	no	80	87	69	73
	dk	2	1	9	6

a. Percentages per question and gender type add-up to 100.

b. Total entrepreneurial activity (nascent entrepreneur or owner of a young business).

c. 'Don't know'.

Business activities among entrepreneurially active individuals in the Netherlands are dominated by services

### *Types of business activity*

The types of business activities for those classified as entrepreneurially active in 2001 and 2002 are presented in table 3. About half are active in services. This is typical for Western European countries, although Belgium and France are more manufacturing-oriented (see figure 10). The relatively low presence in services seems to be an important explanation of the low TEA indices found for Belgium and France (see figures 2 and 3). The structure of business activities for the Netherlands is similar to that of the United States. The average sector structure of entrepreneurial activities across the 37 countries participating in GEM is however dominated by retailing<sup>1</sup>.

**table 3 Entrepreneurship by types of business activity, the Netherlands (n=229)**

	<i>Nascent entrepreneurs</i>	<i>Owners of young firms</i>	<i>Total entrepreneurial activity</i>
Agriculture, forestry, hunting, fishing	9	8	9
Mining and construction	4	3	3
Manufacturing	6	12	9
Transportation, communication, utilities	4	7	6
Wholesale, car & repair	2	6	4
Retail, hotel & restaurant	15	12	13
Financial services, real estate	9	2	6
Business services	34	31	33
Health, education, social services	11	7	9
Consumer service	7	13	10
	100	100	100

Source: GEM 2001, 2002.

<sup>1</sup> Taken together, India and China's population make up over half of the population of all countries involved in GEM. As the retail sector dominates in India and China, this is highly reflected in the global sector structure. See Reynolds, Bygrave, Autio and Hay, 2002, Global Entrepreneurship Monitor 2002 Summary Report, Table 4.

figure 10 Structure of business activities in international comparison, 2002



Source: GEM 2002.

In the remainder of this section, we further examine the 229 people that are classified as entrepreneurial active individuals, on characteristics that are most basic when analyzing determinants of entrepreneurship at the micro level<sup>1</sup>. These characteristics relate to demography, preparation and finance.

#### Demography

Women in the 25-34 age category are underrepresented in the Netherlands

In figure 11, it is seen that the age distribution of women involved in entrepreneurial activity deviates from that of the male entrepreneur. In particular, the 25-34 age category is underrepresented for women. Probably, the combination of entrepreneurship with having and raising children is not seen as ideal. However, there is also a group of women who actually start a business, because it compatible with the task of raising a family (freelance activities at home, for example). About ten percent of all women involved in entrepreneurship indicate doing this<sup>2</sup>. In the Netherlands, there are good provisions that allow women to keep their jobs during and after pregnancy. This may partly explain the lack of interest in entrepreneurship for this particular group. In total, the 'peak' lies at a somewhat higher age than in most other countries.

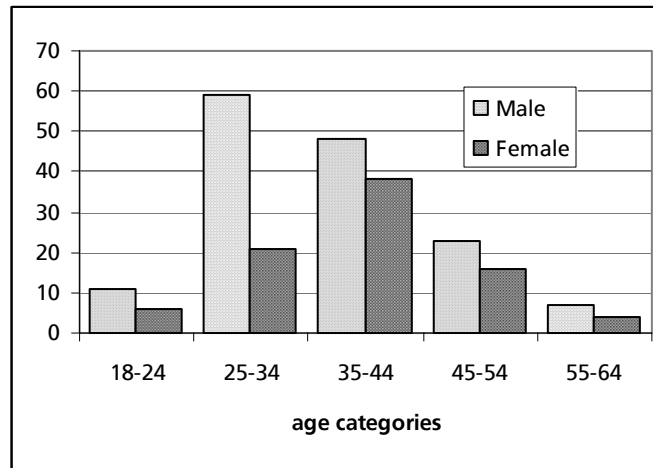
The average number of owners of young businesses is somewhat less than 2

The average number of owners per business is 1.8. There is no significant difference between nascent entrepreneurs and owners of young firms in this respect. Also, this number is about equal to the average among all countries involved in GEM. Countries with the highest average number of owners of young firms are Hong Kong, Sweden and Spain (ranging from 2.1 to 2.3). Countries at the lower extreme are mostly developing countries. Lowest are India, China and Korea (ranging from 1.2 to 1.3).

<sup>1</sup> See for example Evans, and Leighton, 1989, Some empirical aspects of entrepreneurship; and Bosma, Van Praag, Thurik and De Wit, 2002, The Value of Human and Social Capital Investments for the Business Performance of Start-ups.

<sup>2</sup> Dirks, Rosenbrand and Bosma, 2002, Transitie naar ondernemerschap (Transition to entrepreneurship).

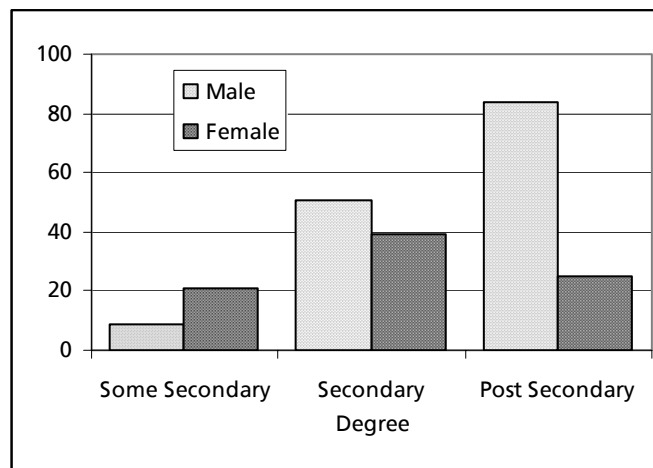
figure 11 Age and gender distribution of the people involved in entrepreneurial activity



Men involved in entrepreneurial activities have higher education levels

Gender seems to be unbalanced if we also consider the education levels of the entrepreneurs as well (see figure 12). While more than half of the men involved in entrepreneurial activity have post secondary education, this is the case for about one in three of the women.

figure 12 Education and gender of the people involved in entrepreneurial activity



About half of the start-ups involves up to 6 months of preparation.

#### Preparation time

About half of the adults involved in entrepreneurial activity has been preparing the start-up for at most six months. Preparation time for nascent entrepreneurs is slightly shorter than for owners of young businesses, see table 4. This is, of course, partly due to the fact that nascent entrepreneurs need a varying amount of additional time to actually get the business started.



**table 4** Preparation time for nascent entrepreneurs (time until the interview), and owners of young businesses (time until the start-up)

	<i>Nascent entrepreneurs</i>	<i>Owners of young firms</i>	<i>Total entrepreneurial activity</i>
Less than 3 months	23	26	24
3-6 months	31	21	27
6-12 months	30	28	29
1- 2 year	10	15	12
More than 2 years	6	10	8
	100	100	100

#### *Financial characteristics*

Using the results of the 2002 sample, we see that people who are involved in entrepreneurial activity, have access to household incomes that are significantly higher than people who are not involved in entrepreneurial activity.

Low prevalence of informal investors in the Netherlands

GEM also investigates the willingness among the population to invest in new businesses (see Annex I, question 4). In this way GEM derives an 'informal investor prevalence rate' for each country. The Netherlands performs fifth lowest at 1.5 percent of the adult population<sup>1</sup>. This result may be seen in line with the 'saving culture' that characterizes the Netherlands. Dutch inhabitants seem keener on investing in risk-averse projects (pensions, employee premiums, debenture). Informal investor prevalence rates are highest in Iceland, New Zealand and Thailand (ranging 5.3 to 7.4). Japan, Brazil, Croatia and Poland (ranging 1.0 to 1.3) are the four countries with prevalence rates below the Dutch rate. In table 5, we see that more than half of the individuals currently preparing a new business requires up to €25,000 for the start-up. Most of the total sum needed for setting-up the business is provided by the entrepreneurs themselves (the amount of own investments includes debt capital).

**table 5** Start-up capital required and invested by individuals involved in nascent entrepreneurial activity

	<i>Start-up capital required</i>	<i>Own money investments</i>
Up to € 10,000	26	30
€ 10,000 - € 25,000	29	34
€ 25,000 - € 100,000	5	9
€ 100,000 - € 250,000	16	9
€ 250,000 - € 1,000,000	18	14
Higher than € 1,000,000	5	5
	100	100

Source: GEM/EIM, 2002.

<sup>1</sup> France and Belgium have an equal informal investor prevalence rate.

### 3.3 Start-up motives and perceived bottle-necks

#### *Motives for setting up a business*

The motives for setting up a business, presented in table 6, are in line with some results found earlier. Motives seem to be predominantly reflect positive associations. The most important one, being your 'own boss' was also found in earlier panel studies among nascent entrepreneurs and business founders<sup>1</sup>. It is striking to note that the motive referring to earnings is mentioned more often among owners of young firms, rather than to the individuals who are still involved in setting up the business. A small share of the entrepreneurially active people pursues a new market opportunity. Section 3.4 deals with market expansion in more detail.

**table 6** Percentages of entrepreneurially active individuals giving specific start-up motives

	<i>Nascent entrepreneurs</i>	<i>Owners of young firms</i>	<i>Total entrepreneurial activity</i>
Being your 'own boss'	46	64	54
Challenge	30	27	29
Earning more money compared to wage-earning	11	22	16
Pursuing a perceived new market opportunity	11	7	9
(Threat of) unemployment	5	7	6
Better possibilities to combine labor and nurturing	5	3	5
Dissatisfaction with current job	3	5	4
Other	16	17	17

Source: GEM/EIM, 2002.

#### *Bottlenecks*

Almost every entrepreneur experiences some bottlenecks in the process of setting up a business. The problems mentioned by the people involved in entrepreneurial activity are set out in table 7. Most prevalent problems encountered relate to regulatory matters and to finance. Some also perceive finding a good accommodation as a bottleneck. Nascent entrepreneurs have more problems with finance<sup>2</sup>. This can be explained by the fact that some nascent entrepreneurs may not prepare themselves properly and will consequently not acquire the required funds. This possible explanation was also put forward by Van Gelderen et al. (2002), who studied the determinants of successful nascent entrepreneurs, where success was defined as: setting-up the business.

<sup>1</sup> Stigter, 2001, Het voorbereidingsproces: van start tot finish (Preparing a business start-up: from start to finish).

<sup>2</sup> This was also found in Van Gelderen (1999) and Stigter (2001). However, percentages related to these particular bottlenecks (regulatory and finance) were somewhat higher.

table 7 Percentages of entrepreneurially active individuals mentioning specific bottle-necks

	<i>Nascent entrepreneurs</i>	<i>Owners of young firms</i>	<i>Total entrepreneurial activity</i>
Regulatory matters	22	20	21
Finance	18	10	14
Finding customers, market	8	19	13
Finding qualified personnel	7	15	11
Problems with customers / suppliers	7	7	7
Accommodation	7	-	5
Insufficient knowledge / experience	4	3	4
Personal circumstances	3	3	3
Availability of information / advice	-	3	2
Other	12	12	12

Source: GEM/EIM, 2002.

### 3.4 Market expansion orientation

Setting up a business is one thing. Business growth is another. An important indicator of future growth is the involvement in *innovative* entrepreneurial activity. In addition, having an international orientation is also indicative for future growth.

#### *Innovation*<sup>1</sup>

In table 8, we see that two out of 10 people involved in entrepreneurial activity believe that the product or service they offer is new to all clients. Nascent entrepreneurs seem to judge the newness of their products higher than the entrepreneurs that have already started their business. Perhaps some are a bit over-enthusiastic. Nascent entrepreneurs also foresee slightly fewer competitors offering the same product. One in ten entrepreneurs claims to use the latest technology.

<sup>1</sup> The GEM findings relating to innovative start-ups will, along with other supporting research material, be dealt with in-depth in a separate publication: EZ/EIM, 2003, *Entrepreneurship in the Netherlands*, forthcoming.

**table 8** Market expansion features

		<i>Nascent entrepreneurs</i>	<i>Owners of young firms</i>	<i>Total entrepreneurial activity</i>
Product/services will be considered new to*	all clients	28	10	20
	some clients	10	16	13
	none	62	74	67
		100	100	100
How many competitors offer the same products or services?	many	39	54	46
	few	44	33	39
	none	17	12	15
		100	100	100
Were the required technologies or methods available one year ago?	yes	89	90	89
	no	11	10	11
		100	100	100

\* Significant difference (95% confidence level) between nascents and owners of young firms.

### Exports

The international orientation of the people involved in entrepreneurial activity is set out in table 9. About one in five has (while about one in eight expects to have) a considerable share (above 25 percent) of customers outside the Netherlands. About one in eight of the entrepreneurially active individuals has more than half of its clients outside the Netherlands. In this, the Netherlands performs about average. The Netherlands is known for its high level of international trade, relative to GDP<sup>1</sup>. However, this is accounted for mainly by the activities of large firms. The percentage of small firms engaged in international trade is more limited<sup>2</sup>.

**table 9** Percentage of (anticipated) clients outside the Netherlands

	<i>Nascent entrepreneurs</i>	<i>Owners of young firms</i>	<i>Total entrepreneurial activity</i>
90% and more	6	5	5
76% - 90%	1	3	2
51% - 75%	-	10	5
26% - 50%	6	3	5
25% and less	87	78	83
	100	100	100

<sup>1</sup> See, for example, World Competitiveness Yearbook, 2002. The high position of the Netherlands is particularly caused by the geographical characteristics.

<sup>2</sup> About 90 percent of small-sized businesses in the Netherlands is not engaged in any international activities. See Kleinschalig Ondernemen (Small-scaled Entrepreneurship), 2002, EIM: Zoetermeer.

### 3.5 Conclusion

This chapter analyzed the Dutch individuals that were involved in entrepreneurial activity - and thus together form the personification of the Dutch TEA rate. The samples of 2001 and 2002 were merged to be able to draw reliable conclusions from subsets. The number of people involved in entrepreneurial activity that were interviewed then amounts to 229.

Compared to individuals that are not involved in entrepreneurial activity, those people that are entrepreneurially active (and men in particular) show more affinity to entrepreneurship; they have more contacts with other entrepreneurs, recognize more business opportunities and find themselves better qualified and skilled to set up a business.

Younger women (in the category 25-34 years) are underrepresented in the Netherlands. Apparently, the option of combining entrepreneurship with having and nurturing children is not (yet) seen as ideal. The Dutch entrepreneurs are generally well educated; male entrepreneurs are somewhat more highly educated than women.

Most mentioned motives to start a business are 'being independent', as well as 'accepting a challenge'. Necessity-based motives are hardly heard. Most pregnant bottlenecks seem to be regulatory and finance related.

An important result of GEM 2002, also found in 2001, is that the prevalence rate of informal investors in the Dutch adult population is extremely low in international perspective. Few Dutch people involved in entrepreneurial activity are internationally orientated. When considering market expansion, entrepreneurially behavior in the Netherlands can be characterized as moderate.

In sum, these findings indicate that for some specific target groups, improvements could still be made when it comes down to stimulating entrepreneurship with more pretension than 'just running the business'.



## 4 The Dutch Entrepreneurial Climate; A Brief Update

### 4.1 Introduction

The decision to become an entrepreneur depends on many factors. Whereas in the previous chapter the characteristics at individual level were described, as well as the entrepreneur's direct environment, this chapter focuses on the wider external environment of entrepreneurial activity in the Netherlands as a whole. Various external conditions, on which the individual has no influence, together form the entrepreneurial climate. The entrepreneurial climate is an important determinant of the measure of entrepreneurial activity<sup>1</sup>. In the Dutch GEM report of 2001, an assessment of the entrepreneurial climate was carried out, with respect to the nine entrepreneurial framework conditions distinguished in the GEM project.<sup>2</sup> These are:

Nine entrepreneurial framework conditions are distinguished

- Financial support,
- Government policies,
- Government programs,
- Education and training,
- R&D transfer,
- Commercial and professional infrastructure,
- Internal market openness,
- Access to physical infrastructure,
- Attitudes, and cultural and social norms.

Assessments by Dutch experts and the comparisons of these with the assessments of their international colleagues leads to strengths and weaknesses

#### *Methodology*

Experts on each of these fields were interviewed, for every country, using a semi-structured interview template<sup>3</sup>. The experts (i) assessed the above framework conditions, by judging each topic using five or six sub questions; and (ii) indicated three weaknesses and three strengths of the Dutch entrepreneurial climate. Using these self-assessments of the Dutch experts in detail, and the aggregate assessments of the experts of other countries, we are able to state strengths and weaknesses of the current entrepreneurial climate in the Netherlands. These judgments are supported by harmonized, cross-national statistics where available.

The self-assessment of the Netherlands for 2002 produced scores similar to those of 2001. For a complete assessment of the entrepreneurial climate, we refer to Bosma, Stigter and Wennekers (2001). In this section, an update of the strengths and weaknesses is provided. National strengths are assessed in section 4.2, whereas the weak-

<sup>1</sup> For a comparison of the conditions for entrepreneurship across countries within an eclectic framework, see D.B. Audretsch, A.R. Thurik, I. Verheul and S. Wennekers (eds.), 2002, *Entrepreneurship: Determinants and Policy in a European-US Comparison*.

<sup>2</sup> See N.S. Bosma, H.W. Stigter and A.R.M. Wennekers (2002), *The long road to the entrepreneurial society; Global Entrepreneurship Monitor the Netherlands*. Also downloadable at [www.gemconsortium.org](http://www.gemconsortium.org) and <http://www.eim.nl/smes-and-entrepreneurship>.

<sup>3</sup> A list of the experts interviewed for GEM 2002 is provided in Annex II. In 2001 another 36 experts were interviewed.

nesses are dealt with in section 4.3. This chapter ends with a summarizing conclusion of the entrepreneurial climate of the Netherlands.

## 4.2 Strengths

In the expert questionnaires, and in the face-to-face interviews, the experts considered the following entrepreneurial framework conditions to be most favorable in the Netherlands:

- Government Policies
- Financial Support
- Access to physical infrastructure.

Below, we discuss in more detail what makes these items national strengths. To highlight the strengths, we have added some quotes from the interviews.

### *Government policies*

Strength: general support of entrepreneurship

The experts were particularly positive about government support for entrepreneurship via specific policies, as well as on the effect of general national policies. The Netherlands is also in the top of the list of the GCR Public Institutions Index<sup>1</sup>. Of the countries involved in GEM, only Finland, Iceland, New Zealand and Denmark score higher on this index.

*'Netherlands keeps stressing the main conditions for entrepreneurship in its policy. There has been a consistent policy towards entrepreneurship in the last decade, which is very important in order to achieve targets.'*

A few less favorable aspects in this area are the regulatory burden, and the effect of general national taxation on entrepreneurship. Support of new firms through public procurement is also lacking.

### *Financial Support*

Strength: availability of financial capital

The experts were generally satisfied with financial support for entrepreneurship. Only the US experts judged their country higher on the availability of equity and debt funds for new and growing firms.

*'In general there is enough supply of financial capital available to starting entrepreneurs.'*

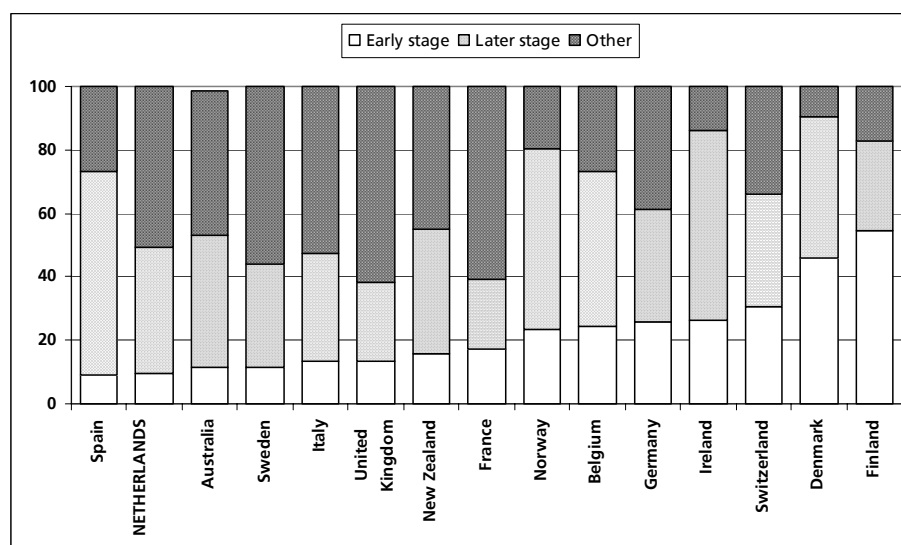
The Netherlands was also given a positive score for financing through IPO's and angels. However, the GEM results in 2001 and 2002 revealed a relatively low prevalence of people making informal capital investments. From figure 13 it is seen that venture capital funds are available particularly for businesses in a later stage of their life cycle.

*'The business market should be interested in innovations, but often subsidies are required to give market innovative efforts a push. It is not clear, however, what funds can be used for what purposes.'*

<sup>1</sup> Global Competitiveness Report, 2001.



figure 13 Division of domestic funds for Venture Capital, according to the stage of investment, for a selection of GEM countries



Early stage: seed, start-up.

Later stage: expansion, late stage.

Other: replacement, turnaround, buy-out, acquisition.

Source: ECVA and NCVA.

#### Access to physical infrastructure

Strength: quality of the infrastructure

The strength of the Dutch physical infrastructure lies especially in the high *quality* of the infrastructure (telecommunication, utilities, transport). Accessibility of land and space for offices was considered to be of minor importance. In international context, the Netherlands scores about average on physical infrastructure. One positive item is that new and growing firms can, more than in most other countries, afford the utility costs. A negative detail on this topic is the relatively low factor score on how quick new and growing firms can get access to communication.

*'Although the roads are often full, the infrastructure (including transport on water) can be considered a strong point'.*

In the infrastructure score, published by the World Competitiveness Yearbook, the Netherlands also scores reasonably well, above many European countries<sup>1</sup>.

### 4.3 Weaknesses

The experts considered the following entrepreneurial framework conditions to be most problematic in the Netherlands:

- Education and training
- Cultural and social norms
- R&D Transfer.

<sup>1</sup> World Competitiveness Yearbook, 2001, p. 35. USA has the highest score, Scandinavian countries and Switzerland follow. Netherlands performs about equal to Germany, while for example the United Kingdom, and France have lower scores.

Below, we discuss in more detail what the perceived problems in these areas.

Weakness: education philosophy towards innovativeness

#### *Education and Training*

Most problems indicated by the experts pertain to the education philosophy towards innovation skills and creative studies. Two experts indicate that the expertise of entrepreneurs and managers is lacking, while one also questions the quality of the trainers.

*'The availability of sufficiently qualified personnel is a significant weakness and an obstacle for further growth of start-ups. With respect to the entrepreneur an important bottleneck is the lack of marketing know-how and market knowledge. This is especially true for entrepreneurs with a technological background.'*

The problems relating to education are certainly not unique for the Netherlands. Summarizing factor scores on questions related to education and training reveal that the Netherlands performs better than most European countries. Of all countries involved in GEM, Canada and the United States are most satisfied with this framework condition. Education and attitudes towards entrepreneurship were studied in depth in last year's GEM report for the Netherlands.<sup>1</sup>

#### *Cultural and social norms*

Weakness: attitudes towards failure and risk

Weaknesses associated with cultural and social norms are particularly related to attitudes towards failure and towards risk. In this respect it is remarkable that 75% of the Dutch adult population indicates that fear of failure would not prevent them from setting up a business. However, a questionnaire among European countries pictured the Dutch population as rather non-supportive when it comes to giving a failed entrepreneur a second chance<sup>2</sup>.

*'Entrepreneurship and taking risks do not receive the credit they receive in other countries. Once an entrepreneur has gone bankrupt it is nearly impossible to obtain new financial loans from banks. In contrast, US banks are more willing to provide a new loan to a bankrupt entrepreneur since he is expected to have gained experience from his previous business attempt. People in the Netherlands are also less willing to take risks than US-citizens.'*

As was found last year, it was again recognized in this year's interviews that entrepreneurial awareness has greatly improved in the last decades.

*'Public appreciation and recognition of entrepreneurship have strongly improved compared to the 1970s. Public opinion towards entrepreneurship has become much more favorable.'*

<sup>1</sup> Bosma, Stigter and Wennekers (2002), The long road to the entrepreneurial society; Global Entrepreneurship Monitor the Netherlands. Also downloadable at [www.gemconsortium.org](http://www.gemconsortium.org) and <http://www.eim.nl/smes-and-entrepreneurship>.

<sup>2</sup> European Commission, 2000, Eurobarometer 2000.

Weakness: knowledge  
transfer activity

#### *R&D Transfer*<sup>1</sup>

Although there is a large stock of relevant scientific knowledge available in the Netherlands, the transfer of R&D to small firms lags behind. The problems indicated especially relate to national orientation and to transfer activity. The innovative capacity is adequate in the Netherlands<sup>2</sup>.

*'Existing support programs for innovative start-ups are not transparent for (potential) entrepreneurs. They are opaque. This also goes for the education programs offered in relation to innovative start-ups.'*

The perceived problems that are associated with R&D transfer in the Netherlands may be one of the reasons for the relatively limited percentage of entrepreneurially active people that are innovative, in the sense that they provide a niche market (see section 3.4).

## 4.4 Conclusion

In general, the Netherlands has a favorable entrepreneurial climate<sup>3</sup>. On most of the nine framework conditions that - taken together - make up the entrepreneurial climate, the Netherlands scores above average. In order to be aware of the specific Dutch strong and weak points, scores are attached to different aspects of all these framework conditions. Examining these scores, combining them with strength and weaknesses put forward by the interviewed experts and using supporting harmonized data from various sources makes it possible to judge the national strengths and weaknesses of the Dutch entrepreneurial climate.

From the self-assessment, strengths for the Netherlands are seen to be:

- Government policies
- Financial support
- Access to physical infrastructure.

The most pregnant weak points are in the fields of:

- Education and training
- Cultural and social norms
- R&D transfer.

This is a generic classification of rather broadly defined conditions for entrepreneurship. Within these fields, there are - without exception - variation in successes and sources of concern. For example, some aspects of government policies (like regulatory burdens, public procurement) still need improvement. Likewise, some aspects of cultural and social norms (such as the general attitude towards entrepreneurship) are actually quite favorable.

<sup>1</sup> An extended review on R&D transfer, using the GEM results, will appear in EIM/EZ, 2003, Entrepreneurship in the Netherlands, (forthcoming).

<sup>2</sup> This is reflected in the reasonably high Dutch Innovative Capacity Index, published by the Global Competitiveness Report, 2001.

<sup>3</sup> This is also reflected in the annual competitiveness scores, published in the Global Competitiveness Report, 2001; and World Competitiveness Yearbook, 2001.



## 5 Conclusion

In the year 2002 entrepreneurship has met with increasing adversity. The worldwide slow-down in economic growth rates signals diminishing opportunities for new enterprises, and has been accompanied by a strong decline in business start-up activity. For the 28 countries participating in the Global Entrepreneurship Monitor in both 2001 and 2002, the total entrepreneurial activity index dropped on average from 9.9 to 7.6. This is a relative decline of 23%. Informal investments in new business start-ups have suffered likewise; with a worldwide decrease of 13%.

In the Netherlands the decline of the total entrepreneurial activity rate was 29%, which compares favorably with the ten other EU Member States participating in GEM (37%) decline was even more dramatic (52%) in Eastern Europe. Nascent entrepreneurial activity in the Netherlands, however, proved remarkably stable over the business cycle, but the young firms ownership rate suffered heavily. We are of the opinion that this primarily signals stagnation in the start-up process of new enterprises, although an increased failure rate of new firms cannot be ruled out.

At the same time the ranking of countries by degree of entrepreneurial activity is remarkably stable, reflecting enduring cultural values and national institutions. The Netherlands' TEA-rate is still in the second lowest quartile of the global distribution, although slightly improving its relative position. Dutch entrepreneurial activity compares particularly unfavorably with that in many English-speaking countries such as New Zealand, Australia, Canada and the USA. In the Netherlands, the market for informal investments in new businesses started by someone else is still under-developed by international comparison.

Nevertheless, there is reason to believe that the modest improvement in the relative position of Dutch entrepreneurship in the Netherlands may be the fruit of continued efforts to improve societal conditions for entrepreneurship. During the past 15 years, successive Dutch governments have conducted a consistent policy to reduce entry barriers, improve labor market flexibility and enhance entrepreneurial awareness. In this period, the number of new business start-ups almost doubled between 1987 and 2000, after which a (temporary) setback recently occurred. Undoubtedly, it will take more time to fully modernize all relevant institutions, and it may take several generations to create a deeply rooted entrepreneurial culture. The experts consulted for this report suggest that negative attitudes towards failure and risk as also the scant attention for entrepreneurship in the education system are among the major weaknesses of the Dutch entrepreneurial environment. The problem of limited R&D transfer towards small firms, seen last year, is also still pregnant<sup>1</sup>. Additionally, the interviews held with Dutch nascent and young entrepreneurs indicate that dealing with regulatory matters is the number one bottleneck encountered during the start-up phase, while financing the enterprise and finding adequate accommodation are other frequently mentioned concerns.

<sup>1</sup> The GEM findings relating to knowledge transfer to start-ups will, along with other supporting research material, be dealt with in-depth in a separate publication: EZ/EIM, 2003, *Entrepreneurship in the Netherlands*, forthcoming.

The research carried out for the Global Entrepreneurship Monitor has also thrown light on the characteristics of nascent and young entrepreneurs, and on those of their businesses. In the Netherlands, two out of three persons entrepreneurially active are male, which is also the worldwide average. The prevalence of entrepreneurial activity peaks between the ages of 25 and 35 for men and between 35 and 45 for women. Not only are male business starters younger than their female counterparts, they are also more likely to have followed a post-secondary education (more than 50% versus around 33%). Furthermore, people involved in entrepreneurial activity have access to relatively high household incomes. As far as their (prospective) businesses are concerned, about 4% are innovative in the sense that they expect to provide at least some new market niche creation, while the comparable average figure for all countries represented in GEM is 7%. Most of the entrepreneurial activities (over 50%) are involved in Services.

In conclusion, entrepreneurship across the world is under pressure, at least temporarily. Entrepreneurial activity in the Netherlands, although modest by international comparison, has held up relatively well under the present unfavorable economic circumstances. In the short run, regulatory bottlenecks and the financing of new businesses are important policy areas in the Netherlands. In the longer run, improving the prevailing attitude towards risk and failure and raising entrepreneurial awareness through the educational system remain the major concerns.

## References

- Audretsch, D.B., A.R. Thurik, I. Verheul and S. Wennekers (eds.), 2002, *Entrepreneurship: Determinants and Policy in a European-US Comparison*, Kluwer Academic Publishers, Boston/Dordrecht.
- Bosma, N.S., H.W. Stigter and A.R.M. Wennekers (2002), *The long road to the entrepreneurial society; Global Entrepreneurship Monitor the Netherlands 2001*, EIM: Zoetermeer.
- Bosma, N.S., M.C. van Van Praag, A.R. Thurik and G. de Wit, 2002, The Value of Human and Social Capital Investments for the Business Performance of Start-ups, *Tinbergen Discussion Paper No 02-027/3*, Tinbergen Institute: Rotterdam.
- Dirks, F., M.E. Rosenbrand and N.S. Bosma, 2003, *Transitie naar ondernemerschap* (Transition to Entrepreneurship), OSA: Tilburg (forthcoming).
- European Commission, Eurobarometer 2000.
- Evans, D.S. and L. Leighton. 1989, Some empirical aspects of entrepreneurship, *American Economic Review* 79, pp. 519-535.
- EZ, 2002, *Ondernemerschapsmonitor, Najaar 2002* (Entrepreneurship Monitor, Fall 2002), Den Haag: Ministry of Economic Affairs. Downloadable at [www.ez.nl](http://www.ez.nl).
- EZ/EIM, 2003, *Entrepreneurship in the Netherlands*, forthcoming.
- Hofstede, G., 2001, *Culture's Consequences; Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd edition, Thousand Oaks: Sage.
- Global Competitiveness Report, 2001-2002*, Oxford, UK: Oxford University Press.
- Kleinschalig Ondernemen 2002* (Small-scaled entrepreneurship), 2002, EIM: Zoetermeer.
- Reynolds, P.D., W.D. Bygrave, E. Autio and M. Hay, 2002, *Global Entrepreneurship Monitor 2002 Executive Report*, Babson College / Ewing Marion Kauffman Foundation, London Business School.
- Reynolds, P.D., W.D. Bygrave, E. Autio and M. Hay, 2002, *Global Entrepreneurship Monitor 2002 Summary Report*, Babson College / Ewing Marion Kauffman Foundation, London Business School.
- Stigter, H.W., 2001, *Het voorbereidingsproces: van start tot finish?*, EIM: Zoetermeer.
- Thurik and Wennekers, 2001, *Entrepreneurship, economic growth and the significance of the GEM project*, Global Entrepreneurship Monitor 2001 Summary Report, Appendix.
- Van Gelderen, M., 1999, *Ontluikend Ondernemerschap* (Nascent Entrepreneurship), EIM: Zoetermeer.
- World Competitiveness Yearbook, 2002*, Lausanne, Switzerland: International Institute for Management Development.





## Annex I Adult Population Survey Questions

### *Standard GEM survey questions*

Questions 1-5 in table 10 select those people involved in entrepreneurial activities. Additional screening questions are then used to identify nascent entrepreneur and owners of young businesses. Besides the questions in table 10, standard characteristics about age, gender, education, main occupation, household income were asked.

**table 10** The ten central GEM questions for all adults surveyed

1	You are, alone or with others, currently trying to start a new business, including any self-employment or selling any goods or services to others.	Yes	No	DK
2	You are, alone or with others, currently trying to start a new business or a new venture for your employer - an effort that is part of your normal work.	Yes	No	DK
3	You are, alone or with others, currently the owner of a company you help manage, self-employed, or selling any goods or services to others.	Yes	No	DK
4	You have, in the past three years, personally provided funds for a new business started by someone else, excluding any purchases of stocks or mutual funds.	Yes	No	DK
5	You are, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years.	Yes	No	DK
6	You have, in the past 12 months, shut down, discontinued, or quit a business you owned and managed, any form of self-employed, or selling goods or services to anyone (not counting businesses that were sold).	Yes	No	DK
7	You know someone personally who started a business in the past 2 years.	Yes	No	DK
8	In the next six months there will be good opportunities for starting a business in the area where you live.	Yes	No	DK
9	You have the knowledge, skill, and experience required to start a new business.	Yes	No	DK
10	Fear of failure would prevent you from starting a business.	Yes	No	DK

### *Questions for people involved in entrepreneurial activity*

#### **A. Questions for all countries participating in GEM**

The questions below help identifying people involved in nascent entrepreneurship and owners of young businesses. Additionally, basic characteristics of the (prospected businesses) are derived.

- Over the past twelve months have you done anything to help start a new business, such as looking for equipment or a location, organizing a start-up team, working on a business plan, beginning to save money, or any other activity that would help launch a business?
- Will you personally own all, part, or none of this business?
- How many people, including yourself, will both own and manage this new business?

- Has the new business paid any salaries, wages, or payments in kind, including your own, for more than three months?
- What was the first year the owners received wages, profits, or payments in kind?
- What kind of business is this?
- Will all, some, or none of your potential customers consider this product or service new and unfamiliar?
- Right now, are there many, few, or no other businesses offering the same products or services to your potential customers?
- Were the technologies or procedures required for this product or service generally available more than a year ago?
- What proportion of your customers normally live outside your country? Is it more than 90%, more than 75%, more than 50%, more than 25%, or 25% or less?
- Right now how many people, not counting the owners but including exclusive subcontractors, are working for this business? By exclusive subcontractors, we mean only people or firms working ONLY for this business, and not working for others as well.
- How many people will be working for this business, not counting the owners but including all exclusive subcontractors, when it is five years old? By exclusive subcontractors, we mean only people or firms working ONLY for this business, and not working for others as well.
- Are you involved in this start-up to take advantage of a business opportunity or because you have no better choices for work?
- How much money, in total, will be required to start this new business?
- How much of your own money, in total, do you expect to provide to this new business?

#### **B. Additional questions for the Netherlands**

The questions below were added for the Netherlands. Purposes of posing these questions were to learn more about (i) preparation time, motives and bottlenecks and (ii) characteristics of knowledge transfer as this year's special topic for GEM 2002 in the Netherlands<sup>1</sup>.

- How much time did it take to set-up the business (up till now)?
- How much hours did you, in an average week spend on preparing the start-up (up till now)?
- Which motives were most important for you to start an own business?
- What statement suits best to you? 'I want my business to become as big as possible'; or 'I want to be able to run the business on my own, with a restricted number of employees'.
- Which were the most important bottlenecks you experienced in setting up the business?
- Is technological knowledge required in your business? If yes: from which organizations do you acquire this kind of knowledge?
- Did you have access to technological knowledge via intermediates or advisors? If yes: what kind of intermediates/advisors?
- What bottlenecks did you (or do you) experience in acquiring the required knowledge?

<sup>1</sup> The results on knowledge transfer to start-ups will be addressed in EZ/EIM, 2003, *Entrepreneurship in the Netherlands*, forthcoming.

## Annex II Interviewees for GEM 2002

We would like to thank the interviewees for their contribution to the project. They provided valuable insights into the state of entrepreneurship in the Netherlands. The following Dutch experts were interviewed for GEM 2002:

Prof. Guus Berkhout	TU Delft
Mr. James Broens	Wärtsilä John Crane-Lips
Prof. Niek Douben	TU Eindhoven
Dr. Ineke Giezeman	Nederlandse Maatschappij voor Nijverheid en Handel
Mr. Paul de Haas	Bureau voor de Industriële Eigendom
Mr. René Hartman	Syntens
Mrs. Karin Jongkind	Ministerie van Economische Zaken
Prof. Jan Lambooy	Universiteit Utrecht
Mr. Aalt Leusink	Filtrix
Dr. Roel Nieuwenkamp	Ministry of Economic Affairs
Mr. Martijn Nitzsche	Water Energy Services
Mr. Marcel Peek	ING
Mrs. Karla Peijs	Europees Parlement
Mr. Peter Pronk	Ministerie van Financiën
Mr. Ton Ravesloot	MKB-Nederland
Dr. Peter van der Sijde	TU Twente
Mr. Martin Touber	KvK Amsterdam
Mr. Nils de Witte	NEBIB Nederlandse Beurs voor Investerings in Bedrij- ven en Ondernemingen

The active contribution of Ro Braaksma, Arnoud Muizer and Heleen Stigter, who assisted the authors of this report in interviewing the abovementioned experts, is also gratefully acknowledged.



The results of EIM's Research Programme on SMEs and Entrepreneurship are published in the following series: Research Reports, Strategic Studies and Publieksrapportages. The most recent publications of all three series may be downloaded at: [www.eim.nl/smes-and-entrepreneurship](http://www.eim.nl/smes-and-entrepreneurship).

### Recent 'Publieksrapportages'

A200204	10-1-2002	ZZP'ers in de tijd gevolgd
A200203	9-26-2002	Het belang van importeren voor het MKB
A200202	10-10-2002	Kleinschalig Ondernemen 2002
A200201	7-29-2002	Het midden- en kleinbedrijf in de jaren 2003-2006
A200118	5-16-2002	Monitor Administratieve Lasten Bedrijven 2001
A200117	3-7-2002	De kracht van het idee
A200116	3-28-2002	De innovativiteit van de Nederlandse industrie - Editie 2001: Ontwikkelingen in de tijd
A200115	3-13-2002	The Long Road to the Entrepreneurial Society
A200114	3-8-2002	Monitor Administratieve Lasten Bedrijven 2000
A200113	2-14-2002	Voor wie niet altijd 'Kleinduimpje' in ondernemersland wil blijven
A200112	3-7-2002	Entrepreneurship in the Netherlands; Innovative Entrepreneurship: New Policy Challenges!
A200111	1-23-2002	Waarom investeren jonge bedrijven?
A200110	1-17-2002	Stimulering van het MKB
A200109	1-22-2002	Ondernemen in de Diensten 2002
A200108	1-22-2002	Ondernemen in de Detailhandel 2002
A200107	1-9-2002	Ondernemen in de Groothandel 2002
A200106	12-17-2001	Ondernemen in de Industrie 2002
A200105	12-17-2001	Ondernemen in het Ambacht 2002
A200104	12-17-2001	De opbrengsten van bedrijfsopleidingen
A200103	8-28-2001	Zelfstandigen Zonder Personeel: waarheden en mythes
A200102	10-15-2001	Small business, big markets, one world
A200101	7-12-2001	Kleinschalig ondernemen 2001
A200021	5-3-2001	Hoe 'groen' is het MKB-milieubeleid?
A200020	4-10-2001	Het voorbereidingsproces: van start tot finish?
A200019	4-24-2001	De MKB-ondernemer en de inzet van en zorg voor personeel
A200018	3-8-2001	De ontwikkeling van de arbeidskosten in de jaren negentig
A200017	3-5-2001	De innovativiteit van de Nederlandse industrie
A200016	2-19-2001	Jonge ondernemingen in 2000
A200015	2-15-2001	Regionale clusters nader bekeken
A200014	3-8-2001	Entrepreneurship in the Netherlands; New economy: new entrepreneurs!
A200013	1-22-2001	Het belang van bedrijfstypen voor de werkgelegenheidsontwikkeling, Editie 2000
A200012	2-6-2001	Reductie administratieve lasten door ICT
A200011	1-11-2001	Wat betekent ICT voor vernieuwingen in het MKB?
A200010	1-8-2001	Ondernemen in de Groothandel 2001
A200009	1-8-2001	Ondernemen in de Diensten 2001
A200008	12-18-2000	Ondernemen in de Industrie 2001
A200007	12-18-2000	Ondernemen in het Ambacht 2001

A200006	12-13-2000	Bedrijvendynamiek, snelgroeiende bedrijven en regionaal-economische ontwikkeling
A200005	12-5-2000	Ondernemen in de Detailhandel 2001
A200004	8-16-2000	Wat bepaalt het succes van een starter?
A200003	7-6-2000	Het belang van bedrijfstypen voor de werkgelegenheid-ontwikkelingen
A200002	6-15-2000	Groeipatronen van bedrijven
A200001	6-16-2000	Kleinschalig ondernemen 2000
A199923	5-16-2000	Bedrijfsleven in beeld: het particulier beveiligingsbedrijf
A199922	5-11-2000	The State of Small Business in the Netherlands 1997/1998
A199921	4-26-2000	Scholing van werknemers
A199920	3-2-2000	Ondernemerschap in de grote steden
A199919	2-29-2000	De innovativiteit van de Nederlandse dienstensector
A199918	2-28-2000	MKB-kenniscirkels
A199917	2-22-2000	Signalen uit de netwerkeconomie: samenwerken op Internet
A199916	2-15-2000	Financiering van startende vrouwelijke ondernemers
A199915	2-16-2000	Ondernemen in de Diensten 2000
A199914	2-16-2000	Ondernemen in de Industrie 2000
A199913	2-10-2000	Ondernemen in het Ambacht 2000
A199912	1-24-2000	Ondernemen in de Groothandel 2000
A199911	1-24-2000	Ondernemen in de Detailhandel 2000
A199909	1-24-2000	Benchmark ondernemerschap
A199908	1-12-2000	Entrepreneurship in the Netherlands: Opportunities and threats to nascent entrepreneurship