

# **Global Entrepreneurship Monitor 2011 The Netherlands**

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# Contents

1	Introduction	5
1.1	The Global Entrepreneurship Monitor (GEM)	5
1.2	The entrepreneurship process	6
1.3	The GEM Adult Population Survey (APS)	8
1.4	The Dutch GEM Report 2011	10
2	Entrepreneurial attitudes, perceptions, and intentions	11
2.1	Entrepreneurial attitudes	11
2.2	Entrepreneurial perceptions	13
2.3	Start-up intentions	16
2.4	Comparing potential and intentional entrepreneurs	18
2.5	Summary	21
3	Entrepreneurial activity	23
3.1	Total early-stage entrepreneurial activity (TEA)	23
3.2	Aspirations of early-stage entrepreneurs	28
3.3	Established entrepreneurship	31
3.4	Entrepreneurial exit	32
3.5	Summary	35
4	Competition and entrepreneurship	37
4.1	Competition and entry	37
4.2	Competition and demographic characteristics	39
4.3	Competition and human capital	39
4.4	Competition and innovation	40
4.5	Competition and job growth ambitions	42
4.6	Summary	43
5	Entrepreneurial employees	45
5.1	Introduction	45
5.2	Conceptual framework and research design	45
5.3	The prevalence of entrepreneurial employee activity	48
5.4	Characteristics of entrepreneurial employees	54
5.5	Characteristics of entrepreneurial employee activity	58
5.6	Summary	62
	References	65



# 1 Introduction

## 1.1 The Global Entrepreneurship Monitor (GEM)

### *History*

The Global Entrepreneurship Monitor (GEM) is a research program executed annually with the aim to obtain internationally comparative high quality research data on entrepreneurial activity at the national level. This academic research consortium started as a partnership between the London Business School and Babson College in 1999 with 10 participating countries. Over the years GEM has expanded to comprise 55 economies in 2011. Currently, GEM is the largest study of entrepreneurial activity in the world. The GEM research program provides a harmonized assessment of the level of national entrepreneurial activity and conditions to which it is subject for each participating country. In 2011, the Netherlands participated in GEM for the eleventh time since it joined the GEM project in 2001.

### *The role of entrepreneurship in economic development*

Although it is widely acknowledged that entrepreneurship is an important force shaping a country's economy, the understanding of the relationship between entrepreneurship and economic development is still far from complete. The quest to unravel this complex relationship has been hampered particularly by a lack of cross-national harmonized data on entrepreneurship. Since 1999, the GEM Research program has sought to address this by collecting relevant cross-national harmonized data on an annual basis. GEM focuses on three main objectives:

- To measure differences in the level of entrepreneurial activity between countries;
- To uncover factors that determine national levels of entrepreneurial activity;
- To identify policies that may enhance the national level of entrepreneurial activity.

In addition to these three main objectives GEM's goal is to study the contribution of entrepreneurship to national economic growth. Traditional analyses of economic growth and competitiveness have tended to neglect the role played by new and small firms in the economy. GEM takes a comprehensive approach and considers the extent of involvement in entrepreneurial activity within a country, identifying different phases of entrepreneurship and three stages of a country's economic development level.

The following phases differ regarding the level of involvement in entrepreneurial activities. The first phase consists of potential entrepreneurs: individuals who are not involved in entrepreneurial activity yet, but who have the beliefs and abilities to start a new business. Entrepreneurial intent refers to individuals who expect to start a new business on the short term. The cycle continues with early-stage entrepreneurship: this phase consists of nascent entrepreneurship – those who are trying to start a new business – and new entrepreneurship – those who own and manage a new business. Finally, there are individuals who own and manage an established business. GEM also takes account of individuals who quit the entrepreneurial process and individuals who decide to re-enter one of the phases after such an exit.

The role of entrepreneurship in the economy and the specific nature of entrepreneurial activity depend on the level of economic development of an economy. Three stages of economic development can be identified which can be ordered from least developed to most developed as follows:

- (1) *factor-driven economies*. Economic activity in these economies is primarily based on the extraction of natural resources;
- (2) *efficiency-driven economies*. In these economies, industrialization and increasing scale-intensity are the major drivers of economic development;
- (3) *innovation-driven economies*. The service sector strongly expands and the industrial sector evolves in terms of variety, R&D and knowledge intensity.

These stages of economic development correspond to the classification of the World Economic Forum (WEF) into factor-driven, efficiency-driven, and innovation-driven economies, as presented in the Global Competitiveness Reports. The level of per capita income is used to classify countries along this line, see table 1. An economy can be marked as primarily factor-driven, efficiency-driven, or innovation-driven depending on the activities that are most significant for a nation's economic development.

Table 1 Income thresholds for establishing the stages of economic development

<i>Stage of economic development</i>	<i>GDP per capita (in US\$)</i>
Stage 1: Factor-driven	< 2,000
<i>Transition from stage 1 to stage 2</i>	2,000 – 3,000
Stage 2: Efficiency-driven	3,000 – 9,000
<i>Transition from stage 2 to stage 3</i>	9,000 – 17,000
Stage 3: Innovation-driven	≥ 17,000

Source: *The Global Competitiveness Report (GCR) 2010-2011 (Schwab, 2011)*.

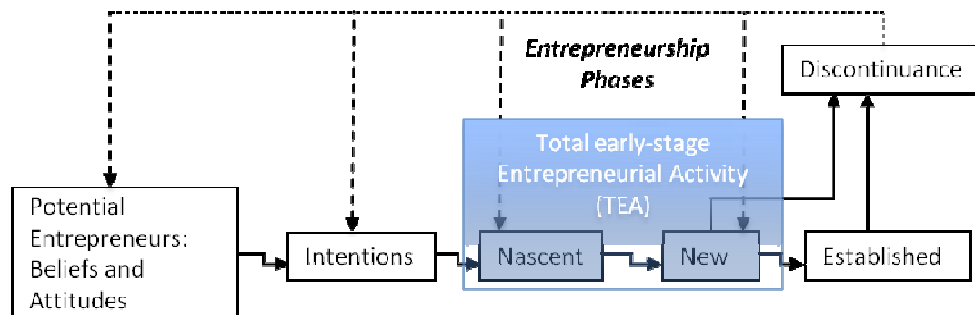
## 1.2 The entrepreneurship process

GEM acknowledges that entrepreneurial activity is best seen as a process rather than a single time event. Therefore, data are collected across several phases of entrepreneurship. Such a dynamic view provides valuable information to policy makers because individuals may respond differently to policy interventions depending on the specific position in the entrepreneurial process. For example, it may happen that substantial awareness for entrepreneurship as a career choice exists within a country and that many people expect to start a business within the next few years. In that same country, however, low rates of nascent entrepreneurship may exist as compared to countries with similar level of economic development. Such a discrepancy in entrepreneurship involvement rates across several phases may call for targeted policy interventions to ameliorate the transformation between phases, in this example from intentions to actual steps to start a new business. GEM operationalizes the entrepreneurial process as depicted in Figure 1 which is taken from the GEM's 2011 Global Report (Kelly, Singer, and Herrington, 2012).

Hence, the following phases of entrepreneurship can be distinguished:

- *Potential entrepreneurship*: Potential entrepreneurs are individuals who have not yet taken steps to start a business, but they have the beliefs and abilities to start a business. Specifically, individuals are considered to be potential entrepreneurs when they believe they have the knowledge and skills to start a business and/or when they see opportunities for setting up a business in the area where they live in. Furthermore, they should not be afraid of business failure.
- *Entrepreneurial intent*: Potential entrepreneurship is followed by entrepreneurial intent. In this phase, individuals are included who have actual intentions – alone or together with other individuals – to start a new business within the next three years.
- *Total early-stage entrepreneurial activity*: Total early-stage entrepreneurial activity (TEA) consists of nascent entrepreneurs and of owners-managers of new businesses. Specifically, the group of *nascent entrepreneurs* refers to individuals within the adult population (18-64 years of age) who are currently trying to start a new business. For this start-up effort, the individual expects to own at least a part of this new business, and salaries or wages have not yet been paid for the past three months.  
*New entrepreneurs* are currently involved in owning and managing a new existing business. Salaries or wages have been paid for between 3 and 42 months. Self-employed individuals are also included in this group.
- *Established entrepreneurship*: The cycle continues with established business owners, who have been owner-managers of a business for at least 42 months.

Figure 1 The entrepreneurship process



Source: GEM (Kelly, Singer, and Herrington, 2012)/EIM.

Whereas the phases of actually starting a business are characterized by potential entrepreneurs, entrepreneurial intent, nascent entrepreneurs, new business owners, and established business owners, there are two other phases depicted in Figure 1:

- *Discontinuance*: Any business owner-manager may decide to quit his/her business endeavor at some moment of time. This may be because of a combination of reasons. Some reasons with a more negative connotation are problems to get finance, and simply because the business was not profitable anymore. Other reasons may be retirement, or a possibility to sell the business. The business may continue its business activities after the owner-manager has quit the business or the business may continue its activities with the remaining or new owner-managers.

- *Re-engagement*: The dashed arrows connecting discontinuance and the several phases of entrepreneurship refer to individuals who quit one of their business activities, and afterwards decide to re-engage in the entrepreneurship process.

### 1.3 The GEM Adult Population Survey (APS)

GEM consists of two survey components. Data collected as part of the Adult Population Survey (APS) are used to provide indicators of entrepreneurial activity, attitudes, and aspirations within an economy. These indicators can then be compared between economies. To gather the relevant information, interviews are conducted with at least 2,000 randomly selected individuals from the adult population in each participating economy. In the National Expert Survey (NES), on the other hand, at least 36 experts in each participating country are asked their opinions about nine factors which are believed to have an impact on a nation's entrepreneurial activity. In this way, measurements of nine so-called 'entrepreneurial framework conditions' are constructed.

The present report focuses on findings from the Adult Population Survey. The APS data collection covers the complete life cycle of the entrepreneurial process. GEM data are collected by standardized telephone surveys (or in some countries by means of face-to-face interviews) in each participating economy. Each economy's sample consists of at least 2,000 respondents of at least 18 years old. In total, more than 160,000 interviews were conducted by GEM across 54 economies in 2011. The Dutch sample consists of 3,500 respondents and is acquired by means of a mixture between fixed-line and mobile-line telephone interviews. In the remainder of this report, all data are reweighted by the actual distribution of the Dutch population in terms of age, gender, and education level to make the sample representative along these dimensions for the Dutch adult population between 18 and 64 years of age.

#### *Participating countries in GEM APS 2011*

Interviews were carried out in 54 economies worldwide across different levels of economic development. Among the countries, there are 26 Member countries of the Organisation for Economic Cooperation and Development (OECD) and 20 Member States of the European Union. Table 2 contains an overview of the participating economies. A classification across the three stages of economic development is provided: *factor-driven economies*, *efficiency-driven economies*, and *innovation-driven economies*. In addition, the sample size for each participating economy is presented. The unweighted average sample size amounts to 2,975 respondents, whereas the smallest and largest sample sizes are those in Belgium and Spain, respectively.



Table 2 Participating economies in the GEM Adult Population Survey (APS) 2011

<i>Economies</i>	<i>Member OECD</i>	<i>Member EU</i>	<i>Sample size</i>
<i>Factor-driven economies (7)</i>			
Algeria*	no	no	3,427
Bangladesh	no	no	2,000
Guatemala*	no	no	2,398
Iran*	no	no	3,350
Jamaica*	no	no	2,047
Pakistan	no	no	2,002
Venezuela*	no	no	2,000
<i>Efficiency-driven economies (24)</i>			
Argentina*	no	no	2,000
Barbados*	no	no	2,928
Bosnia and Herzegovina	no	no	2,277
Brazil*	no	no	2,000
Chile*	yes	no	7,195
China	no	no	3,690
Colombia	no	no	10,374
Croatia*	no	no	2,000
Hungary*	yes	yes	2,002
Latvia*	no	yes	2,000
Lithuania*	no	yes	2,003
Malaysia	no	no	2,053
Mexico*	yes	no	2,511
Panama	no	no	2,000
Peru	no	no	2,010
Poland*	yes	yes	2,000
Romania	no	yes	2,028
Russia*	no	no	7,500
Slovakia*	yes	yes	2,000
South Africa	no	no	3,178
Thailand	no	no	2,000
Trinidad & Tobago*	no	no	2,008
Turkey*	yes	no	2,401
Uruguay*	no	no	2,074

<i>Economies</i>	<i>Member OECD</i>	<i>Member EU</i>	<i>Sample size</i>
<i>Innovation-driven economies (23)</i>			
Australia	yes	no	2,000
Belgium	yes	yes	1,852
Czech Republic	yes	yes	2,005
Denmark	yes	yes	2,015
Finland	yes	yes	2,011
France	yes	yes	2,009
Germany	yes	yes	4,260
Greece	yes	yes	2,000
Ireland	yes	yes	2,002
Japan	yes	no	2,004
Republic of Korea	yes	no	2,001
Netherlands	yes	yes	3,500
Norway	yes	no	2,001
Portugal	yes	yes	2,011
Singapore	no	no	2,000
Slovenia	yes	yes	2,009
Spain	yes	yes	17,500
Sweden	yes	yes	3,101
Switzerland	yes	no	2,000
Taiwan	no	no	2,012
United Arab Emirates	no	no	3,029
United Kingdom	yes	yes	2,000
United States	yes	no	5,863
<i>Total number of economies: 54</i>		<i>Total number of interviews: 160,641</i>	

\* *Country in transition to the next stage.*

*Source: EIM/GEM.*

*Originally, the APS sample size in Nigeria amounted to 2,190 individuals. However, the Nigerian APS did not meet GEM's standard quality requirements, and therefore, Nigeria is not included here.*

#### 1.4 The Dutch GEM Report 2011

The present report is organized as follows. Chapter 2 elaborates on the Dutch entrepreneurial climate regarding individuals' perceptions of and attitudes towards entrepreneurship. The developments over time of potential entrepreneurship and entrepreneurial intent are also provided. In addition, the Dutch situation is compared internationally. Chapters 3 describes the latest developments regarding entrepreneurial activity, while chapter 4 focuses on the relation between competition and entrepreneurship. Chapter 5 deals with entrepreneurial employee activity<sup>1</sup>.

<sup>1</sup> The authors are indebted to Niels Bosma for his advice and assistance for Chapter 5.

## 2 Entrepreneurial attitudes, perceptions, and intentions

This chapter presents information on entrepreneurial *attitudes*, *perceptions*, and *intentions* for the Netherlands for the year 2011. The Dutch numbers on these attitudes, perceptions, and intentions are put into perspective by comparing them with previous years, and by establishing international comparisons. Regarding these international differences, the Dutch results are mainly balanced against the results of the economies with the highest levels of economic development.

First, the *attitudes* of Dutch citizens towards entrepreneurship are reported. These attitudes refer to the general image of entrepreneurship in the Netherlands, and reveal the extent to which entrepreneurship is considered an acceptable choice of occupation by Dutch adults. Specifically, the attitudes refer to the desirability of entrepreneurship as a career option in the Netherlands, the level of status and respect that Dutch adults attach to entrepreneurs, and the attention of Dutch media for successful entrepreneur(ship). The three measures are assumed to be influenced by cultural factors, at least partly, and are therefore relatively invariant over time.

Second, the *perceptions* refer to the extent to which individuals perceive to possess entrepreneurship-specific beliefs and abilities. Individuals who have these beliefs and/or abilities are considered to be 'potential' entrepreneurs. That is, the potential of starting a business among these individuals is higher than among the individuals without entrepreneurship-specific beliefs and abilities. Specifically, potential entrepreneurs are those who have the belief they have enough skills to start a business, who are confident that there are enough opportunities in their area to start a business, and who have a low fear of business failure. Naturally, there is no guarantee that potential entrepreneurs will turn their innate start-up potential into a start-up realization.

Third, entrepreneurial *intentions* are operationalized by measuring the percentage of the adult population that intends to start a new business within the next three years. It is known that entrepreneurial intent can be an adequate predictor of actual start-up rates (Krueger et al., 2000; Davidsson, 2006).

### 2.1 Entrepreneurial attitudes

Measuring attitudes towards entrepreneurship in a society is important, because entrepreneurial attitudes contain information about the value that is attached to entrepreneurship. More favorable attitudes towards entrepreneurship ameliorate the image of entrepreneurs and could therefore increase the number of people that are interested in starting an own business. One aspect of entrepreneurial attitudes refers to the status that entrepreneurs have in a society. Specifically, it has been postulated that the selection into entrepreneurship depends on the status of entrepreneurs (Parker and Van Praag, 2010). Empirically, Van Praag (2009) finds that the perceived status of entrepreneurship is related to the likelihood of becoming an entrepreneur. Hence, entrepreneurial attitudes such as the

perceived status of entrepreneurship provide relevant information regarding the entrepreneurial orientation of a society.

The current report distinguishes between three entrepreneurial attitudes: respondents' opinions about starting a business being a desirable career option, respondents' perceptions about the level of respect and status that entrepreneurs receive, and respondents' assessments of the appearance of successful entrepreneurs in the media.

#### *Developments in the Netherlands over time*

Table 3 displays the three measures of entrepreneurial attitudes and their prevalence within the Dutch adult population for the past nine years (2003-2011). The last column of table 3 shows that in 2011 more than 80% of the Dutch adult population believe that starting a business is considered a desirable career option. Furthermore, about two-thirds think that entrepreneurs have a high level of status and respect in the Netherlands. Finally, 62% of the adult population believe that stories about successful entrepreneurs occur frequently in the public media.

Another observation is that the numbers for the first two measures ('entrepreneurship as desirable career choice' and 'entrepreneurship is given high status') have gone down, albeit slightly, in 2011 as compared to 2010. Furthermore, the percentages of the three measures do not vary greatly over time. This can be explained by the fact that the three attitudes are partly determined by culture. The status of occupations such as entrepreneurship in a society cannot be easily modified.

Table 3 National entrepreneurial attitudes in the Netherlands, 2003-2011, percentage of adult population (18-64 years of age) that agrees with the statement

<i>Item</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
<u>Entrepreneurship as desirable career choice:</u>									
'In the Netherlands, most people consider starting a new business a desirable career choice'	77	81	79	80	85	85	84	85	83
<u>Entrepreneurship is given high status:</u>									
'In the Netherlands, those successful at starting a new business have a high level of status and respect'	66	67	66	65	69	69	67	69	67
<u>Media attention for entrepreneurship:</u>									
'In the Netherlands, you will often see stories in the public media about successful businesses'	63	59	58	59	61	61	64	61	62

Source: EIM/GEM.

#### *An international comparison*

Table 4 shows an international comparison regarding the three entrepreneurial attitudes. Note that a clear link between the level of economic development and 'entrepreneurship as desirable career choice' can be deduced from table 4. That

is, the percentage of individuals claiming that most people consider starting a business a desirable career choice, decreases with the level of economic development. The averages are 77%, 70%, and 57% in factor-driven, efficiency-driven, and innovation driven economies, respectively. Since the Netherlands belongs to the group of innovation-driven countries, differences within the pool of innovation-driven economies are mainly of our interest. Specifically, the Netherlands outperforms all other EU, OECD and innovation-driven economies regarding the perception of entrepreneurship being a desirable career choice.

The fact that the Dutch averages for the first two measures ('entrepreneurship as desirable career choice' and 'entrepreneurship is given high status') went down slightly from 2010 to 2011 is in line with the international trend. That is, whereas in 2010 the percentages were 60% and 71% for these measures in innovation-driven economies, the percentages are 57% and 69% in 2011. Earlier, we observed that the perception of entrepreneurship as a desirable career option stands out in the Netherlands as compared to economies with similar levels of economic development. The extent to which Dutch adults attach high status to entrepreneurs, however, is comparable to the average in the innovation-driven economies. Furthermore, individuals' opinions regarding the extent of media attention for entrepreneurship in the Netherlands are slightly more favourable than the average opinions on this matter in the innovation-driven economies.

Table 4 National entrepreneurial attitudes internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age) that agrees with the statement

	<i>Factor-driven economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Entrepreneurship as desirable career choice	77	70	57	57	59	83
Entrepreneurship is given high status	79	69	69	69	70	67
Media attention for entrepreneurship	58	60	58	53	51	62

Source: EIM/GEM.

## 2.2 Entrepreneurial perceptions

Potential entrepreneurs are individuals who have a positive belief of their own capabilities of starting a new business, who see good opportunities to start a new business in the area they live in, and/or who have a low fear of failure. Potential entrepreneurship is the first phase in the entrepreneurship process as depicted in Figure 1. It has been shown in earlier literature that confidence in one's own capabilities of starting a business (i.e., entrepreneurial self-efficacy) predicts entrepreneurial entry. Specifically, it has been found that entrepreneurial self-efficacy is a determining factor in shaping entrepreneurial intentions and entry into entrepreneurship (Boyd and Vozikis, 1994; Chen et al., 1998; Zhao et al., 2005). Furthermore, regions where there are ample opportunities to start a business – for example, because of the munificence of resources in these areas – are

considered to be more competitive (Kitson et al., 2004; European Commission, 2009) and characterized by higher performance in terms of job creation and economic growth (Carree and Thurik, 2010; Audretsch and Keilbach, 2004; Baptista et al., 2008). In addition, entrepreneurship is considered a risky occupation, and those who are not afraid of failure are less likely to give up entrepreneurial aspirations in the presence of riskiness (Shepherd, 2003; Politis, 2005).

#### *Developments in the Netherlands over time*

Table 5 displays the development of the indicators of potential entrepreneurship over time (2001-2011). 'Perceived capabilities' reached peak amounts in 2009 and 2010, but this number went down again in 2011. For the other two measures ('perceived opportunities' and 'fear of failure'), the averages for 2011 are excessive. That is, 'perceived opportunities' has the highest percentage across all years. Furthermore, fear of failure has always remained under 30% (except for 2004); however, about 37% of the Dutch adult population claim that fear of failure would prevent them from starting a new business in 2011. This is by far the highest percentage in the entire time interval 2001-2011.

Table 5 Individual entrepreneurial perceptions in the Netherlands, 2001-2011, percentage of adult population (18-64 years of age) that agrees with the statement

<i>Item</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
<u>Perceived capabilities:</u>											
'Do you have the knowledge, skill and experience required to start a new business?'	37	37	32	37	42	38	39	38	47	46	42
<u>Perceived opportunities:</u>											
'In the next six months, will there be good opportunities for starting a business in the area where you live?'	42	49	29	38	39	46	42	39	36	45	48
<u>Fear of failure:</u>											
'Would fear of failure prevent you from starting a business?'	25	24	28	32	29	29	21	26	27	26	37

Source: EIM/GEM.

#### *An international comparison*

The three measures of potential entrepreneurship in the Netherlands have witnessed a change from 2010 to 2011 that is comparable to the change in percentages in the innovation-driven economies as a whole. That is, as compared to 2010, (1) fewer individuals believe they possess the relevant entrepreneurial skills; (2) more individuals see good opportunities to start a business in the area they live in; and (3) more individuals fear failure. The 2010-2011 differences regarding 'perceived capabilities' and 'perceived opportunities' are only a few percentage points, both within the group of innovation-driven economies and in the Netherlands. However, differences regarding 'fear of failure' are much more pronounced in the Netherlands. That is, whereas fear of failure on average has increased five percentage points in the innovation-driven economies, in the OECD, and in the EU as compared to 2010, the percentage has gone up by more than ten percentage points in the Netherlands. Not surprisingly, whereas the Nether-

lands had the lowest fear of failure among all innovation-driven economies in 2010, this is not the case anymore in 2011.

Importantly, table 6 shows that fear of failure is still below the average of the innovation-driven economies, as well as below the OECD and EU averages. Furthermore, table 6 reveals that 'perceived capabilities' in the Netherlands is at par with comparable economies whereas 'perceived opportunities' is still well above average.

Table 6 Individual entrepreneurial perceptions internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age) that agrees with the statement

	<i>Factor-driven economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Perceived capabilities	56	52	41	43	43	42
Perceived opportunities	49	40	35	35	32	48
Fear of failure	35	37	43	42	45	37

Source: EIM/GEM.

#### *Perceptions of different subgroups*

An individual's entrepreneurial perceptions clearly depend on the specific position in the entrepreneurship process. For example, nascent entrepreneurs are almost certainly more convinced of their own capabilities of starting a new business than individuals who are currently in paid employment. Another example refers to the owner-managers of subsequent businesses ('serial entrepreneurship', Westhead et al., 2005; Hyytinen and Ilmakunnas, 2007) who are probably less likely to fear failure than individuals who are only considering setting up a business for the first time.

Table 7 reports on the three indicators of potential entrepreneurship for individuals involved in several phases of the entrepreneurship process. The second column shows the same averages as table 5, that is, for the entire Dutch adult population. The other columns compare non-entrepreneurs with entrepreneurs. That is, the third column contains individuals without any involvement in entrepreneurship. Specifically, these individuals, at the time of the survey, do not intend to start a business, nor are they taking steps to start a business (nascent entrepreneurs), nor are they an owner-manager of a new, or an established business. Subsequent columns compare the entrepreneurial perceptions among these subgroups, that is, among intentional entrepreneurs (column 4), nascent entrepreneurs and new business owners-managers (TEA, column 5), and established business owners-managers (column 6). Chapter 3 of the present report zooms in on the prevalence of nascent entrepreneurship, new entrepreneurship, and established entrepreneurship in the Netherlands.

One can clearly see that the averages differ heavily across the several subgroups. The largest differences can be found between the non-entrepreneurs (column 3) and the individuals who are involved in TEA (column 5). Whereas only 30% of the non-entrepreneurs find themselves capable of starting a new busi-

ness, this number amounts to 91% for the individuals who are involved in TEA. In addition, only 18% of the TEA individuals fear failure, whereas this is 41% among the non-entrepreneurs.

Table 7 Individual entrepreneurial perceptions of subgroups in the Netherlands, 2011

<i>Item</i>	<i>Adult popu- lation (3,500)</i>	<i>Non- entrepre- neurs (2,821)</i>	<i>Intentional entrepre- neurs (201)</i>	<i>TEA (244)</i>	<i>Established entrepreneurs (250)</i>
	(2)	(3)	(4)	(5)	(6)
Perceived capabilities	42	30	64	91	86
Perceived opportunities	48	43	59	73	53
Fear of failure	37	41	35	18	19

Source: EIM/GEM. The group of intentional entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship. The numbers in the columns (3)-(6) do not exactly add to 3,500, because there are some individuals who are both involved in TEA and established entrepreneurship (i.e., 16 in total).

### 2.3 Start-up intentions

Even though intentions are not always directly transformed into action, many scholars have defended the idea that intentions are a good predictor of action, i.e. entrepreneurial activity (Krueger et al., 2000; Davidsson, 2006). Therefore, it is important to assess entrepreneurial intentions and to compare the Dutch averages with the averages of economies with similar levels of economic development.

#### *Developments in the Netherlands over time*

Table 8 presents the evolution of entrepreneurial intent in the Netherlands over time (2002-2011). Although there was a decline in intentions in 2010, an increase by almost three percentage points can be witnessed for 2011 as compared to 2010. That is, nearly 10% of the Dutch adult population intends to start a new business in the next three years. This number is the highest among all figures since the Netherlands joined GEM in 2001.

Table 8 Start-up intentions in the Netherlands, 2002-2011, percentage of adult population (18-64 years of age)

<i>Item</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
<u>Entrepreneurial intent:</u>										
'Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?'	5.1	5.7	6.5	6.2	5.6	5.5	5.3	7.4	7.1	9.8

Source: EIM/GEM.

#### *An international comparison*

Despite the increase in start-up intentions the Netherlands still underperforms as compared to the innovation-driven economies (12.3%), the OECD (15.3%), and



the EU (15.1%). Hence, although the indicators of entrepreneurial attitudes and the three entrepreneurial perceptions are at least comparable to the averages of the innovation-driven economies (and in many cases more favorable), the Dutch intentions still lag behind from an international point of view. Table 9 shows these international discrepancies. Especially the deviation from the EU average has become larger in 2011 as compared to 2010 (5.3 percentage points difference in 2011 whereas it was 3.2 in 2010).

Entrepreneurial intent is traditionally high in factor-driven and efficiency-driven economies. That is, the fractions of the adult population that expects to start a business within the next three years are 30.8% and 28.3% in factor-driven and efficiency-driven economies, respectively.

Table 9 Start-up intentions internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age)

	<i>Factor- driven economies</i>	<i>Efficiency- driven economies</i>	<i>Innovation- driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Entrepreneurial intent	30.8	28.3	12.3	15.1	15.3	9.8

Source: EIM/GEM.

An explanation behind the discrepancy between entrepreneurial attitudes and potential entrepreneurship on the one hand, and entrepreneurial intent on the other hand, may lie in the relatively high level of employment protection and social security in the Netherlands (Henrekson, 2005; Hessels et al., 2007). This may discourage employees with positive entrepreneurial perceptions from actually considering an entrepreneurial career. The GEM data show that Dutch citizens are relatively favorable towards entrepreneurship as a career choice. However, at the same time, they are aware of the stability of their current income of paid employment and all accompanying social security arrangements. In addition, Dutch employees are relatively active in starting new businesses for their employer or as part of their regular full-time or part-time job. For evidence on these high intrapreneurship rates in the Netherlands, see Chapter 5 of the current report.

#### *Perceptions of different subgroups*

The information presented so far on entrepreneurial intentions is based on the entire Dutch adult population. One may be interested in how these intentions differ across specific subgroups of the population. Specifically, a distinction between entrepreneurs and non-entrepreneurs may be valuable. In addition, non-entrepreneurs can be divided into a group of potential entrepreneurs and individuals who do not meet these criteria ('non-potential entrepreneurs').

For clarity, potential entrepreneurs are defined as those individuals who are not involved in any entrepreneurial activity yet, but who respond with 'yes' to the question 'Do you have the knowledge, skill and experience required to start a new business?', with 'yes' to the question 'In the next six months, will there be good opportunities for starting a business in the area where you live?', and respond with 'no' to the question 'Would fear of failure prevent you from starting a business?'. The 'non-potential entrepreneurs' are not involved in any entrepre-

neurial activity, and at the same time answer 'no' to the first question, or 'no' to the second question, or 'yes' to the third question (or a combination of these answers).

In fact, table 10 shows how entrepreneurial intent differs across several subgroups. The second column duplicates the averages of entrepreneurial intent from table 8. The third and fourth column describe the percentages of entrepreneurial intent for non-entrepreneurs, that is, for 'non-potential entrepreneurs' (column 3) and for potential entrepreneurs (column 4). The last two columns reveal entrepreneurial intent for those involved in TEA (column 5) and for established entrepreneurs (column 6). It turns out that potential entrepreneurship can indeed be seen as a preceding phase of entrepreneurial intentions in the entrepreneurship process. That is, more than one fifth of all potential entrepreneurs have intentions to start a new business. This percentage is only 7.4% among the 'non-potential entrepreneurs'. Note that almost one out of ten established entrepreneurs has intentions to start a new business in the next three years.

Table 10 Start-up intentions of subgroups in the Netherlands, 2011

<i>Item</i>	<i>Adult population (3,500)</i>	<i>Non- potential entrepreneurs (2,794)</i>	<i>Potential entrepreneurs (228)</i>	<i>TEA (244)</i>	<i>Established entrepreneurs (250)</i>
	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>	<i>(6)</i>
Entrepreneurial intent	9.8	7.4	22.2	24.6	8.9

*Source: EIM/GEM. The group of potential entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship. The numbers in the columns (3)-(6) do not exactly add to 3,500, because there are some individuals who are both involved in TEA and established entrepreneurship (i.e., 16 in total).*

## 2.4 Comparing potential and intentional entrepreneurs

GEM acknowledges that the prevalence of entrepreneurship within a country is important to take into account, but that the inclusion of groups of individuals with different (socio-demographic) characteristics is at least equally important. Figure 1 shows this 'inclusiveness issue' for gender and age. Although women have increased their participation in entrepreneurial activities throughout the years, in many economies they still lag behind men regarding owning and managing their own businesses (De Bruin et al., 2006; Langowitz and Minniti, 2007). In other words, the full potential of female entrepreneurship has still not been fully realized. Therefore, triggering women to engage in entrepreneurship can be important in increasing a country's entrepreneurship rates (Baughn et al., 2006). In the same way, participation in entrepreneurship from a diverse range of age and education groups is desired to realize the full potential of all entrepreneurial human resources. That is, not only the number of entrepreneurs plays a role for economic performance, but also the diversity in entrepreneurship, for example in terms of gender, age, and education (Verheul and Van Stel, 2010). More generally, it has been emphasized that a diverse pool of economic actors is important in achieving economic prosperity (Broda and Weinstein, 2006).

First, this section compares potential and intentional entrepreneurship in the Netherlands on basis of gender, age, and educational background. Second, po-

tential and intentional entrepreneurs are compared on basis of their current employment status.

#### *Demographic characteristics*

The first analysis compares the gender, age, and education distribution between 'non-potential' entrepreneurs, potential entrepreneurs, and those having entrepreneurial intentions. Such an analysis enables to discover groups that are over or under represented in entrepreneurial activities.

Table 11 presents a gender, age and education decomposition for the three groups of individuals. A first glance at table 11 reveals that the pool of non-entrepreneurs (columns 2 and 3) is a heterogeneous group of individuals because the 'non-potential entrepreneurs' and potential entrepreneurs differ significantly from each other on basis of gender, age, and education. Especially within the group of potential entrepreneurs, men are predominantly present: more than two third of all potential entrepreneurs is male, whereas this is less than 50% within the group of 'non-potential entrepreneurs'. Indeed, additional calculations show that males are more likely than females to be convinced of their own capabilities of starting a new business, males are more likely than females to see start-up opportunities in their area, and males are less likely than females to fear failure. The distribution between males and females within the group of intentional entrepreneurs is 60%/40%. Indeed, earlier internationally oriented research found that women are less likely than men to prefer to start a business (Blanchflower et al., 2001; Grilo and Irigoyen, 2006). However, Van der Zwan et al. (2012) investigate gender differences in entrepreneurial considerations across European countries and conclude that gender differences are particularly small in the Netherlands as compared to other European countries.

Table 11 shows that the groups consisting of potential and intentional entrepreneurs contain more individuals with a post-secondary or graduate degree than the group of 'non-potential entrepreneurs'. Indeed, higher educated individuals may be more alert than lower educated individuals in recognizing entrepreneurial opportunities and may have accumulated more knowledge and skills necessary for owning-managing a business (Stam et al., 2010). However, the opportunity costs of entrepreneurship are higher for higher educated individuals than for lower educated individuals because they often have better opportunities for finding a job in paid employment. Hence, the question remains whether education indeed affects entry into an entrepreneurial career. Earlier research has mostly found insignificant relationships between educational attainment and the probability of belonging to the earliest stages of the entrepreneurship process (Roteffoss and Kolvereid, 2005). The next chapter will elaborate on individual's educational attainment in the more advanced stages of the entrepreneurship process.

Another way of presenting differences in entrepreneurial intentions for different subgroups is to calculate the prevalence rates of entrepreneurial intentions (see table 8 for all adults between 18 and 64 years) for these subgroups. It appears that 12.1% and 7.4% of all Dutch male adults and female adults (18-64 years) have entrepreneurial intentions, respectively. Dutch men are more than 1.5 times more likely to have entrepreneurial intentions than are Dutch women. Interestingly, start-up intentions decrease with age in a linear way. That is, the prevalence rates of entrepreneurial intentions are 14.5%, 13.4%, 11.6%, 8.9%,

and 2.3% for the age groups 18-24 years, 25-34 years, 35-44 years, 45-54 years, and 55-64 years, respectively. In other words, intentions to start-up a new business seem to decrease as people grow older. Indeed, it can be argued that young individuals are more likely to experiment than do older individuals, which increases the probability of considering an entrepreneurial career for these young individuals (Lévesque and Minniti, 2006; Davidsson, 2006).

Finally, the prevalence rates of intentions are 11.3%, 8.4%, and 12.9% among the adults with some secondary degree, a secondary degree, and a post-secondary or graduate degree. Hence, intentions are relatively uniformly distributed across individuals with different educational backgrounds.

Table 11 Demographic structure of (non-)potential and intentional entrepreneurs in the Netherlands, 2011

		<i>'Non-potential entrepreneurs'</i>	<i>Potential entrepreneurs</i>	<i>Intentional entrepreneurs</i>
<i>Gender</i>	Male	46%	69%	60%
	Female	54%	31%	40%
<i>Age</i>	18-24 years	15%	11%	20%
	25-34 years	20%	20%	29%
	35-44 years	22%	22%	24%
	45-54 years	23%	30%	23%
	55-64 years	21%	18%	4%
<i>Education</i>	Some secondary degree	7%	1%	7%
	Secondary degree	69%	58%	59%
	Post-secondary/graduate degree	24%	42%	34%

Source: EIM/GEM. Potential entrepreneurs are defined as those individuals who are not involved in any entrepreneurial activity (e.g., with entrepreneurial intent) yet. The group of intentional entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship.

#### *Main employment status*

Table 12 shows differences in employment status between 'non-potential' entrepreneurs, potential entrepreneurs, and those having entrepreneurial intentions. Table 12 reveals that about 80% of potential and intentional entrepreneurs is currently in part-time or full-time employment. Whereas only 5% of all potential entrepreneurs is seeking employment, this is 10% of all intentional entrepreneurs.

Table 12 Main employment status of (non-)potential and intentional entrepreneurs in the Netherlands, 2011

		<i>'Non-potential entrepreneurs'</i>	<i>Potential entrepreneurs</i>	<i>Intentional entrepreneurs</i>
<i>Employment status</i>	Employed in full-time work	49%	63%	53%
	Employed in part-time work	30%	19%	27%
	Not employed: retired, disabled	8%	6%	4%
	Full-time homemaker	4%	1%	1%
	Student	2%	2%	3%
	Seeking employment	6%	5%	10%
	Self-employed	1%	4%	4%

Source: EIM/GEM.

*Potential entrepreneurs are defined as those individuals who are not involved in any entrepreneurial activity (e.g., with entrepreneurial intent) yet. The group of intentional entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship.*

## 2.5 Summary

This chapter reported on entrepreneurial attitudes, perceptions, and intentions in the Netherlands. The number of respondents that sees good opportunities to start a business in their living area has increased a few percentage points, resulting in the most favorable perception in GEM history for the Netherlands. However, at the same time, fear of failure has risen drastically, although it is still below the average of the innovation-driven economies. Entrepreneurial intentions went up significantly during the previous year, but the Netherlands still underperforms as compared to economies with similar levels of economic development. The next chapter zooms in on the more advanced stages in the entrepreneurship process i.e. prevalence rates of total early-stage entrepreneurial activity (TEA), established entrepreneurship, and entrepreneurial exit.



## 3 Entrepreneurial activity

The present chapter focuses on four specific phases of the entrepreneurship process. First, this chapter reports on the prevalence of total early-stage entrepreneurial activity (TEA) in the Netherlands. TEA has been used to compare countries regarding the supply of new entrepreneurs. TEA is a dynamic measure of entrepreneurial activity as it relates to inflow into entrepreneurship and consists of two groups of individuals: those who are taking serious steps to start a new business (*nascent entrepreneurs*) and those who are owning and managing a business for less than 3.5 years (*new entrepreneurs*). The aspiration levels of early-stage entrepreneurs in terms of job growth expectations and product innovativeness are investigated as well.

Second, this chapter zooms in on the prevalence of *established entrepreneurship*. The rates are constructed on basis of the percentage of the Dutch adult population that is an owner-manager of a business that exists for more than 3.5 years. Established entrepreneurship is a static indicator of entrepreneurial activity and contains information on the structural presence of entrepreneurs within a country.

Third, the current chapter devotes attention to the fraction of the Dutch adult population that exited the entrepreneurship process during the previous twelve months. Furthermore, an overview is given of the most important reasons for such an *entrepreneurial exit*.

Information on nascent entrepreneurship, new entrepreneurship, established entrepreneurship, and entrepreneurial exit is provided for the Netherlands for 2011. Furthermore, comparisons will be made between the Netherlands and economies with similar levels of economic development.

### 3.1 Total early-stage entrepreneurial activity (TEA)

Total early-stage entrepreneurial activity captures nascent entrepreneurs and new entrepreneurs. Nascent entrepreneurs are those adults between 18 and 64 years of age who are trying to start a new business which they will partially own. The adults should be actively involved in this start-up activity. For example, they could have developed a specific business plan, they could have searched for a location from where the future business will be active, and/or they could have been involved in the organization of a start-up team.

New entrepreneurs are the adults between 18 and 64 years of age who currently own and manage a business for less than 3.5 years. Note that an individual could be an owner-manager of a new business and simultaneously be involved in start-up activities for the launch of a new business. Such an individual will be counted as one active person in the calculation of the TEA rates.

#### *Developments in the Netherlands over time*

Table 13 shows the prevalence of total early-stage entrepreneurial activity and its two underlying measures – i.e., nascent entrepreneurship and new entrepre-

neurship – over time. Each of the three measures of entrepreneurial activity witnessed a significant increase from 2010 to 2011. TEA experienced the largest increase by about 1.0 percentage point. In other words, 8.2% of the Dutch adult population between 18 and 64 years is involved in setting up a business or is the owner-manager of a new business in 2011 while this was 7.2% in 2010. After a stagnation of TEA in 2010 as compared to 2009, the TEA rate of 2011 is the highest rate that is observed in the Netherlands since its first measurement in 2001.

Another observation refers to the fact that the nascent entrepreneurship rate and the new entrepreneurship rate in 2011 are the highest across the entire time period as well. Most remarkable is the evolution of nascent entrepreneurship during the most recent years: the percentage of the adults between 18 and 64 years that is involved in nascent entrepreneurial activities has more than doubled from 2008 to 2011.

Table 13 Total early-stage entrepreneurial activity (TEA) in the Netherlands, 2001-2011, percentage of adult population (18-64 years of age)

<i>Item</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>
<u>TEA:</u>											
Aggregate of nascent and new entrepreneurship	4.9*	4.6	3.6	5.1	4.4	5.4	5.2	5.2	7.2	7.2	8.2
<u>Nascent entrepreneurship:</u>											
'Are you, alone or with others, currently trying to start a new business?'	2.3*	2.6	1.7	3.0	2.5	3.6	2.7	2.1	3.1	4.0	4.3
<u>New entrepreneurship:</u>											
'Are you, alone or with others, currently the owner of a business you help manage?'	2.8*	2.1	1.9	2.2	1.9	1.9	2.6	3.2	4.1	3.4	4.1

\* Revised figure.

\*\* Note that wages, profits, or payments in kind from this business should have been received after January 1, 2008. Furthermore, respondents partially or fully own this new business.

Source: EIM/GEM.

#### *International comparison*

A worldwide comparison of TEA rates is provided in table 14. Traditionally, the TEA rates are considerably higher in factor-driven and in efficiency-driven economies than in innovation-driven economies. Furthermore, a glance at table 14 reveals that the Dutch TEA rate is higher than the unweighted average of the innovation-driven economies.

In 2010, there were four innovation-driven economies with higher TEA rates than the Netherlands (7.2%), i.e., the United States (7.6%), Norway (7.7%), Australia (7.8%), and Iceland (10.6%). In 2011, this situation has changed in that the Norwegian's TEA rate has decreased by almost one percentage point to 6.9%. Iceland does not participate in GEM in 2011. Hence, in 2011, only two innovation-driven economies are better performers than the Netherlands regarding total early-stage entrepreneurial activity. These economies are Australia and the United States with TEA rates of 10.5% and 12.3%, respectively.



The fact that Norwegian's TEA rate decreased from 2010 to 2011 is an exception from an international point of view (Norwegian's TEA rates have steadily decreased since 2008). In total, of all 23 innovation-driven economies participating in 2011, 20 economies also participated in 2010. Out of these 20 economies, only four economies experienced a decrease in the TEA rate (France from 5.8% to 5.7%; Norway from 7.7% to 6.9%, Slovenia from 4.7% to 3.7%, and Taiwan from 8.4% to 7.9%). All other innovation-driven economies experienced an increase. Whereas the average TEA rate of all innovation-driven economies was 5.5% in 2010, this number has increased by almost 1.5 percentage points to 6.9% in 2011 (see table 14).

Table 14 TEA rates internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age)

	<i>Factor-driven economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
TEA	13.4	14.1	6.9	8.2	7.6	8.2
Nascent entrepr.	9.2	8.4	4.0	4.9	4.6	4.3
New entrepreneurship	4.8	5.9	3.0	3.5	3.1	4.1

Source: EIM/GEM.

#### *Demographic characteristics*

Table 11 showed a decomposition across gender, age, and educational background for three subgroups of individuals ('non-potential entrepreneurs', potential entrepreneurs, and intentional entrepreneurs). Table 15 replicates table 11, and adds the decomposition across gender, age, and education for early-stage entrepreneurs.

A first observation is that almost two third of all Dutch early-stage entrepreneurs is male. This finding is in line with the earlier notion that the majority of the intentional entrepreneurs are male adults. Not surprisingly, males are over-represented in the more active phases of entrepreneurship, i.e. potential, intentional, and early-stage entrepreneurship. This gender imbalance in involvement in early-stage entrepreneurship can also be expressed as follows. Whereas the overall TEA rate is 8.2%, it holds that 10.4% of the Dutch male adult population (18-64 years) is involved in total early-stage activity, whereas this is 6.0% for the Dutch female adult population (18-64 years). In 2010, these percentages were 10.1% and 4.4% for the male adult population and female adult population, respectively. Hence, especially women have increased their participation in early-stage entrepreneurship in the Netherlands over the past year. Earlier research indicated that the participation of Dutch females in the total number of people who start a business has steadily increased from 2000 to 2009 (Bleeker, Bruins, and Braaksma, 2011). The Dutch TEA figures from 2011 seem to confirm that this trend continues.

Furthermore, table 15 reveals that the group of individuals aged 35-44 years is the most represented category among early-stage entrepreneurs. However, the differences between the three 'middle groups' (as opposed to the 'extreme groups' 18-24 years and 55-64 years) are not large. When looking at the TEA rates for the five age groups, we encounter the following percentages: 7.4%

(18-24 years), 9.9% (25-34 years), 9.3% (35-44 years), 9.0% (45-54 years), and 4.9% (55-64 years). Again, we observe that the involvement in early-stage entrepreneurship does not differ much between the age groups 25-34 years, 35-44 years, and 45-54 years. It must be noted that early-stage entrepreneurs were less equally distributed across these three age groups in 2010. Specifically, the TEA rates were 11.3%, 7.6%, and 6.8% for the groups 25-34 years, 35-44 years, and 45-54 years, respectively. Hence, in 2011, total early-stage entrepreneurship is a more inclusive phenomenon on the dimensions of gender and age, as compared to 2010.

Regarding educational background, table 15 shows that the majority of early-stage entrepreneurs holds at least a secondary degree. Additional calculations show that the TEA rates across the three categories are 5.7%, 6.8%, and 12.2% for the adults with some secondary degree, a secondary degree, and a post-secondary or graduate degree, respectively. Although individuals with a post-secondary degree are the least represented individuals in the Dutch society, they are most likely to be involved in early-stage entrepreneurial activities.

Table 15 Demographic structure of subgroups in the Netherlands, 2011

		<i>'Non-potential entrepreneurs'</i>	<i>Potential entrepreneurs</i>	<i>Intentional entrepreneurs</i>	<i>Early-stage entrepreneurs</i>
<i>Gender</i>	Male	46%	69%	60%	64%
	Female	54%	31%	40%	36%
<i>Age</i>	18-24 years	15%	11%	20%	12%
	25-34 years	20%	20%	29%	23%
	35-44 years	22%	22%	24%	27%
	45-54 years	23%	30%	23%	26%
	55-64 years	21%	18%	4%	12%
<i>Education</i>	Some secondary degree	7%	1%	7%	4%
	Secondary degree	69%	58%	59%	56%
	Post-secondary degree and/or graduate experience	24%	42%	34%	40%

Source: EIM/GEM.

*Potential entrepreneurs are defined as those individuals who are not involved in any entrepreneurial activity (e.g., with entrepreneurial intent) yet. The group of intentional entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship.*

#### *Opportunity and necessity TEA*

Individuals who are involved in early-stage entrepreneurial activity are asked about their underlying motives of starting a business. Within the context of the Global Entrepreneurship Monitor, a distinction between opportunity motives and necessity motives has been traditionally made. Opportunity entrepreneurship reflects start-up efforts 'to take advantage of a business opportunity', whereas necessity entrepreneurship exists when there are 'no better choices for work'. A respondent may also indicate that (s)he is driven by a combination of opportunity and necessity reasons. Respondents with these 'mixed motives' are included in

the category of opportunity entrepreneurs in the tables that follow. A separate category consists of respondents are driven by 'other motives' than opportunity-based or necessity-based motives.

We have earlier seen that 8.2% of the Dutch adult population is involved in total early-stage entrepreneurial activity. When taking the motivations into account, it holds that 7.0% of the Dutch adult population is involved in TEA because they took advantage of a business opportunity whereas 0.7% had no better options for work. Table 16 shows the evolution of opportunity and necessity TEA rates over the years. Interestingly, as compared to the previous year, the increase in opportunity TEA is substantial (from 6.1% to 7.0%) whereas the necessity rate has hardly increased (from 0.6% to 0.7% of the Dutch adult population). In other words, the increase of the aggregate TEA rate is almost fully captured by an increase of individuals who take advantage of a business opportunity. This is an interesting observation, because – although there exists large variety in measuring opportunity and necessity entrepreneurship in different studies – there is some evidence that necessity entrepreneurs underperform as compared to opportunity entrepreneurs at the micro level (Block and Wagner, 2010; Vivarelli, 2004).

Traditionally, the percentage of individuals that starts a business out of opportunity has outnumbered the percentage of individuals that starts out of necessity in the Netherlands. In fact, there are only five innovation-driven economies that have a lower necessity-based TEA rate than the Netherlands. These economies are Norway (0.3%), Denmark (0.3%), Sweden (0.4%), Slovenia (0.4%), and Belgium (0.6%).

Table 16 Major motives for the decision to be entrepreneurially active (TEA), the Netherlands, 2002-2011, percentage of adult population (18-64 years of age)

<i>Item</i>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Opportunity-driven motivation	4.0	3.0	4.3	3.9	4.9	3.9	4.3	5.0	6.1	7.0
Necessity-driven motivation	0.5	0.4	0.7	0.3	0.3	0.6	0.5	0.7	0.6	0.7
Other motivation	0.1	0.2	0.1	0.1	0.2	0.7	0.4	1.4	0.5	0.5
Total (TEA)	4.6	3.6	5.1	4.4	5.4	5.2	5.2	7.2	7.2	8.2

Source: EIM/GEM.

The opportunity-based TEA rate is considerably higher than the necessity-based TEA rate for all innovation-driven economies. The two rates are nearly identical for South Korea only (opportunity TEA rate is 4.4%; necessity TEA rate is 3.2%). For all factor-driven and efficiency-driven economies, the differences between opportunity-based TEA and necessity-based TEA are less pronounced than for innovation-driven economies. This is illustrated in table 17, which provides an international comparison regarding the decomposition of TEA according to motivational type. In fact, there are two factor-driven economies and one efficiency-driven economy for which the necessity-based TEA rate is actually higher than the opportunity-based TEA rate. Iran (opportunity TEA rate is 5.7%; necessity TEA rate is 7.7%) and Pakistan (4.1% and 4.3%) are these two factor-driven economies whereas Bosnia and Herzegovina (3.1% and 5.0%) is the exception within the group of efficiency-driven economies.

Table 17 Major motives for the decision to be involved in TEA, internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age)

	<i>Factor-driven economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Opportunity-driven motivation	8.0	9.5	5.4	6.1	5.5	7.0
Necessity-driven motivation	4.9	3.8	1.3	1.8	1.8	0.7
Other motivation	0.5	0.8	0.2	0.3	0.3	0.5
Aggregate (TEA)	13.4	14.1	6.9	8.2	7.6	8.2

Source: EIM/GEM.

### *Sector decomposition*

GEM makes a distinction between four major sectors in which entrepreneurial activities can take place: extractive sectors (e.g., agriculture, forestry, fishing, mining); transformative sectors (e.g., construction, manufacturing, transportation); business services (e.g., finance, insurance, real estate); and consumer services (e.g., health, retail, restaurants). Table 18 compares the Netherlands with other economies regarding the sector distribution of early-stage entrepreneurship. Participation of early-stage entrepreneurs in consumer oriented sectors is highest in all economies, including in the Netherlands. Furthermore, one can clearly see that the fraction of early-stage entrepreneurs being active in business oriented sectors increases with stage of economic development. Especially in the Netherlands, this share is relatively high. In fact, only five innovation-driven economies have a higher share of early-stage entrepreneurs in business services (France, Ireland, Slovenia, Sweden, and the United Kingdom). The shares of three other sectors decrease with stage of economic development.

Table 18 Sector distribution of early-stage entrepreneurs, internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age) involved in TEA

	<i>Factor-driven economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Extractive sectors	9.0%	6.0%	3.9%	4.0%	5.1%	3.4%
Transformative sectors	25.5%	27.2%	22.2%	24.5%	26.6%	17.9%
Business services	7.0%	14.7%	28.5%	27.0%	28.2%	33.5%
Consumer services	58.5%	52.0%	45.4%	44.5%	40.1%	45.1%

Source: EIM/GEM.

## 3.2 Aspirations of early-stage entrepreneurs

This section zooms in on the aspirations of early-stage entrepreneurs. Two dimensions of entrepreneurial aspirations are taken into account, i.e. the innova-

tiveness of the product or service that the entrepreneur introduces, and the expected growth of the business in terms of the number of employees. Another dimension of entrepreneurial aspirations – the number of competitors on the market that offer the same products or services – will be discussed in much more detail in Chapter 4. Chapter 4 distinguishes between two degrees of business innovation: a situation in which there is hardly or no competition, and a situation with many business competitors.

Regarding the level of innovation of the product or service, respondents indicate how many customers consider the product or service new or unfamiliar. Three levels of product innovation are distinguished: products/services that are unfamiliar to all (potential) customers, products/services that are unfamiliar to some (potential) customers, and products/services that are unfamiliar to no customers at all.

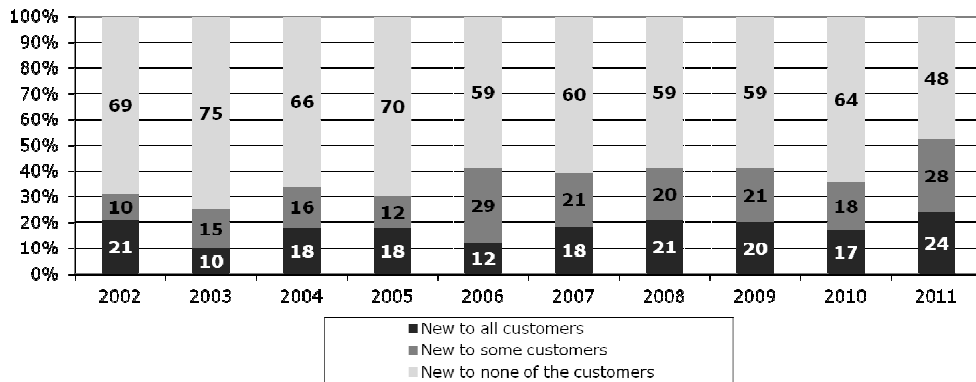
Another aspect of entrepreneurial aspirations refers to the growth ambitions of early-stage entrepreneurs. Fast growing firms are important because they are responsible for the bulk of job creation and economic prosperity in a country (Shane, 2009; Henrekson and Johansson, 2010). GEM asks each early-stage entrepreneurs about the expected number of employees five years from now (not counting the owners). A distinction is made between early-stage entrepreneurs who expect to employ at least 20 people five years from now (high growth expectations), those who expect to employ between 5 and 19 people (medium growth expectations), and those who expect to employ between 0 and 4 people (low-growth expectations).

#### *Product innovation*

Remember that product innovation is measured by an early-stage entrepreneur's assessment of whether the product is new to no, a few, or many customers. Figure 2 shows the development of the level of product innovation over time in the Netherlands. The cumulative percentages of product novelty to some or all customers have fluctuated between 35% and 41% during the previous six years (2006-2010). Interestingly, figure 2 reveals a sharp increase from 35% (2010) to 52% (2011) during the previous year.

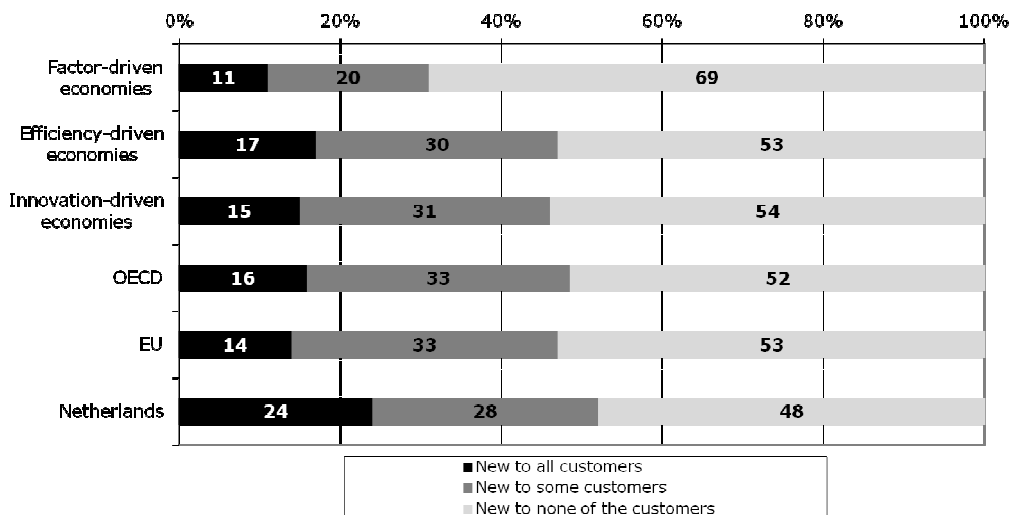
From an international point of view, it appears that Dutch early-stage entrepreneur show an above-average level of product innovation (figure 3). A more detailed analysis reveals that only six innovation-driven economies have higher shares of innovative early-stage entrepreneurs. This is in sharp contrast with 2010 when the Dutch percentages were substantially lower than the averages of all innovation-driven economies.

Figure 2 Product innovativeness of Dutch early-stage entrepreneurs in the Netherlands, 2011, percentage of TEA



Source: EIM/GEM.

Figure 3 Product innovativeness of early-stage entrepreneurs internationally compared (unweighted average), percentage of TEA, 2011

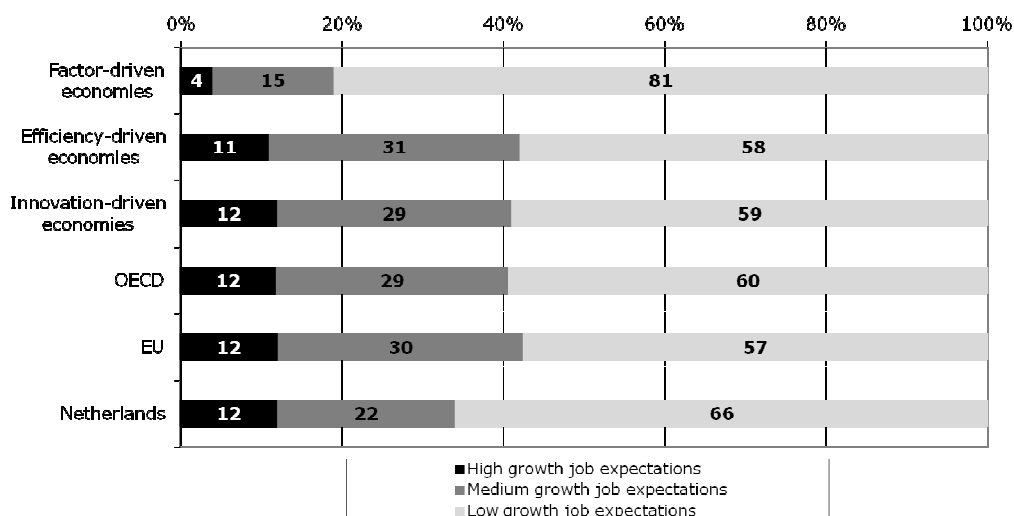


Source: EIM/GEM.

### Job growth expectations

GEM asks early-stage entrepreneurs about the expected growth in the number of employees in the next five years. Figure 4 provides an international comparison of these job growth expectations for the year 2011. Figure 4 distinguishes between three categories of job growth expectations: low growth expectations (expecting 0 to 4 employees), medium growth expectations (expecting 5 to 19 employees), and high growth expectations (expecting at least 20 employees five years from now). It can be seen that the efficiency-driven and innovation-driven economies are similar regarding the job growth expectations. Furthermore, Dutch early-stage entrepreneurs have somewhat lower job growth expectations than early-stage entrepreneurs in innovation-driven economies on average. This pattern of below-average job growth expectations in the Netherlands as compared to the innovation-driven economies could also be observed in the previous years.

Figure 4 Job growth expectations of early-stage entrepreneurs internationally compared (unweighted average), 2011, percentage of TEA



Source: EIM/GEM.

### 3.3 Established entrepreneurship

This section reports on established entrepreneurship: owner-managers of businesses that have been in existence for at least 3.5 years. Prevalence rates of established entrepreneurship contain information about the structural presence of entrepreneurial activities within a country, and thus, established enterprises eventually create certainty about jobs and employment.

#### *Developments in the Netherlands over time*

Table 19 shows that the prevalence rates of established entrepreneurship have steadily increased over time. However, 2011 interrupts a four years-growth in established entrepreneurship rates that initiated in 2007. In 2011, 8.7% percent of the Dutch adult population is involved in owning and managing a business that exists for more than 3.5 years.

Table 19 Established entrepreneurship in the Netherlands, 2001-2011, percentage of adult population (18-64 years of age)

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<u>Established entrepreneurship:</u>										
'Are you, alone or with others, currently the owner of a business you help manage?'	4.6	3.8	6.1	5.7	6.6	6.4	7.2	8.1	9.0	8.7

\* Note that wages, profits, or payments in kind from this business should have been received before January 1, 2008. Furthermore, respondents partially or fully own this new business.

Source: EIM/GEM.

#### *International comparison*

The Dutch rates of established entrepreneurship are compared internationally in table 20. The prevalence of established entrepreneurship seems to increase with stage of development, but a clear-cut conclusion about the strength of this rela-

tionship (as for example with the TEA rates) cannot be drawn here. In factor-driven economies, established entrepreneurship is not as widespread as early-stage entrepreneurship. Clearly, many individuals are taking steps to start a business in these economies, but a majority of these individuals do not survive the first crucial years of business existence. In other words, the structural presence of established enterprises is low in comparison with the TEA rates in these economies.

The Dutch average is well above the average of the innovation-driven economies. However, where in 2010 only three economies (Finland, Greece, Korea) had higher established entrepreneurship rates than the Netherlands, in 2011 there are seven economies with higher rates (Australia, Finland, Greece, Korea, Spain, Switzerland, United States).

Table 20 Established entrepreneurship internationally compared (unweighted averages), 2011, percentage of adult population (18-64 years of age)

	<i>Factor- driven economies</i>	<i>Efficiency- driven economies</i>	<i>Innovation- driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Established entrepreneurship	5.6	7.2	7.2	7.2	6.6	8.7

Source: EIM/GEM.

### 3.4 Entrepreneurial exit

The total number of entrepreneurs in an economy, and hence, economic progress, depends heavily on two related mechanisms, i.e. the creation of variation and the operation of selection (Stam et al., 2010; Audretsch et al., 2004). Indeed, the processes of entry and exit are related (Carree and Thurik, 1996; Fok et al., 2009) and are drivers of the evolution of industries and economies (Audretsch et al., 2004). On the one hand, the creation of variation can be analyzed by means of the number of individuals who actually start a new business. Without these entrepreneurs there is no selection. The operation of selection is most often investigated by those individuals who (un)voluntarily exit the entrepreneurship process. Whereas all previous sections in this chapter elaborated on the creation of variation (i.e., entrepreneurial entry), this section discusses more deeply the operation of selection, i.e. entrepreneurial exit. Individuals who exit the entrepreneurship process may have accumulated relevant entrepreneurship-specific capital in terms of knowledge, ability, and skills. Therefore, these former entrepreneurs may decide to enter the entrepreneurship process again and may provide an important new source of variation (Hessels et al., 2011).

The present section elaborates on the fraction of the adult population that has exited the entrepreneurship in the past twelve months. These individuals also indicate whether the relevant business continued or discontinued its activities after the individual exited this business. Furthermore, respondents reveal the most important reason behind exiting the entrepreneurship process.



### *Developments in the Netherlands over time*

Table 21 shows the development of entrepreneurial exit in the Netherlands over time. A distinction is made between businesses that continued their activities after the individuals exited the entrepreneurship process, and businesses that did not continue their activities. In total, 2.0% of the Dutch adult population exited a business in 2011, which is an increase by more than 0.5 percentage points as compared to 2010. Note, however, that this exit percentage is lower than the percentage in 2009. The increase in entrepreneurial exit can be witnessed especially among the individuals whose businesses discontinued their activities. For 1.4% of the Dutch adult population an individual exit from the entrepreneurship process coincides with such an exit of the business.

Additional calculations show that Dutch male adults are more likely to experience an entrepreneurial exit than Dutch female adults. Whereas 2.0% of all Dutch adults exited a business in 2011, the percentages for males and females are 2.2% and 1.8%. The fact that men are more likely than women to quit the entrepreneurship process is not surprising because men are inclined to be a potential, intentional, or early-stage entrepreneur (table 15). The probability of exit clearly depends on the age of the individual. Specifically, the exit rates are 2.3%, 2.9%, 1.6%, 2.1%, and 1.3% for the age groups 18-24 years, 25-34 years, 35-44 years, 45-54 years, and 55-64 years. Indeed, young people are more likely to exit (Evans and Leighton, 1989; Van Praag, 2003), because of their lack of experience and lack of human capital, and young people experience relatively high opportunity costs of entrepreneurship. Earlier literature has also suggested that exit rates could increase after a certain age (Stam et al., 2010; Schäfer and Talavera, 2009). Regarding the relationship between entrepreneurial exit and education, we note that exit rates are the highest among the individuals with some secondary degree. More precisely, the probabilities of experiencing an entrepreneurial exit are 3.0%, 1.7%, and 2.3% for individuals with some secondary degree, a secondary degree, and a post-secondary or graduate degree, respectively. The high exit rates among individuals with the lowest level of education are remarkable, because these individuals have the lowest likelihood of being an early-stage entrepreneur (table 15).

Table 21 Entrepreneurial exit in the Netherlands, 2002-2011, percentage of adult population (18-64 years of age)

<i>Item</i>	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<u>Exit with business closure:</u>										
Sold, shut down, discontinued, or quit a business in the past 12 months; business did <b>not</b> continue its activities after exit	1.7	1.6	1.2	1.5	0.8	0.5	1.0	1.8	0.9	1.4
<u>Exit without business closure:</u>										
Sold, shut down, discontinued, or quit a business in the past 12 months; business continued its activities after exit	.	.	.	.	.	0.3	0.6	0.7	0.5	0.5

Source: EIM/GEM.

### *International comparison*

Table 22 compares entrepreneurial exit rates from an international point of view. A first observation is that the probability of exit decreases with stage of economic development. Second, the exit rates have increased worldwide as compared to 2010. In the case of innovation-driven economies, for example, 1.5% and 0.7% of the adult population experienced an entrepreneurial exit in the case of a business closure and business continuance, respectively, in 2010. These numbers have increased to 1.7% and 1.0%, respectively, in 2011. Third, table 22 shows that the Dutch exit rates are considerably lower than for innovation-driven economies on average. In addition, the unweighted averages of the OECD and the EU are higher than the Dutch averages.

Table 22 Entrepreneurial exit internationally compared (unweighted averages), 2011, percentage of adult population (18-64 years of age)

	<i>Factor- driven economies</i>	<i>Efficiency- driven economies</i>	<i>Innovation- driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Nether- lands</i>
Exit with business closure	3.0	3.0	1.7	2.1	2.0	1.4
Exit without business closure	1.3	1.2	1.0	1.0	0.8	0.5

Source: EIM/GEM.

### *Main exit reason*

There are several reasons, or combinations of reasons, why individuals decide to quit their entrepreneurial initiatives. For example, a business may lack profitability, the owner-managers may have difficulties in acquiring the relevant financial resources, or an individual may simply retire. In total, GEM distinguishes between eight exit reasons and respondents are asked to select the most important reason for quitting their business. An overview of these eight reasons and corresponding percentages is given in table 23.

For the Netherlands, non-profitability of the business has traditionally been a dominant reason for firm exit. The occurrence has increased by almost 10 percentage points from 17% of all Dutch exits in 2010 to 26% in 2011.

Another interesting observation based on table 23 is that hardly any individuals exited because of an opportunity to sell the business. Clearly, there is a very low supply of individuals who are willing to take over existing firms in the Netherlands. Interestingly, this phenomenon is only visible during the past few years. That is, in 2009, the fraction of all exits that was due to a sell-off amounted to 19%. Subsequently, this percentage decreased to 15% in 2011 while it plummeted to 1% in 2011.

The percentage of exits that is due to financial problems is lower in the Netherlands than the unweighted averages of innovation-driven economies, the OECD economies, or the EU economies. However, the Dutch percentage almost doubled from 4% in 2010 to 7% in 2011. This percentage was 9% in 2009 whereas it was still 2% in 2008.

The fraction of individuals that exits because of retirement is extremely low in the Netherlands, especially when compared to the average of the innovation-

driven economies. Remarkably, in 2008, almost one fourth of all former entrepreneurs consisted of retirements.

Table 23 Main reason for quitting a business, 2011, percentage of the total number of exits

	<i>Factor- driven economies</i>	<i>Efficiency- driven economies</i>	<i>Innovation- driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
An opportunity to sell	2%	4%	5%	5%	4%	1%
Business was not profitable	24%	29%	30%	30%	31%	26%
Problems getting finance	11%	16%	10%	12%	12%	7%
Another job or business opportunity	4%	7%	10%	10%	10%	5%
Exit was planned in advance	1%	3%	3%	3%	3%	0%
Retirement	2%	2%	8%	7%	6%	1%
Personal reasons	17%	19%	17%	16%	15%	18%
An incident	4%	4%	4%	4%	3%	1%
Other reason/don't know	34%	15%	13%	13%	15%	40%

Source: EIM/GEM.

### 3.5 Summary

First, this chapter reported on the prevalence of total early-stage entrepreneurial activity (TEA) in the Netherlands. It turns out that 8.2% of the Dutch adult population is involved in setting up a business or is the owner-manager of a new business. This is the highest Dutch TEA rate since its first measurement in 2001. Within the group of innovation-driven economies, there are only two economies with higher percentages (Australia and the United States). Especially women have increased their participation in early-stage entrepreneurship in the Netherlands over the past year. Furthermore, we observed that entrepreneurial aspirations of Dutch early-stage entrepreneurs in terms of product innovation have grown considerably in the Netherlands. Whereas 35% of all Dutch early-stage entrepreneurs offered a product or service that was unfamiliar to the customers in 2010, this percentage has increased to 52% in 2011.

Second, this chapter focused on individuals who are the owner-manager of a business that exists for more than 3.5 years. In 2011, 8.7% percent of the Dutch adult population is involved in owning-managing an established business. This is a slight decrease as compared to 2010.

Third, the current chapter zoomed in on entrepreneurial exit. In total, 2.0% of the Dutch adult population (18-64 years) exited a business in 2011, which is in increase by more than 0.5 percentage points as compared to 2010. However, the Dutch exit rates are still lower than for comparable economies. Non-profitability is the exit reason that is mentioned most frequently in the Netherlands as the most important exit reason. A minor fraction of the exiting entrepreneurs had an opportunity to sell their businesses (only 1%).



## 4 Competition and entrepreneurship

This chapter deals with entrepreneurship and competition. Entrepreneurs who are in the process of setting up their own business can enter markets with high or more limited levels of competition. In this chapter we explore whether certain characteristics of entrepreneurs such as demographics and human capital attributes are associated with the extent of competition that entrepreneurs face. We also explore the link between competition and innovation, and between competition and job growth ambitions.

### 4.1 Competition and entry

#### *The role of entrepreneurs in disequilibrium*

While orthodox neoclassical economics focuses on determining static market equilibrium situations which are characterized by perfect competition, Kirzner (1973) has emphasized that it is important to focus on the process that leads to such market equilibriums and on the role that entrepreneurs play in this market process. He argues that when markets are in disequilibrium this means that profit opportunities exist in the market, which are exploited by entrepreneurs. He highlights that this process of bringing markets towards equilibrium is inherently competitive, as each individual entrepreneur tries to make a better offer than other entrepreneurs in the markets. This competitive entrepreneurial process continues until profit opportunities are eliminated. In fact, he argues that it is exactly this competitive nature of market processes that stimulates entrepreneurs towards better offerings so that they are able to make a profit through their participation in the market. Thus, while the competitive nature of the market process is highlighted, and while the entry of entrepreneurs is associated with market disequilibrium, Kirzner does not address, however, whether new entrepreneurs will choose to enter markets with low or with high levels of competition. Some have argued that entrepreneurs enter markets with high competition, as the presence of many competitors signals the existence of profit opportunities. Entrepreneurs will enter these markets to try to capture profits from other entrepreneurs. In this situation entrepreneurs contribute to an adjustment process towards equilibrium, often by means of imitation. Entrepreneurs, however, could also decide to enter markets with limited competition in which they are able to take, at least temporary, some kind of monopoly position (Schumpeter, 1934). Typically, in these situations entrepreneurs contribute to creating disequilibrium by introducing innovations. Over time, imitation by other entrepreneurs occurs and the temporary profits enjoyed by the innovator are eroded. Hence, entrepreneurs may contribute both to creating disequilibrium (e.g., by introducing innovations which make extant technology obsolete – creative destruction) and to adjustment towards the (new) equilibrium by diffusion of innovation and imitation (Schultz, 1975).

#### *Competitive strategy versus blue ocean strategy*

The extent of competition that firms face is actually the topic of a heated debate in strategic management literature, where two schools of thought differ in their views of the importance of competition for firms. Proponents of the *competitive strategy* school of thought argue that, although it is possible for firms to make

high profits and avoid competition temporarily by means of innovation, imitation and erosion of profits will occur relatively quickly, and the long-term state is one of competition with close rivals (Porter, 1980, 1985). On the other hand, proponents of the *blue ocean strategy* school of thought argue that, by exploiting 'untapped markets' through innovation, it is possible for firms to structurally avoid competition by continuously creating new market demand (Kim and Mauborgne, 2005). In essence, the two schools of thought differ in their views of how many untapped markets exist and how quick imitation takes place. Competitive strategy proponents take the view that there are not sufficient untapped markets for a sufficient number of firms and moreover, if one is found, that imitation and erosion of profits occurs quickly. In contrast, blue ocean strategy proponents take the view that it is possible to find sufficient untapped markets and that imitation occurs more slowly so that innovators can enjoy higher profits for a longer period of time. This period would in fact be so long that a strategy focused on finding new markets (blue oceans) is in fact a sustainable strategy for a sufficient number of firms. The implication for managers of firms is that the main strategic concern lies with managing competition if one takes a competitive strategy point of view, while it lies at managing innovation if one takes a blue ocean strategy point of view (Burke et al., 2008). Burke et al. (2008) show that in practice, both strategies may co-exist in the sense that strong competition on an existing market may occur in the short run, requiring competitive strategy, while at the same time, blue ocean strategy is required to manage long term survival chances of firms by exploiting untapped (i.e., new) markets.

#### *Competition in the GEM data base*

The GEM data allow us to provide a picture of the extent of competition that entrepreneurs face when they enter the market. In the GEM APS entrepreneurs are being asked whether the market in which they operate is characterized by many competitors or whether there are only few or even no competitors. Note that the entrepreneur's answers to this question gives an indication of how he/she perceives competition in the market and it is not an objective indicator of the extent of competition in the market. The GEM data for 2011 reveal that entrepreneurs enter markets with low as well as high perceived competition. It appears that 49% of the new entrepreneurs indicate to have entered a market with many competitors, while 51% has entered markets with few or no competitors. When, for simplicity, we interpret 'few or no competitors' as untapped markets, this distribution suggests that blue oceans (new markets with limited competition) and red oceans ('bloody' oceans, with strong competition for a static industry profit) indeed co-exist, as Burke et al. (2008) suggest. Since the overall TEA rate for 2011 is 8.2%, the distribution implies that 4.0% has entered markets with many competitors and 4.2% has entered markets with few or no competitors.

In the next sections we will explore whether there are any differences between entrepreneurs that enter markets with high or low competition, in terms of their demographic and human capital characteristics, as well as in terms of their orientation on innovation, job growth and export. This enables us to explore to what extent entrepreneurs with different background characteristics enter different types of markets (i.e. high versus low competition markets).

## 4.2 Competition and demographic characteristics

### *Gender*

Males are more likely to be entrepreneurially active than females. When you look at the share of males and females within TEA in 2011, 64% of new entrepreneurs are male and 36% are female. Of all the early-stage female entrepreneurs about two thirds (64%) enter markets with few or no competitors, while the remaining share is active in markets with many competitors. Interestingly, the picture is somewhat reversed for male entrepreneurs where more than half (57%) enters markets with many competitors and 43% is active in markets with few or no competitors.

This pattern suggests that female entrepreneurs tend to enter new niche markets, possibly with innovative products, whereas male entrepreneurs tend to enter competitive markets fighting over smaller market shares. In theory, it is also possible that, since we measure competition *as perceived by the entrepreneurs*, female entrepreneurs are less realistic about the extent of competition they will face in the market. We would like to emphasize though that, besides the remarkably high share of female entrepreneurs indicating to enter a market with few or no competitors, we do not have any indication that this is in fact the case.

### *Age*

Entrepreneurs in the age group 35-44 relatively often enter markets with few or no competitors (see table 24). By contrast, entrepreneurs of the youngest age group are overrepresented in markets with many competitors. This pattern suggests that entrepreneurs in the age group 35-44 are better equipped to find and exploit opportunities in new niche markets, compared to entrepreneurs in the age group 18-34 years. Perhaps the middle-aged category have built up more life and career experience enabling them to find 'blue oceans'.

Table 24 Competition and age of new entrepreneurs ( $n=235$ ), the Netherlands, 2011

	<i>Many competitors</i>	<i>Few or no competitors</i>
18-34 years of age	54%	46%
35-44 years of age	40%	60%
45-64 years of age	51%	49%
Overall average	49%	51%

Source: EIM/GEM.

## 4.3 Competition and human capital

Human capital reflects an individual's investment in knowledge and skills (Becker, 1964). With the GEM data it is possible to identify the level of education of early-stage entrepreneurs, which serves as an indicator for investments in knowledge, and whether they possess entrepreneurship-specific skills or not, which serves as an indicator of investment in skills.

### Education

Of all new entrepreneurs 40% has achieved at least a post secondary level of education. These individuals with post secondary or higher levels of education enter markets with many competitors a bit more often than markets with few or no competitors (53% versus 47%). The difference is not significant however.

Table 25 Competition and level of education (n=235)

	Many competitors	Few or no competitors
Secondary education or lower	47%	53%
Post secondary or higher	53%	47%
Overall average	49%	51%

Source: EIM/GEM.

### Entrepreneurial skills

New ventures by definition lack organizational experience, which makes the skills and experiences that entrepreneur(s) and their networks bring to a new organization of particular importance. Entrepreneur's business skills can help compensate for liabilities of newness and may therefore facilitate the process of entering the market (Shrader et al, 2000). Furthermore, individuals with entrepreneurship-related skills may be in a good position to recognize promising market opportunities (Shane, 2003). Within the GEM survey respondents have to self-assess whether they have the skills, knowledge and experience for setting up their own business. You might expect that individuals who are setting up their own business or who already started their business quite likely perceive having such entrepreneurial skills. Indeed, a large majority of the early-stage entrepreneurs (91%) indicates to have the skills, knowledge and experience required to set up their own business. More than half (53%) of these entrepreneurs who state having entrepreneurial skills enter markets with limited competition while 47% enters markets with high levels of competition. The difference is significant ( $p < 0.05$ ).

Combined with the results on formal education, this result suggests that entrepreneurial skills are slightly more important than formal education for finding and exploiting new niche markets. The percentage differences are small though.

## 4.4 Competition and innovation

In market process theory both imitators and innovators are entrepreneurial in the sense that they play an important role in disequilibrium (Kirzner, 1973; Schumpeter, 1934). While innovators compete mainly on quality, imitators compete mainly on price. In Schumpeter's view imitators enter the markets after innovators have brought markets that were in equilibrium out of equilibrium. According to Kirzner, in equilibrium, with perfect knowledge of products and processes, there can be no opportunities for innovation. From his perspective opportunities, both for innovation and for imitation, only exist when no market equilibrium has yet been reached and both activities help to bring markets into equilib-



rium. Imitators and innovators can both be found in markets with high as well as with low competition.

#### *High competition markets*

In this section we will use GEM data to explore whether innovators and imitators tend to enter markets with a high or a more limited number of competitors. It is often emphasized that innovation is of crucial importance for survival and from this perspective one would argue that, in order to be able to enter and survive in highly competitive markets, new entrants should innovate. In such markets, however, it may also be a profitable strategy to imitate or adopt ideas from other firms. Those firms that follow the example set by other firms tend to face lower costs for doing research and development and these firms may be less likely to fail since the product or service offered has already been tested in the market (The Economist, 2012).

Burke (2009) argues that in recent decades the most successful entrepreneurs actually employ a strategy which may be characterized as in between imitation and radical innovation (authors' interpretation). He argues that successful entrepreneurs in present times build further on existing business models employed by competitors and target their innovation at solving the last remaining 10% of a consumer problem. This has the advantages of imitation as described above, i.e. it is already known that there is market demand and the main concept or idea can be imitated (possibly at low costs). However, by solving the last 10% (not the first 90%) of a consumer problem, consumer expenditures can be raised dramatically (Burke, 2009). As an example, Burke mentions that 'in innovation terms Apple is mainly responsible for developing the mouse/click and icon driven computer operating system. However, the problem for consumers was that this system was only available on Macintosh computers while most computers were based on DOS (Disk Operating System). Microsoft solved the last 10% of this problem by adapting Apple's innovation so that it could work on DOS. As a result, Microsoft and not Apple went on to become the dominant supplier of icon/click driven computer software operating systems' (Burke, 2009, p. 36).

#### *Low competition markets*

In markets with no or few competitors new entrants also have the option to compete on quality, or to imitate others and to compete on price. Innovative entrepreneurs who enter markets with no or few competitors acquire some sort of (temporary) monopoly position. If other entrants are not prevented to enter the market, or in other words, when there are no obstacles for competition, others may quickly follow. These others are the imitators. As discussed in Section 4.1, the success of product innovation in new markets as an entrepreneurial strategy depends on the speed with which imitation occurs. If imitation is slow (for instance because the product is technically complex, and therefore hard to copy), then the innovator can enjoy 'monopoly' profits for a relatively long time (as blue ocean strategy proponents argue). If imitation is quick, then introducing product innovation in new niche markets may not be a sustainable strategy (as competitive strategy proponents argue).

### *Empirical findings*

Innovation involves the renewal of products, services and work processes (Schumpeter, 1934). With the GEM data it is possible to identify whether early-stage entrepreneurs innovate in terms of introducing new products or services to the market and in terms of using new technologies (process innovation). The results of the GEM APS for 2011 indicate that on average 52% of the early-stage entrepreneurs introduce a product or service that is new to all or some of their customers. For those entrepreneurs introducing new products or services it is a bit more common to enter markets with limited competition (60%) than to enter highly competitive markets (40%), see table 26. This pattern suggests that imitation is a slightly more used strategy by entrepreneurs in highly competitive markets, while product innovation is slightly more common in low competition markets.

Furthermore, on average 30% of the early-states entrepreneurs indicate using the very latest or new technologies (i.e. technologies that have been available for less than five years). About two thirds of these users of new technology enter markets with few or no competitors, while about one third enters highly competitive markets (table 26). This suggests that blue ocean strategies are more viable for firms using new technologies which are possibly hard to copy.

Table 26 Competition and innovation ( $n=235$ ), the Netherlands, 2011

	<i>Many competitors</i>	<i>Few or no competitors</i>
<b>Innovation</b>		
New product/service introduction	40%	60%
New technology use	32%	68%
Overall average	49%	51%

Source: EIM/GEM.

## 4.5 Competition and job growth ambitions

One of the reasons why entrepreneurs are valued by society is because of their potential to create employment or jobs for others. According to the GEM survey on average about a quarter (26%) of the new entrepreneurs expect to create at least 6 new jobs in the next 5 years. Of these new entrepreneurs who expect to create 6 or more jobs in the next five years 64% enter markets with limited competition and 36% enter markets with high competition. This pattern suggests that a considerable majority of ambitious entrepreneurs expects to realize their ambition by increasing their market shares in new niche markets. In terms of blue ocean strategy, it seems that a majority of ambitious entrepreneurs believe that sufficient untapped markets (blue oceans) exist or can be created in order to realize their job growth ambitions. In other words, the result suggests that a majority of ambitious entrepreneurs believe that blue ocean strategy is in fact a viable long-term strategy, consistent with empirical findings by Burke et al. (2008).

## 4.6 Summary

This chapter focuses on competition and entrepreneurship. Entrepreneurs can choose to enter new or untapped markets (blue oceans) in which the amount of competition they face is limited, or they can enter markets with strong competition (red oceans) aiming to capture some of the profits of other entrepreneurs. The GEM data for 2011 indicates that new entrepreneurs enter both types of markets to a similar extent: 51% enters markets in which they perceive limited competition and 49% enters markets in which they perceive a high number of competitors.

Furthermore, this chapter identifies several characteristics of entrepreneurs that might play a role in finding and exploiting niche markets. Entrepreneurs in the age group 35-44, for example, are overrepresented in markets with limited competition, while those in the age group of 18-34 are underrepresented in these markets. Perhaps individuals in the 35-44 years of age group have built up some life and career experience that helps them to find blue oceans. Furthermore, those who have entrepreneurial skills appear to find and exploit niche markets a bit more often, suggesting that these skills may facilitate finding blue oceans. It also appears that female entrepreneurs are overrepresented in markets with limited competition although it is unclear why exactly this is the case.

Finally, this chapter also has addressed the relationship between competition and entrepreneurs' aspirations in terms of innovation and job growth. The findings show that entrepreneurs who innovate by means of introducing new products or services and in particular by using new technologies are overrepresented in markets with limited competition. This suggests that blue ocean strategies are more viable than red ocean strategies for entrepreneurs who innovate, possibly because their innovations tend to be hard to copy. Finally, new entrepreneurs who aspire to create 6 or more jobs in the next five years are also overrepresented in markets with limited competition, suggesting that the majority of those growth aspiring entrepreneurs expect to realize their growth ambitions in untapped markets or blue oceans.



## 5 Entrepreneurial employees<sup>2</sup>

### 5.1 Introduction

The entrepreneurship<sup>3</sup> literature makes a distinction between two different 'modes of exploitation' (Shane and Venkataraman, 2000) that provide the basis for two large research areas. The first area is concerned with opportunity pursuit by independent (early-stage) entrepreneurs. The subject of this research field is usually designated as independent entrepreneurship or business ownership. The second research area studies opportunity pursuit within existing organizations, also known as entrepreneurial employee activity, corporate entrepreneurship or intrapreneurship. Both fields employ a wide range of definitions and perspectives. So far GEM has mainly focused on various aspects of the independent entrepreneurship field. As was already stated in the Introduction to the present report (Chapter 1), the Global Entrepreneurship Monitor 2011 devoted a special theme study to one particular facet of entrepreneurship within existing organizations, i.e. entrepreneurial activities of individual employees. Entrepreneurial employee activity can be viewed as a (special) type of entrepreneurship in the sense that it also aims at some sort of new venture creation. To a large extent, entrepreneurial activities of employees also share many behavioral characteristics with the overall concept of entrepreneurship, such as taking initiative, pursuit of opportunities and innovativeness (Bosma, Stam and Wennekers, 2010).

The present chapter gives a summary account of the many observations and findings which came out of GEM's special theme study, while highlighting the results for the Netherlands.

In Section 5.2 we will present the conceptual framework and the research design which were used for the special theme study. Section 5.3 deals with the prevalence of entrepreneurial employee activity. In this section we will also show to what extent it will be possible to distinguish between *types of economies* in terms of varying national patterns of both independent entrepreneurship and entrepreneurial employee activity. Subsequently, in Section 5.4 we will discuss the characteristics of individual entrepreneurial employees, while Section 5.5 will deal with the characteristics of the new business activities which are initiated by these entrepreneurial employees. Finally, Section 5.6 presents some conclusions.

### 5.2 Conceptual framework and research design

#### *Conceptual framework*

The 'entrepreneurship within existing organizations' field employs a wide-ranging terminology, including corporate entrepreneurship, corporate venturing, strategic renewal, and intrapreneurship (Sharma and Chrisman, 1999). The first three of these concepts primarily refer to the level of organizations and often concern top-down processes and management strategies to foster workforce initiatives

<sup>2</sup> The authors are indebted to Niels Bosma for his advice and assistance for this chapter.

<sup>3</sup> Here we mean entrepreneurship in the sense of entrepreneurial opportunity discovery and not in the sense of self-employment.

and efforts to innovate and develop new business (De Jong and Wennekers, 2008). Intrapreneurship on the other hand mostly relates to bottom-up, proactive initiatives of individual employees. The term 'intrapreneurship' is usually attributed to Pinchot (1985).

The 2011 GEM special theme study (Bosma et al., 2012a; Bosma et al., 2012b) focuses on the level of individual entrepreneurial employees who have a leading role in the creation and development of new business activities for the organization in which they work. These entrepreneurial initiatives include both top-down and bottom-up activities. Throughout this chapter, these individuals will usually be called entrepreneurial employees. The GEM special theme study operationalizes entrepreneurial employee activity as 'employees developing new activities for their main employer, such as developing or launching new goods or services, or setting up a new business unit, a new establishment or subsidiary'. This definition is wider than new organization creation, but it excludes employee initiatives that mainly aim at optimizing internal work processes. Furthermore, the theme study distinguishes between two phases of entrepreneurial employee activity, as will be explained below.

#### *Research design*

The GEM special theme study investigation was carried out in the framework of the Adult Population Survey (APS) and the National Experts Survey (NES) of the Global Entrepreneurship Monitor 2011. An advantage of this methodology is the opportunity to compare entrepreneurial employees with other employees on the one hand, and with independent entrepreneurs (i.e. individuals who own their businesses, or expect to own the business they are setting up) on the other, at both the macro and the micro level.

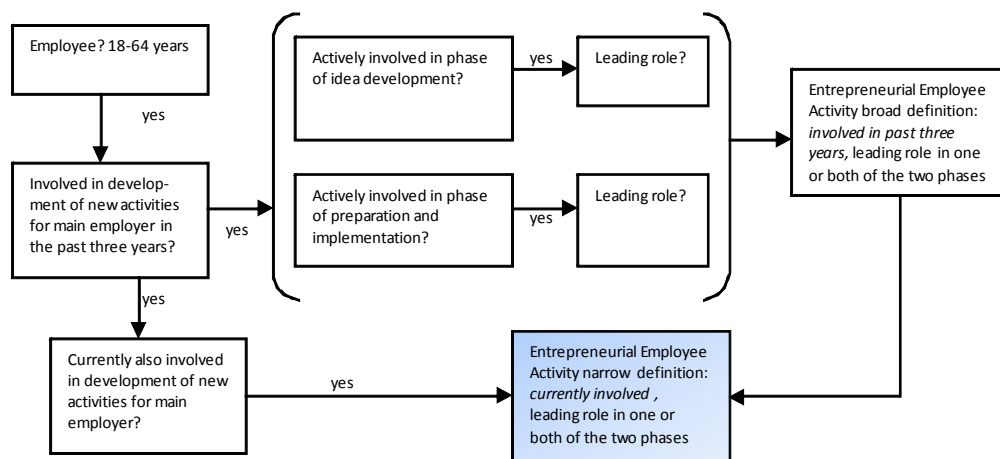
Methodologically the special theme study builds upon an earlier pilot study across 11 countries including the Netherlands, conducted in the framework of the Global Entrepreneurship Monitor 2008 (see Hessels, Hartog and Wennekers, 2009). The research design includes a distinction between two phases of entrepreneurial employee activity, i.e. 'idea development for a new activity' and 'preparation and implementation of a new activity'. Idea development includes for example active information search, brainstorming and submitting ideas for new activities to the management of the business. Preparation and implementation of a new activity refers to promoting an idea for a new activity, preparing a business plan, marketing the new activity, finding financial resources and acquiring a team of workers for the new activity.

In addition, with respect to the involvement of employees in each of these two phases of the development of new activities, this study makes a distinction in a supporting and a leading role<sup>4</sup>. A leading role in at least one of these phases has been used as the final criterion for identifying entrepreneurial employees (see Figure 1). Based on these conceptual elements, the special theme study measures the prevalence of entrepreneurial employee activity according to two definitions. Following a first (broad) definition entrepreneurial employee activity refers to employees who, *in the past three years*, were actively involved in and had a leading role in at least one of these phases (i.e., 'idea development for a new ac-

<sup>4</sup> This is based on self-assessment by the respondents of the Adult Population Survey.

tivity' and/or 'preparation and implementation of a new activity'). The second (narrow) definition refers to the entrepreneurial employees who are also *currently* involved in the development of such new activities. Current entrepreneurial employees are thus a subgroup of the group of employees who were involved in entrepreneurial employee activity during the past three years. In the remainder of this chapter the prevalence of entrepreneurial employee activity is usually defined as the number of current entrepreneurial employees, as a percentage of either the total number of employees or the adult population (between 18-64 years of age). Entrepreneurial employee activity according to this narrow definition is denoted as EEA.

Figure 5 Entrepreneurial employee activity: recent and current involvement



In addition, the left-hand side of figure 5 also identifies two even broader categories of 'entrepreneurial employees':

- employees who in the past three years were, in one way or another, involved in the development of new activities for their main employer;
- employees, as defined above, who were also *currently* involved in the development of such activities.

In all 52 countries for which data were collected on entrepreneurial employee activity, all employees classified as entrepreneurial employees were asked two further questions about their 'most significant new activity' in the past three years. These questions referred to a brief description of the new activity and to the expected number of people working on the new activity five years after its introduction. This latter question is the basis for the following distinction:

- entrepreneurial employee activity with expectations of at most four jobs resulting from the activity five years from now - EEA-SL (solo & low job expectations);
- entrepreneurial employee activity with expectations of at least five jobs resulting from the activity five years from now - EEA-MH (medium & high job expectations).

This distinction is important because not all entrepreneurial activity contributes equally to economic development and job creation.

In addition, 32 of these 52 economies also participated in an optional special topic section. Here, the employees classified as entrepreneurial employees were

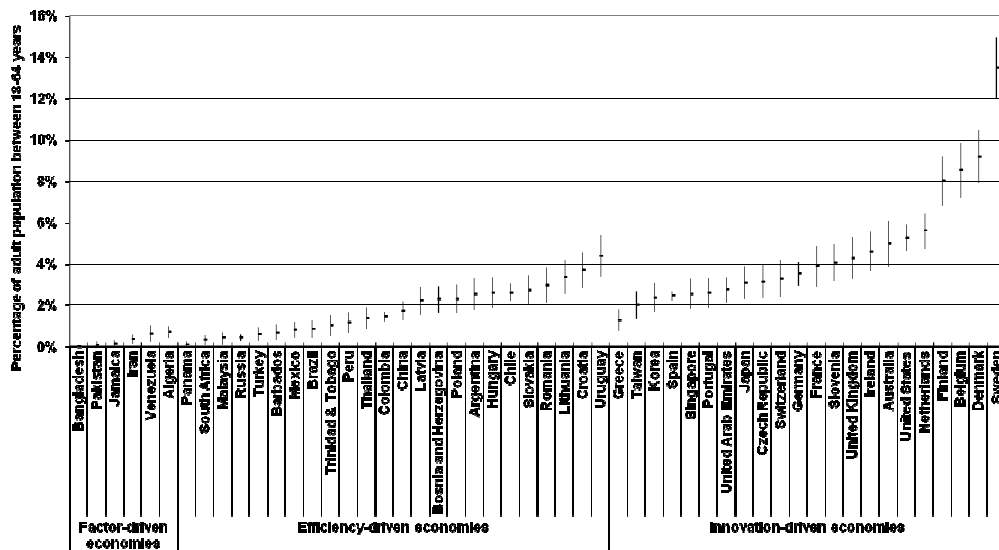
asked some additional questions about the new business activity, including among others several aspects of the degree of newness of the new activity. Finally, all employees in these 32 economies were asked to what extent their employer provides support when employees come up with new ideas, as well as two questions about the sector of industry in which they are employed and about their job title.

### 5.3 The prevalence of entrepreneurial employee activity

#### *Prevalence rates*

Figure 6 shows the point estimates of the EEA rates for each of the 52 economies in 2011 by phase of economic development. A first glance at Figure 1 reveals that in many countries entrepreneurial employees, as defined here, are not very numerous. On average, only about 3% of the adult population and 5% of the employees in our sample is currently involved in EEA. A second observation is that entrepreneurial employee activity is less prevalent in efficiency-driven economies than in innovation-driven economies, while it is even more rare in factor-driven economies.

Figure 6 Prevalence rates of entrepreneurial employee activity (EEA), percentage of adult population (18-64 years of age), 2011



As is shown in table 27, the incidence of entrepreneurial employee activity in the adult population is on average substantially lower than that of total early-stage entrepreneurial activity as presented in Chapter 3 of this report. In the factor-driven economies entrepreneurial employee activity is extremely scarce while, on the contrary, early-stage entrepreneurial activity is abundant. In the efficiency-driven economies the differences are somewhat smaller, but early-stage entrepreneurial activity is still several times as prevalent as entrepreneurial employee activity. Only in the innovation-driven economies is the incidence of entrepreneurial employee activity in the adult population in the same order of magnitude as that of early-stage entrepreneurial activity, albeit still somewhat lower.



The table also highlights the results for the Netherlands. A striking observation is the fact that in the Netherlands both EEA and TEA are above the average value for the innovation-driven countries. Compared with the EU-countries in the sample, EEA and TEA in the Netherlands are also above average, while in comparison with the OECD-countries in the sample, entrepreneurial activity in the Netherlands is either average (TEA) or above average (EEA).

Table 27 Early-stage entrepreneurial activity (TEA) and entrepreneurial employee activity (EEA) internationally compared (unweighted average), 2011, percentage of adult population (18-64 years of age)

	<i>Factor-driven economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
TEA	13.4	14.1	6.9	8.2	7.6	8.2
EEA	0.3	1.8	4.6	4.2	4.5	5.6
EEA in private sector	0.2	1.2	2.9	2.7	2.9	3.3

Source: EIM/GEM.

Table 27 also shows that about two-thirds of entrepreneurial employee activity takes place in the private or for-profit sector. This also implies that, overall, one-third of entrepreneurial employees are to be found in organizations in the government and the not-for-profit sector. In the innovation-driven economies the share of public sector EEA is on average even slightly larger, ranging from less than 20% in Taiwan to almost 50% in some Scandinavian countries. In the Netherlands public sector EEA has a share of about 40%. The prevalence rate of public sector EEA of course depends on both the relative size of this sector and the percentage of employees in these organizations that are involved in entrepreneurial activities. Generally speaking in the innovation-driven economies entrepreneurial employee prevalence rates (in % of employees) are remarkably similar for the private and the public sectors, while in the efficiency-driven economies these rates are somewhat lower for the public sector (Bosma et al., 2012b).

The findings clearly suggest that not-for-profit organizations and government agencies also develop new activities, just like private businesses. This finding may be interpreted as another illustration of the omnipresence of entrepreneurial behavior as proposed by the Austrian school of economics (Boettke and Coyne, 2003). Apparently this type of behavior is not only *not* restricted to independent entrepreneurs, but is also *not* restricted to private, commercial activities. For a more extensive discussion see Bosma et al. (2012b).

Prevalence rates of entrepreneurial employee activity (in % of the total number of employees) are also available across organization size class (table 2). A distinction is made between three size classes: organizations with fewer than 10 employees, those with between 10 and 249 employees, and those with at least 250 employees. It should be noted that size class data are not available for almost 10% of the entrepreneurial employees and for about 20% of all other employees. In the Netherlands, around 8% of all employees in the sample did not provide the size of their organization.

Table 28 shows that entrepreneurial employees are active in all three size classes of organizations, which reconfirms the proposition regarding the omnipresence of entrepreneurship. Secondly, EEA prevalence rates are nonetheless higher in large organizations and somewhat lower in small ones. This holds particularly for the innovation-driven economies. Indeed, for the Netherlands also, the prevalence rate of entrepreneurial employee activity increases with the size of the organization.

Table 28 Entrepreneurial employee activity (EEA) across organization size class, 2011, percentage of total number of employees

	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
<10 employees	4.6	6.7	6.5	7.2	3.8
10-249 employees	4.3	7.5	7.4	7.5	9.1
at least 250 employees	5.1	9.0	8.8	8.8	9.5

Source: EIM/GEM.

Note: size class data are not available for all entrepreneurial employees.

In addition, table 29 presents the entrepreneurial employee activity prevalence rates across four private sector industries, based on the 32 countries that participated in the optional special topic section. The most striking observation is that entrepreneurial employee activity appears to be most prevalent in the business services. Interestingly, in the Netherlands its prevalence is lowest in consumer oriented sectors which tend to have the highest TEA rates. However, as a large majority of these 32 countries are efficiency-driven economies and only five are in fact innovation-driven economies, the comparisons in table 29 across country groups have very limited significance only.

Table 29 Entrepreneurial employee activity (EEA) across sectors of industry, 2011, percentage of total number of employees

	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>OECD</i>	<i>EU</i>	<i>Netherlands</i>
Extractive	1.9	4.4	3.8	2.2	4.6
Transforming	4.1	5.8	4.8	4.9	4.7
Business services	10.2	9.9	8.7	9.9	8.6
Consumer services	8.5	5.9	5.7	6.7	2.7

Source: EIM/GEM.

Finally, table 30 presents a breakdown into the four types of entrepreneurial employees as defined in the previous section for the innovation-driven economies and for the Netherlands. Prevalence rates of these four types of entrepreneurial employees as percentages of the total number of employees are provided. The aggregate sample of the innovation-driven economies consists of 64,885 adults and 38,078 employees. For these economies, 8,236 employees (21.6% of the to-

tal number of employees) have been involved in the development of new activities for their employer in the past three years, of whom 5,448 are also currently involved (14.3%). As can also be seen from the table, the number of entrepreneurial employees according to the so-called broad definition is 3,498 (9.2%) and according to the most narrow definition (EEA) it is 2,794 (7.3%). Entrepreneurial employees in the latter category thus amount to about 34% of the number of employees that have somehow been involved in the development of new activities for their employer in the past three years.

Table 30 Breakdown of entrepreneurial employees into four types for the innovation-driven economies and the Netherlands, 2011

	<i>Innovation-driven economies</i>		<i>Netherlands</i>	
	<i>Sample size</i>	<i>% of employees</i>	<i>Sample size</i>	<i>% of employees</i>
Adult population 18-64 years	64,885	-	3,500	
Employees 18-64 years	38,078	100	2,058	100
Involved in development of new activities, in past three years	8,236	21.6	550	26.7
Idem, and also involved in current year	5,448	14.3	361	17.5
Actively involved and a leading role in at least one phase, in past three years	3,498	9.2	251	12.2
Idem, and also involved in current year (EEA)	2,794	7.3	182	8.8

Source: EIM/GEM.

Note: all percentages refer to unweighted percentages with respect to the number of employees in the sample.

In the sample for the Netherlands (3,500 adults), 550 employees out of a total of 2,058 employees (26.7%) were somehow involved in the development of new activities for their employer in the past three years, of whom 361 were also involved in the current year (2011; 17.5%). Finally, a number of 251 entrepreneurial employees was identified as entrepreneurial employees according to the broad definition, i.e. involvement and a leading role in the past three years. Finally, there are 182 entrepreneurial employees according to the narrow definition (EEA). The corresponding unweighted percentages of entrepreneurial employee activity relative to the total number of employees are 12.2% and 8.8% according to the broad and narrow definition, respectively<sup>5</sup>. It thus appears that compared with the innovation-driven economies, prevalence rates in the Netherlands are systematically higher across all four types of entrepreneurial employee activity.

<sup>5</sup> The weighted percentages are 11.1% and 7.9% respectively. Here the data are weighted by the actual distribution of the Dutch population in terms of age, gender, and education level to make the sample representative for the Dutch adult population between 18 and 64 years of age.

*A typology of economies*

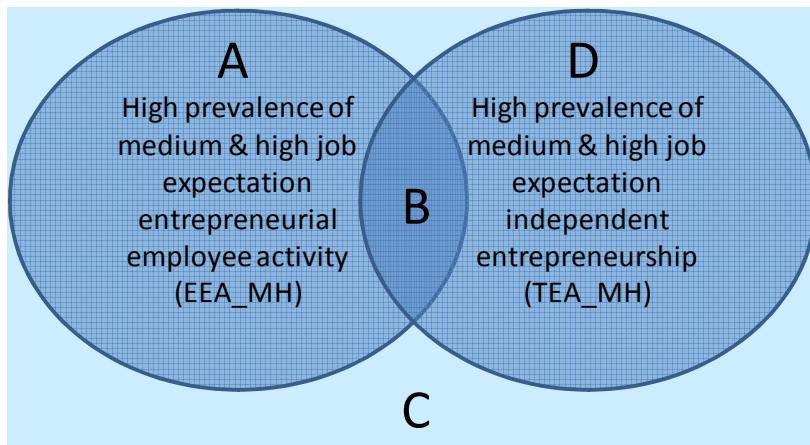
In the Global Entrepreneurship Monitor 2011, several countries were found to have a high prevalence in either independent (early-stage) entrepreneurial activity or entrepreneurial employee activity, and to have a low prevalence in the other entrepreneurship mode, while other countries were shown to have a high prevalence in both modes of entrepreneurship and still others to have a low prevalence in both. As will be shown below, a similar finding also holds for the distribution across countries, of independent (early-stage) entrepreneurship and entrepreneurial employee activity with medium-high job expectations, as a reflection of ambitious entrepreneurship.

In this respect, GEM's 2011 special theme study report on entrepreneurial employee activity (Bosma et al., 2012b) has carried out a more specific analysis. All economies were classified along the following two dimensions:

- The prevalence of medium & high job expectations early-stage entrepreneurial activity (TEA-MH), as a reflection of ambitious independent early-stage entrepreneurship.
- The prevalence of medium & high job expectations entrepreneurial employee activity (EEA-MH), as a reflection of ambitious entrepreneurial employee activity in existing firms.

For the efficiency-driven and the innovation-driven economies separately, a classification of different types of economies was based on the four possible combinations of high versus low country prevalence rates for these two entrepreneurship dimensions (TEA-MH and EEA-MH). These combinations or types of economies may be numbered A through D, as is visualized below in figure 7.

Figure 7 Typology of economies based on two dimensions of ambitious entrepreneurship



Type A: high prevalence of medium & high job expectation entrepreneurial employee activity (EEA-MH) and low prevalence of medium & high job expectation independent entrepreneurship (TEA-MH);

Type B: high prevalence of both types of entrepreneurial activity;

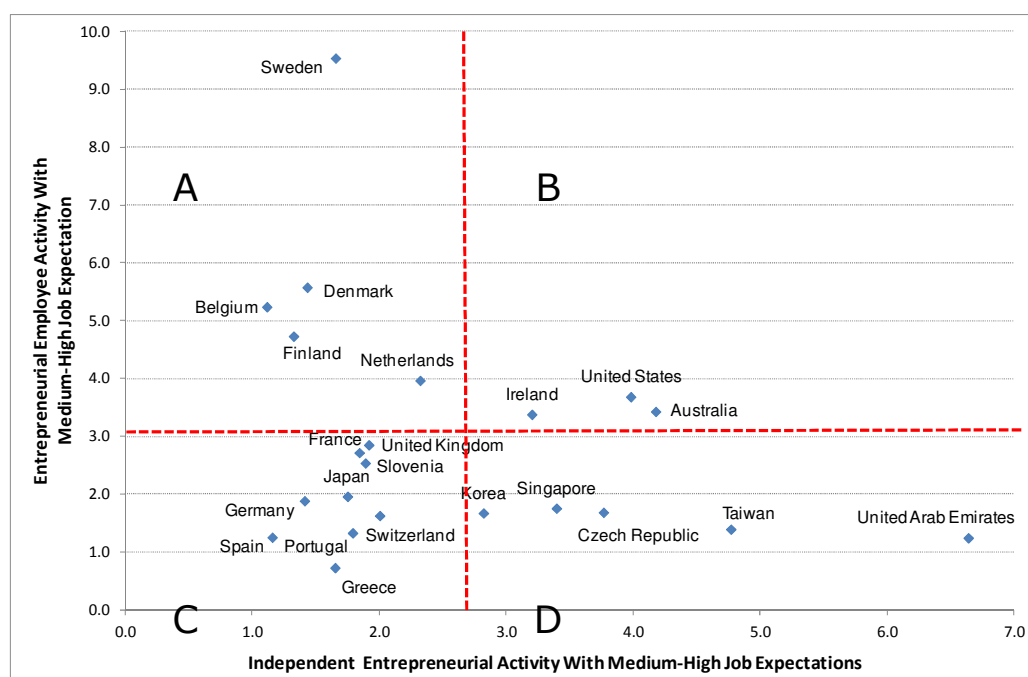
Type C: low prevalence of both types of entrepreneurial activity;

Type D: high prevalence of medium & high job expectation independent entrepreneurship (TEA-MH) and low prevalence of medium & high job expectation entrepreneurial employee activity (EEA-MH).

Countries at each of these two development levels were classified as having high versus low prevalence with respect to each dimension compared to the *average value*<sup>6</sup> for the countries at that same development level. For the innovation-driven economies the resulting patterns are presented in figure 8. As can be seen from the figure, group A (low TEA-MH – high EEA-MH) are five small open economies in North-West Europe including the Netherlands, Group B (high TEA-MH – high EEA-MH) consists of three Anglo-Saxon countries, group C (low TEA-MH – low EEA-MH) consists of eight other European countries plus Japan, while group D (high TEA-MH - low EEA-MH) includes four 'Asian tigers' plus the Czech Republic.

Given the high TEA-rate of the Netherlands as discussed in Chapter 3 of the present report, it may come as a surprise that the Netherlands are classified as belonging to group A (high EEA-MH and low TEA-MH) and not group B (high prevalence of both types of ambitious entrepreneurship). However, this reflects the fact that in the Netherlands solo & low job expectations and not medium & high job expectation independent entrepreneurship is relatively prominent (Bosma et al., 2012a: 36-37). In addition, it is also true that of all countries in group A the Netherlands is closest to group B, as its rate for TEA-MH is only slightly below the average of the innovation-driven economies.

Figure 8 Types of economies based on low versus high rates\* for two dimensions of ambitious entrepreneurial activity (TEA-MH and EEA-MH); innovation-driven economies



\* Note: below versus above the unweighted average for innovation-driven economies.

<sup>6</sup> Average values were chosen instead of median values because, in the case of a skewed distribution, use of the latter criterion would lead to classifying a number of countries as 'high' which are visually closer to the bulk of the countries classified as 'low'.

As is extensively discussed in Bosma et al. (2012b), these patterns of entrepreneurial activity may also be related to differences in entrepreneurial framework conditions. Apart from differences in the level of economic development, diversity in culture and institutions may also help explain the various patterns of entrepreneurial manifestations across economies. For example, a low degree of income inequality and a high level of social security for all citizens in general and for employees in particular, as found in group A compared to in particular group D, may go together with substitution of (ambitious) independent entrepreneurship by (ambitious) entrepreneurial employee behavior. Another plausible observation is the high level of self-expression values for group A and B where a related high autonomy for employees seems to correlate with a high prevalence of entrepreneurial employee activity. A similar correlation also holds for the relatively high rate of employers' support for employees who come up with new ideas, as found in GEM's adult population survey for groups A and B. Finally, the fact that the three Anglo-Saxon countries in group B have relatively traditional cultural values while the five small open economies in North-West Europe (group A) have a high level of secular-rational values, confirms the negative effect of the latter values on the rate of early-stage independent entrepreneurship reported by Reynolds (2010). For a more extensive discussion the reader is referred to Bosma et al. (2012b).

#### 5.4 Characteristics of entrepreneurial employees

##### *Demographic characteristics*

Table 31 presents the entrepreneurial employee activity prevalence rates, broken down into age, gender, education and household income (based on 52 countries), for all economies, for the innovation-driven economies and for the Netherlands. As for the age distribution, entrepreneurial employee activity follows an inverted U-shape pattern, with highest prevalence rates in the age groups between 25 and 54 years of age. This pattern is broadly similar to that of early-stage entrepreneurs as shown in Chapter 3. However, within the age range 25-54 years entrepreneurial employee activity generally peaks at higher ages than early-stage entrepreneurship. De Jong et al. (2011) reason that age proxies both motivation and perceived capability to engage in entrepreneurial employee activity. First, openness to new experiences and change decreases with age, implying a negative relationship between age and motivation for entrepreneurial employee activity. Second, perceived capability as indicated by experience in the workplace increases with age. Assuming that both factors have threshold values below which no amount of the other can compensate, employees in the middle age range are consequently most likely to engage in entrepreneurial employee activity. As for the Netherlands, the same pattern can be observed as for the innovation-driven economies as a whole. That is, the prevalence rate of entrepreneurial employee activity is greatest among the individuals aged 35-44 years.

Secondly, significant gender differences are observed, with male adults being almost twice as likely to be involved in entrepreneurial employee activity as female adults on average. The overall pattern is again broadly similar to that of early-stage entrepreneurs. An analysis of the gender gap differences in entrepreneurial employee activity at the level of individual countries is a subject for further research, but differences in female labor participation are likely to play a

role. For the Netherlands it also holds that male adults are almost twice as likely to be involved in entrepreneurial employee activity as female adults.

Thirdly, entrepreneurial employee activity seems to be an activity that is particularly suitable for higher educated employees. This finding is partly related to the human capital requirements of innovation activity. In addition, higher job levels offer more autonomy to employees and provide better opportunities to develop social networks, which are both conducive to entrepreneurial employee activity (De Jong et al., 2011). Finally, and in accordance with our findings on education, table 31 shows that entrepreneurial employee activity is most prevalent at higher income levels. A relatively high prevalence of entrepreneurial employee activity for higher educated and higher income employees appears to be particularly conspicuous in the Netherlands.

Table 31 Prevalence of entrepreneurial employee activity (narrow definition) across age, gender, education, and household income, 2011, percentage of adult population (18-64 years of age)

		<i>All economies</i>	<i>Innovation-driven economies</i>	<i>Netherlands</i>
<i>Age</i>	18-24 years	1.2	1.4	2.4
	25-34 years	3.7	4.9	6.4
	35-44 years	4.2	6.2	8.4
	45-54 years	3.4	5.4	6.2
	55-64 years	2.0	3.0	3.0
<i>Gender</i>	Male	4.0	5.7	7.3
	Female	2.2	3.1	3.9
<i>Education</i>	Low	0.5	0.8	1.2
	Medium	2.2	3.1	2.5
	High	6.1	8.1	14.2
<i>Income</i>	Low	0.9	1.3	1.7
	Medium	2.0	3.0	2.8
	High	5.7	8.2	10.1
	Unknown/Not reported	2.4	2.6	2.2

Source: EIM/GEM.

Note: based on simple averages across individuals in each phase of economic development.

### *Job types*

Table 32 shows the prevalence rates of entrepreneurial employees across job types in established organizations in the Netherlands. This information was derived from the optional special topic section, in which 32 countries participated. Among these countries were only five innovation-driven economies, and the average rates of such a small group have only limited suitability for benchmarking. Instead we added the data for Australia, in order to have some sort reference. As

can be seen in the table, in both countries employees in management jobs have a quite high prevalence of entrepreneurial employee activity. Other groups with a relatively high prevalence of entrepreneurial activity are professional employees in business and administration, information and communications, science and engineering, and teaching. In most other occupations entrepreneurial employee activity rates are quite low.

Table 32 Prevalence rates of entrepreneurial employee activity per job type in the Netherlands and Australia (optional item), 2011

	<i>Netherlands</i>	<i>Australia</i>
Managers	21.6%	22.2%
Professionals	12.4%	6.2%
Technicians and associate professionals	10.6%	9.7%
Clerical support workers	1.5%	0.0%
Service and sales workers	2.7%	4.3%
Skilled agricultural, forestry and fishery workers	0.0%	0.0%
Craft and related trades workers	1.3%	0.0%
Plant and machine operators, and assemblers	0.7%	1.5%
Elementary occupations	0.0%	0.0%

Source: EIM/GEM.

#### *Attitudes, perceptions, and intentions*

Entrepreneurial employees may be expected to share various behavioral traits with independent entrepreneurs, such as proactiveness and innovativeness (De Jong et al., 2011). GEM does not collect data on these behavioral traits, but the adult population survey does give information about entrepreneurial perceptions. In table 33 these perceptions are compared between entrepreneurial employees, other employees and independent entrepreneurs (self-employed), for the innovation-driven economies and for the Netherlands.

Entrepreneurial employees in the innovation-driven economies appear to have higher levels of entrepreneurial perceptions and lower fear of failure than other employees, while some of their perceptions are similar to or even more positive than those of the self-employed in the sample. However, entrepreneurial employees in the innovation-driven economies are less likely than the self-employed to feel they have the required skills and knowledge to start a business. Remarkably, they report similarly low fear of failure rates as the self-employed. This latter result is counter-intuitive as entrepreneurial employees obviously face lower financial risks than independent entrepreneurs, and often receive support from their employers when they come up with new ideas.

In the Netherlands, entrepreneurial employees generally also have more entrepreneurial perceptions and attitudes than other employees. However, entrepreneurial employees have only a slightly lower fear of failure than other employees (36% and 42% for the entrepreneurial employees and other employees, respectively), and their fear of failure is substantially higher than is the case for the self-employed in the Netherlands (18%). The entrepreneurial employees are also



less likely than the self-employed to feel they have the required skills and knowledge to start a business.

Table 33 Entrepreneurial perceptions of entrepreneurial employees (narrow definition), other employees, and self-employed individuals for the innovation-driven economies and for the Netherlands, 2011

	<i>% of entrepreneurial employees</i>		<i>% of other employees</i>		<i>% of self-employed</i>	
	<i>Innovation-driven economies</i>	<i>Netherlands</i>	<i>Innovation-driven economies</i>	<i>Netherlands</i>	<i>Innovation-driven economies</i>	<i>Netherlands</i>
'You personally know an entrepreneur who recently started a business'	50	52	29	32	45	59
'There are good opportunities for starting a business in the area where you live'	52	61	30	48	33	60
'You have the required skills and knowledge to start a business'	66	62	40	37	79	87
'Fear of failure would prevent you from starting a business'	35	36	47	42	34	18

Source: EIM/GEM.

These observations provide further confirmation that entrepreneurial employee activity may be considered as a special type of entrepreneurship. It is therefore not surprising that entrepreneurial employees are also far more likely than other employees to have intentions to start a new business in the next three years (see table 34). Although an unknown number of entrepreneurial employees deliberately opt for entrepreneurial employee activity instead of independent entrepreneurship in order to limit their risks or to receive material support from their employer for developing their idea, it also seems likely that entrepreneurial employee activity can be a stepping stone towards founding one's own business. Indeed, as shown in table 34, the incidence of nascent entrepreneurship is substantially higher for entrepreneurial employees as defined here than for other employees. In the efficiency-driven economies entrepreneurial employees are twice as likely as other employees to be actively involved in setting up a new business, while in innovation-driven economies this likelihood is even three times as high. In addition, entrepreneurial employees on average also have higher intentions to start a new business in the next three years. Taking nascent entrepreneurs and individuals with start-up intentions together (and assuming no double counts), it appears that in the innovation-driven economies 29% of the entrepreneurial employees find themselves somewhere near or on the threshold towards self-employment, as compared to 13% of other employees. The figures for the Netherlands (respectively 24% and 11%) are somewhat lower than the averages for the innovation-driven economies. This may reflect their more conservative assessments of their entrepreneurial skills, as presented in table 33.

Table 34 Nascent entrepreneurship and entrepreneurial intentions, percentage of entrepreneurial employees (narrow definition) and other employees, 2011

	<i>Nascent entrepreneurship</i>		<i>Entrepreneurial intentions (excl. nascent entrepreneurs)</i>	
	<i>% of entrepreneurial employ.</i>	<i>% of other employees</i>	<i>% of entrepreneurial employ.</i>	<i>% of other employees</i>
All economies	14	6	29	19
Efficiency-driven econ.	17	8	36	24
Innovation-driven econ.	10	3	19	10
Netherlands	5	3	19	8

Source: EIM/GEM.

## 5.5 Characteristics of entrepreneurial employee activity

### *Typology of entrepreneurial employee activities*

As discussed in the GEM 2011 Special Theme Study (Bosma et al., 2012b) entrepreneurial employee activities include three main activities: (i) the creation of new products/services; (ii) the expansion to new markets or new establishments (e.g., business units, brands, ventures); and (iii) process innovation to improve the core business and the main functions associated with it. Table 35 presents the distribution of entrepreneurial employee activity by these types of new business activities developed for the main employer. In the innovation-driven economies the creation of new products and the expansion to new markets and/or new establishments appear to be the most common types. Apart from a higher emphasis on process innovation, the results for the Netherlands are not very different from those for the innovation-driven economies.

Table 35 Distribution of entrepreneurial employee activity by type of new activity, 2011

	<i>Innovation-driven economies</i>	<i>Netherlands</i>
<i>EEA related to</i>		
New products	35	32
New markets and new establishments	29	25
Process innovation	23	33
Other	13	10

Source: EIM/GEM.

### *Risk taking*

First, table 36 shows that, on average across all economies, personal risk taking applies to 42% of all entrepreneurial employees. The corresponding figure is 32% of the entrepreneurial employees in the innovation-driven economies. The observations in the table thus suggest that entrepreneurial employee activity is a more risky activity in lower-income countries compared to the higher-income countries. As for the Netherlands, the degree of risk-taking by entrepreneurial employees (21%) is considerably lower than in comparable economies.

Table 36 Risk taking propensity of entrepreneurial employees (narrow definition) internationally compared (unweighted average), 2011

	<i>All economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>Netherlands</i>
Risk taking by entrepreneurial employees (% yes to 'Do you, or did you, personally take any risks in getting involved in this new activity?')	42	50	32	21
Type of risk taken (% of entrepreneurial employees who personally took risks)				
- Loss of status	40	36	46	64
- Damage to career	43	44	42	53
- Loss of job	33	36	27	17
- Loss of own money	42	46	35	27

Source: EIM/GEM.

To examine risk taking by entrepreneurial employees in more detail, GEM distinguished between four types of risk: loss of status, damage to career, loss of employment and loss of own money invested in the new activity. Damage to career is mentioned about equally in efficiency-driven and innovation-driven economies. Loss of status is mentioned more often in innovation-driven economies, whereas loss of job and loss of own money are mentioned more often in efficiency-driven economies. As for the latter finding, the table suggests that in efficiency-driven economies possibly almost 25% of the entrepreneurial employees invest, in some way, money of their own in the new activity<sup>7</sup>, whereas only about 10% of entrepreneurial employees in innovation-driven economies do so. As for the Netherlands, there is a clear difference regarding the type of risk that is taken. Dutch entrepreneurial employees are relatively more afraid for loss of status or damage to their career than are entrepreneurial employees in many other economies. However, the Dutch entrepreneurial employees are relatively confident about their own job security, and only 6% report a risk of losing invested money of their own.

*Relationship between entrepreneurial employee activities and employer organizations*

Table 37 deals with the relationship between the new activity and the incumbent organization in which the activity was initiated. First, the table shows that in a large majority of cases (70%) new business activities remain within the organization at which the entrepreneurial employee is employed. This holds most conspicuously for innovation-driven economies (80%). In the remaining cases a new legal entity has been or will be created. In the Netherlands, an even larger percentage (87%) remains within the incumbent organization.

<sup>7</sup> This percentage can be derived by multiplying the % 'loss of own money' with the % 'risk taking by entrepreneurial employees'.

Secondly, table 37 shows that the technology of a new activity developed by entrepreneurial employees is often (in almost 60% of cases) closely related to the core technologies of the employer. In almost one-third of the cases the technologies are partially related, and in 13% of cases the technologies are not related. These data are not very different in the Netherlands.

Table 37 Relationship between new activity and incumbent organization, 2011

	<i>All economies</i>	<i>Efficiency-driven economies</i>	<i>Innovation-driven economies</i>	<i>Netherlands</i>
Business activity remains within organization	68	61	80	87
Legal entity new activity:				
- New legal entity has been created	19	24	12	9
- New legal entity will be created	13	16	8	4
Relatedness technology of activity (to core technologies employer)				
- Closely related	59	57	59	55
- Partially related	29	32	26	35
- Not related	13	11	15	10

Source: EIM/GEM.

Finally, table 38 displays the level of support that entrepreneurial employees receive from their employer when they come up with ideas for new goods or services. All employees in the 32 countries that participated in the optional special topic section of the adult population survey were asked a question about this issue. The table presents the answers separately for entrepreneurial employees and other employees.

In 40% of the cases, entrepreneurial employees report that their employer is willing to provide some support, while more than 50% report a large extent of support. Less than 10% report no support at all. There are no significant differences between efficiency-driven and innovation-driven economies in this respect, and data for the Netherlands are not very different. This high level of employer support may be one of the reasons why only 42% of the entrepreneurial employees report that they personally took any risks in getting involved in the new activity, as indicated in an earlier table.

Secondly, as is also apparent from table 38, the experiences of the entrepreneurial employees differ quite substantially from the perceptions or experiences of other employees. As shown in the bottom half of the table, other employees (who are not entrepreneurial employees) report substantially lower levels of support from their employer than entrepreneurial employees. Given the size of the sample in relation to the employee population, (almost) none of the employees interviewed in the adult population survey have the same employer. Accordingly the answers to this question not only represent personal perceptions and experiences but may also reflect differences between employers. This suggests

once more that employer support for new ideas may be a determinant of entrepreneurial employee activity.

Table 38 Extent to which employer is willing to provide support when employees come up with ideas for new goods or services, 2011

	<i>All economies</i>	<i>Netherlands</i>	<i>Innovation-driven economies</i>
Employers of entrepreneurial employees			
- To large extent	54	57	53
- To some extent	38	38	40
- Not at all	8	4	7
Employers of other employees			
- To large extent	22	24	24
- To some extent	43	48	43
- Not at all	36	27	33

Source: EIM/GEM.

#### *Aspirations of entrepreneurial employee activities*

This section deals with the aspirations of entrepreneurial employee activities. First, table 39 shows that entrepreneurial employees, both in innovation-driven economies in general and in the Netherlands specifically, have substantially higher job expectations for their new business activity than nascent entrepreneurs and owner-managers of young businesses have for their new business. This observation also holds for the efficiency-driven economies which are not presented in the table.

High job expectations for the new business activities of entrepreneurial employees may be related to relatively high aspiration levels and/or competence levels of these employees, as suggested by their high levels of education and income, and/or to better access to resources for achieving growth, as suggested by the high levels of employer support reported in the previous subsection.

Table 39 Distribution of five-year job expectation of entrepreneurial employees, nascent entrepreneurs and owner-managers of young firms, 2011

	<i>No jobs/ employees</i>	<i>1-5 employees</i>	<i>6-19 employees</i>	<i>20 or more employees</i>
<i>Netherlands</i>				
Entrepreneurial employees	2	22	26	50
Nascent entrepreneurs	9	54	15	23
Owner-managers of young business	26	55	13	7
<i>Innovation-driven economies</i>				
Entrepreneurial employees	5	26	25	44
Nascent entrepreneurs	16	48	21	15
Owner-managers of young business	22	49	16	14

Source: EIM/GEM.

## 5.6 Summary

Entrepreneurial employees as defined in this report are not very numerous. On average, about 3% of the adult population in the 52 countries participating in the GEM special theme study currently (2011) had a leading role in the creation and development of new activities for their main employer. Entrepreneurial employee activity (EEA) is more prevalent in innovation-driven economies (4.6% of the adult population) than in efficiency-driven economies (1.8%), while in factor-driven economies it is extremely rare (0.3%). In the Netherlands EEA is relatively high (5.6% of the adult population and 7.9% of all employees)<sup>8</sup>, while total early-stage entrepreneurial activity (TEA) is 8.2%. The Dutch EEA-rate is also above the average value for the EU-countries well as the OECD-countries in the sample.

The pattern of entrepreneurial employee activity across the stages of economic development is thus the reverse of that for early-stage entrepreneurial activity which tends to decrease with economic development. Accordingly, in the factor-driven and efficiency-driven economies TEA is (much) higher than EEA. Only in the innovation-driven economies EEA is in the same order of magnitude as TEA. In some countries, such as Belgium, Denmark and Sweden, EEA is even higher than TEA.

Overall about two-thirds of entrepreneurial employee activity takes place in the private or for-profit sector, while one-third of entrepreneurial employees are to be found in organizations in the government and the not-for-profit sector. In the Netherlands public sector EEA has a share of about 40%. Apparently not-for-profit organizations and government agencies also develop new activities, just like private businesses. Entrepreneurial employees are active in all size classes of organizations, but they are more prevalent in medium-sized and large organi-

<sup>8</sup> These data are weighted by the actual distribution of the Dutch population in terms of age, gender, and education level.

zations than in small ones. For the Netherlands also, the prevalence rate of entrepreneurial employee activity increases with the size of the organization.

Larger numbers of employees were, in the past three years, somehow involved in entrepreneurial activity, irrespective of their role. In the sample for the Netherlands (3,500 adults), 550 employees out of a total of 2,058 employees (26.7%) were somehow involved in the development of new activities for their employer in the past three years, of whom 361 were also involved in the current year (17.5%)<sup>9</sup>.

As for the age distribution of entrepreneurial employee activity, highest prevalence rates are in the age groups between 25 and 54 years of age. The resulting inverted U-shape age pattern is broadly similar to that of early-stage entrepreneurs. This may reflect openness to change decreasing with age and perceived capability as indicated by experience in the workplace increasing with age. In addition, male employees are on average almost twice as likely to be involved in entrepreneurial employee activity as female employees. Finally, entrepreneurial employee activity has a relatively high prevalence among higher educated employees with high levels of income. These latter patterns are particularly prominent in the Netherlands. As for job characteristics, there is a higher prevalence of entrepreneurial employees among managers and professionals.

Across the innovation-driven economies, the entrepreneurial perceptions of entrepreneurial employees, nascent entrepreneurs and owner-managers are remarkably similar, and clearly differ from the perceptions of other employees. Generally, this also holds for the Netherlands, but here the entrepreneurial employees do not have a significantly lower fear of failure than other employees. The likeliness of entrepreneurial employees to feel they have the required skills and knowledge to start a business is in between that of the other employees and that of the self-employed. Maybe not surprisingly a relatively high percentage of entrepreneurial employees (compared with other employees) thus has the intention to create a new business in the next three years. They are also more often involved in nascent entrepreneurship, but this latter difference is less prominent in the Netherlands as compared to the innovation-driven economies in general.

The activities of entrepreneurial employees are distributed across the creation of new products/services, the implementation of process innovations, and the expansion to new markets or new establishments. In a large majority of cases the technology of a new activity developed by entrepreneurial employees is related to the core technologies of the employer, and the new business activities usually remain within the organization at which the entrepreneurial employee is employed.

Finally, entrepreneurial employees have substantially higher job (growth) expectations for their new activities than nascent entrepreneurs and owner-manager entrepreneurs have for their new businesses. This observation might be related to their higher levels of education and income, as well as to the support of their incumbent organizations.

<sup>9</sup> Unweighted percentages.





## References

- Audretsch, D. B. and M. Keilbach (2004), Entrepreneurship capital and economic performance, *Regional Studies* 38(8), 949-959.
- Audretsch, D.B., P. Houweling and A.R. Thurik (2004), Industry evolution: Diversity, selection and the role of learning, *International Small Business Journal* 22 (4), 331-348.
- Baptista R., V. Escária and P. Madruga (2008), Entrepreneurship, regional development and job creation: The case of Portugal, *Small Business Economics* 30, 49-58.
- Baughn, C.C., B.-L Chua and K.E. Neupert (2006), The normative context for women's participation in entrepreneurship: A multicountry study, *Entrepreneurship Theory and Practice* 30 (5), 687-708.
- Becker, G.S. (1964), *Human Capital*. Chicago: University of Chicago Press.
- Blanchflower, D.G., A. Oswald and A. Stutzer (2001), Latent entrepreneurship across nations, *European Economic Review* 45 (4-6), 680-691.
- Bleeker, D., Bruins, A., and R. Braaksma (2011), Monitor vrouwelijk en etnisch ondernemerschap 2010, Zoetermeer: EIM.
- Block, J.H. and M. Wagner (2010), Necessity and opportunity entrepreneurs in Germany: Characteristics and earnings differentials, *Schmalenbach Business Review* 62, 154-174.
- Boettke, P. and C. Coyne (2003), Entrepreneurship and development: Cause or consequence? *Advances in Austrian Economics* 6, 67-88.
- Bosma, N., E. Stam and S. Wennekers (2010), Intrapreneurship – an international study, Research Report H201005, Zoetermeer: EIM.
- Bosma, N., S. Wennekers and J.E. Amorós (2012a), Global Entrepreneurship Monitor 2011 extended report: Entrepreneurs and entrepreneurial employees across the globe, London: Global Entrepreneurship Research Association (GERA).
- Bosma, N., S. Wennekers, M. Guerrero, J.E. Amorós, A. Matiarena and S. Singer (2012b), Global Entrepreneurship Monitor: Special report on entrepreneurial employee activity, London: Global Entrepreneurship Research Association (GERA), forthcoming.
- Boyd, N.G. and G.S. Vozikis (1994), The influence of self-efficacy on the development of entrepreneurial intentions and actions, *Entrepreneurship Theory and Practice* 18, 63-90.
- Broda, C. and D.E. Weinstein (2006), Globalization and the gains from variety, *Quarterly Journal of Economics* 121 (2), 541-585.
- Burke, A.E (2009), Strategies for Entrepreneurial Success, *Journal of Strategic Management Education* 5(1), 33-44.
- Burke, A.E., A.J. van Stel and A.R. Thurik (2008), Blue Ocean versus Competitive Strategy: Theory and evidence, EIM Research Report H200801, Zoetermeer: EIM.
- Carree M.A. and A.R. Thurik (2010), The impact of entrepreneurship on economic growth. In Audretsch D.B. and Z.J. Acs (Eds), *Handbook of Entrepreneurship Research* (pp. 557-594). Berlin/Heidelberg: Springer Verlag.
- Carree, M.A. and A.R. Thurik (1996), Entry and exit in retailing: Incentives, barriers, displacement and replacement, *Review of Industrial Organization* 11(2), 155-172.

- Chen, C.C., P.C. Greene and A. Crick (1998), Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing* 13(4), 295-316.
- Davidsson, P. (2006), Nascent entrepreneurship: Empirical studies and developments, *Foundations and Trends in Entrepreneurship* 2(1), 1-76.
- De Bruin, A., C.G. Brush and F. Welter (2006). Introduction to the special issue: Towards cumulative knowledge on women's entrepreneurship, *Entrepreneurship Theory and Practice* 30 (5), 585-593.
- De Jong, J. and S. Wennekers (2008), Intrapreneurship: conceptualizing entrepreneurial employee behaviour, Research Report H200802, Zoetermeer: EIM.
- De Jong, J., S.K. Parker, S. Wennekers and C. Wu (2011), Corporate entrepreneurship at the individual level: Measurement and determinants, Research Report H201108, Zoetermeer: EIM.
- European Commission (2009), European Competitiveness Report 2009, Brussels: DG Enterprise and Industry.
- Evans, D.S. and L. Leighton (1989), Some empirical aspects of entrepreneurship, *American Economic Review* 79(3), 519-535.
- Fok, D., A. Burke, A. van Stel and A.R. Thurik (2009), The dynamics of entry and exit, EIM Research Report H200907, Zoetermeer: EIM.
- Grilo, I. and J.-M. Irigoyen (2006). Entrepreneurship in the EU: To wish and not to be, *Small Business Economics* 26 (4), 305-318.
- Henrekson, M. (2005), Entrepreneurship: A weak link in the welfare state? *Industrial and Corporate Change* 14(3), 437-467.
- Henrekson, M. and D. Johansson (2010), Gazelles as job creators: A survey and interpretation of the evidence, *Small Business Economics* 35 (2), 227-244.
- Hessels, J., A. van Stel, P. Brouwer and S. Wennekers (2007). Social security arrangements and early-stage entrepreneurial activity, *Comparative Labor Law and Policy Journal* 28 (4), 743-774.
- Hessels, J., C. Hartog and S. Wennekers (2009), Global Entrepreneurship Monitor 2008 The Netherlands: The hidden entrepreneurial forces of the Dutch economy, Zoetermeer: EIM.
- Hessels, J., I. Grilo, A.R. Thurik and P. van der Zwan (2011), Entrepreneurial exit and entrepreneurial engagement, *Journal of Evolutionary Economics* 21(3), 447-471.
- Hyytinen, A. and P. Ilmakunnas (2007), What distinguishes a serial entrepreneur? *Industrial and Corporate Change*, 16 (5), 793-821.
- Kelley, D.J., S. Singer and M. Herrington (2012), Global Entrepreneurship Monitor: Global Report 2011.
- Kim, W. and R. Mauborgne (2005), *Blue Ocean strategy: How to create uncontested market space and make the competition irrelevant*. Boston MA: Harvard Business School Press.
- Kirzner, I.M. (1973), *Competition and entrepreneurship*. Chicago: Chicago University Press.
- Kitson, M., R. Martin and P. Tyler (2004), Regional competitiveness: An elusive yet key concept? *Regional Studies* 38 (9), 991-999.
- Krueger, N.F., M.D. Reilly and A.L. Carsrud (2000), Competing models of entrepreneurial intentions, *Journal of Business Venturing* 15 (5-6), 411-432.
- Langowitz, N. and M. Minniti (2007), The entrepreneurial propensity of women, *Entrepreneurship Theory and Practice* 31 (3), 341-364.
- Lévesque, M. and M. Minniti (2006), The effect of aging on entrepreneurial behaviour, *Journal of Business Venturing*, 21 (2), 177-194.

- Parker, S.C. and C.M. van Praag (2010), Group status and entrepreneurship, *Journal of Economics & Management Strategy* 19 (4), 919-945.
- Pinchot, G. (1985), *Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur*. New York: Harper and Row.
- Politis D. (2005), The process of entrepreneurial learning: A conceptual framework, *Entrepreneurship Theory and Practice* 29 (4), 399-424.
- Porter, M.E. (1980), *Competitive Strategy*. New York: Free Press.
- Porter, M.E. (1985), *Competitive Advantage*. New York: Free Press.
- Reynolds, P.D. (2010), New firm creation: A global assessment of national, contextual, and individual factors, *Foundations and Trends in Entrepreneurship*, 6 (5-6), 315-496.
- Rotefoss, B. and L. Kolvareid (2005), Aspiring, nascent and fledgling entrepreneurs: An investigation of the business start-up process, *Entrepreneurship & Regional Development* 17, 109-127.
- Schäfer, D. and O. Talavera (2009), Small business survival and inheritance: Evidence from Germany, *Small Business Economics* 32 (1), 95-109.
- Schultz, T.W. (1975), The value of the ability to deal with disequilibria, *Journal of Economic Literature* 13(3), 827-846.
- Schumpeter, J. (1934), *The theory of economic development*. Cambridge, Mass: Harvard University Press.
- Schwab, K. (2011). The Global Competitiveness Report 2011-2012, World Economic Forum: Geneva, Switzerland.
- Shane, S. (2009), Why encouraging more people to become entrepreneurs is bad public policy, *Small Business Economics* 33, 141-149.
- Shane, S. (2003), *A general theory of entrepreneurship: The individual-opportunity nexus*. Cheltenham, UK: Edward Elgar.
- Shane, S. and S. Venkataraman (2000), The promise of entrepreneurship as a field of research, *Academy of Management Review* 25, 217-226.
- Sharma, P. and J.J. Chrisman (1999), Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship, *Entrepreneurship Theory and Practice* 23 (3), 11-27.
- Shepherd, D.A. (2003), Learning from business failure: Propositions about the grief recovery process for the self-employed, *Academy of Management Review* 28 (2), 318-329.
- Shrader, R.C., B.M. Oviatt and P.P. McDougall (2000), How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century, *Academy of Management Journal* 43 (6), 1227-1247.
- Stam, E., A.R. Thurik and P. van der Zwan (2010), Entrepreneurial exit in real and imagined markets, *Industrial and Corporate Change* 19 (4), 1109-1139.
- The Economist (2012), Pretty profitable parrots. For businesses, being good at copying is at least as important as being innovative, May 12th 2012, from the print edition.
- Van der Zwan, P., I. Verheul and A.R. Thurik (2012), The entrepreneurial ladder, gender, and regional development, *Small Business Economics* 39(3), 627-643.
- Van Praag, C.M. (2003), Business survival and success of young small business owners, *Small Business Economics* 21 (1), 1-17.
- Van Praag, M. (2009), Who values the status of the entrepreneur? Tinbergen Institute Discussion Paper TI 2009-056/3.
- Verheul, I. and A.J. van Stel (2010), Entrepreneurial diversity and economic growth. In Bonnet, J., D. Garcia and H. van Auken (Eds), *The entrepreneurial*

*society; How to fill the gap between knowledge and innovation* (pp. 17-36).  
Edward Elgar.

Vivarelli, M. (2004), Are all the potential entrepreneurs so good? *Small Business Economics* 23, 41-49.

Westhead, P., D. Ucbasaran, M. Wright and M. Binks (2005), Novice, serial, and portfolio entrepreneur behaviour and contributions. *Small Business Economics* 25 (2), 109-132.

Zhao, H., S.E. Seibert and G.E. Hills (2005), The mediating role of self-efficacy in the development of entrepreneurial intentions, *Journal of Applied Psychology* 90 (6), 1265-1272.

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