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Global Entrepreneurship Monitor The Netherlands 2012

National Report

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GEM

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Summary

The Global Entrepreneurship Monitor (GEM) is a research program with the aim to obtain internationally comparative data on entrepreneurial activity. By consistently using proven indicators, global and longitudinal comparisons of entrepreneurial activity can be provided. This summary gives an overview of the main GEM indicators for the Netherlands in 2012 and makes a comparison with previous year and with internationally comparable countries; see Table 1. For those who are familiar with GEM's methodology and previous national reports, Table 1 makes the main differences clear at a glance. For the readers new to GEM, the overview provides a reference to the parts of this national report where more information can be found.

The main findings with respect to entrepreneurial perceptions, attitudes towards entrepreneurship, and intentions to start a business are threefold. First, a reduction in the perceptions of good opportunities for setting up a business among the Dutch adult population can be observed. Whereas this may be related to the current economic crisis, we note that this reduction is more pronounced as compared to similar economies worldwide. Second, the Dutch adults remain very positive about entrepreneurship being a desirable career choice. Third, the intentions to start a business in the next three years have increased since 2011 (and almost doubled since 2008), but still lag behind internationally.

In addition to perceptions and attitudes towards entrepreneurship, Dutch developments regarding actual entrepreneurial activity are considered. First, we observe another increase in the prevalence of early-stage entrepreneurs, i.e. adults between 18 and 64 years of age who are actively trying to start a new business or own and manage a business younger than 3.5 years (TEA rate). This rise in entrepreneurial activity is caused mainly by an increase of owner-managers of new firms. The Dutch rates of new entrepreneurship and TEA have virtually doubled since 2008. Chapter 3 focuses on how the TEA rate differs for various subgroups of individuals depending on their gender, age, education, immigrant status, and start-up motivation. Chapter 3 also zooms in on the degree to which established entrepreneurs work together with other entrepreneurs or organizations in their daily practices.

Furthermore, we observe a small increase in the Dutch rate of established business ownership (businesses in existence for more than 3.5 years). The image of favourable institutional conditions for entrepreneurial activity is confirmed by the views of national experts in the context of the National Expert Survey of which the results are discussed in Chapter 3 as well. However, in terms of entrepreneurial aspirations, Dutch early-stage entrepreneurs are still more pessimistic about expected job growth compared to entrepreneurs in similar economies worldwide.

Two topics receive special attention in this national report. First, Chapter 4 zooms in on job growth expectations by exploring whether growth patterns are more associated with specific types of businesses. Job growth ambitions are the highest for employer firms whereas solo self-employed individuals ("*zzp'ers*") reveal relatively low growth ambitions. Furthermore, male business owners, and younger and higher educated business owners expect to grow faster.

Second, Chapter 5 devotes attention to job satisfaction. One of the findings is that Dutch self-employed workers are more satisfied with their work than employees. In

addition, the self-employed are more positive about work-related conditions including perceived independence in conducting one's work, perceived meaningfulness of one's work, and perceived absence of excessive stress. Furthermore, employees who are not satisfied with their work have higher intentions to set up their own business in the next 3 years than satisfied employees.

Table 1 Selection of main GEM indicators for the Netherlands: Comparison between 2011 and between similar economies. Reader guide included.

Indicator/topic	*Section*	***2012***	*2011*	*Internat.*
Perceptions of entrepreneurship:				
Perceived start-up opportunities	2.1	**34%**	48%	31%
Perceived entrepreneurial capabilities	2.1	**42%**	42%	36%
Fear of business failure	2.1	**39%**	37%	44%
Attitudes towards entrepreneurship:				
Entrepreneurship as desirable career choice	2.2	**79%**	83%	55%
Entrepreneurship is given high status	2.2	**65%**	67%	70%
Media attention for entrepreneurship	2.2	**58%**	62%	56%
Entrepreneurial activity:				
Intentions to start a business	2.3	**10.1%**	9.8%	12.7%
Total early-stage entrepreneurial activity	3.1	**10.3%**	8.2%	7.1%
Established entrepreneurial activity	3.3	**9.5%**	8.7%	6.7%
Aspirations:				
Product innovation (new to all or some customers)	3.2	**42%**	52%	48%
Job growth expectations (medium or high)	3.2	**25%**	34%	37%
Perceived competitiveness (no or few competitors)	3.2	**46%**	51%	48%
Entrepreneurial exit:				
Exit with business closure	3.5	**1.5%**	1.4%	1.7%
Exit without business closure	3.5	**0.7%**	0.5%	1.0%
Other topics:				
Business relations	3.4			
National Expert Survey	3.6			
Job growth expectations	4.1-4.6			
Job satisfaction	5.1-5.5			

The numbers in the final three columns represent percentages of the total adult population. For example, 34% of the Dutch adults (18-64 years of age) perceive good opportunities to start a business in 2012, whereas this was 48% in 2011. The unweighted average of all innovation-driven economies (Section 1.2) is 31% for this entrepreneurial perception in 2012.

The numbers corresponding to the aspirations of business owners are represented in percentages of the adult population that is involved in total early-stage entrepreneurial activity. For example, 25% of the Dutch early-stage entrepreneurs have medium-growth or high-growth aspirations in 2012 (34% in 2011).

This table provides point estimates of the population statistics only. Source: GEM 2012.

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 69 economies in 2012. 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 2012, the Netherlands participated in GEM for the twelfth time since it joined the GEM project in 2001.

Objectives

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 studies 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 three stages of a country's level of economic development (Section 1.2) and different phases of entrepreneurship (Section 1.3).

1.2 Stage of economic development

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:

- *Factor-driven economies*. Economic activity in these economies is primarily based on the extraction of natural resources;
- *Efficiency-driven economies*. In these economies, industrialization and increasing scale-intensity are the major drivers of economic development;
- *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. 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. An important criterion that is used to classify countries into these three categories is the level of per capita income, see Table 2.

Throughout the years, the number of factor-driven economies participating in GEM has increased considerably. In 2012, there are 14 factor-driven economies, 31 efficiency-driven economies, and 24 innovation-driven economies.

Table 2 Income thresholds for establishing the stages of economic development

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

Source: The Global Competitiveness Report (GCR) 2011-2012 (Sala-i-Martin et al., 2011).

1.3 The entrepreneurship process

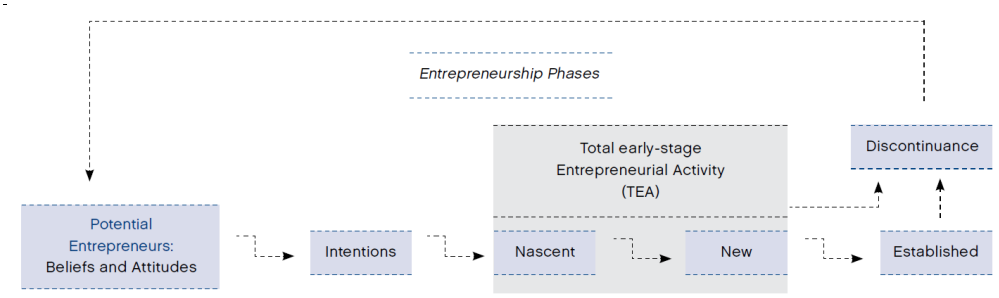
GEM acknowledges that entrepreneurial activity is best seen as a process rather than a single time event. Therefore, data are collected across several phases of entrepreneurship. Such a dynamic view provides valuable information to policy makers because individuals may respond differently to policy interventions depending on the specific position in the entrepreneurship 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 entrepreneurship process as depicted in Figure 1 which is taken from the GEM's 2012 Global Report (Xavier, Kelley, Kew, Herrington, and Vorderwülbecke, 2013).

Hence, the following phases of entrepreneurship can be distinguished:

- *Potential entrepreneurs*: 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. Section 2.1 of this report focuses on potential entrepreneurship.
- *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. Information about the prevalence of entrepreneurial intent in the Netherlands is provided in Section 2.3 of this report.

- *Total early-stage entrepreneurial activity*: GEM's primary measure of entrepreneurship is total early-stage entrepreneurial activity (TEA). TEA consists of nascent entrepreneurs and new entrepreneurs. 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 may also be included in this group.
  A significant part of Chapter 3 of this report is devoted to early-stage entrepreneurship.
- *Established entrepreneurship*: The cycle continues with established business owners, who have been owner-managers of a business for at least 42 months (including self-employed individuals). Again, more information about the occurrence of established entrepreneurs follows in Chapter 3.

Figure 1 The entrepreneurship process



Source: GEM (Xavier et al., 2013).

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

- *Discontinuance*: Any entrepreneur may decide to quit his/her business endeavour at some moment of time. This discontinuance of entrepreneurial activities may reflect a voluntary exit such as an opportunity to sell the business. On the other hand, it may also reflect an involuntary choice or less successful terminations, such as difficulties of getting external finance or a lack of profitability of the business. Entrepreneurial discontinuance is given more attention at the end of Chapter 3.
- *Re-engagement*: The dashed arrow connecting discontinuance and the pool of potential entrepreneurs refers to individuals who quit one of their business activities, and afterwards decide to re-engage in the entrepreneurship process. This category of entrepreneurs (referred to as serial entrepreneurs) together with established entrepreneurs is of importance because it embodies key resources for other entrepreneurs in terms of providing financing, advice, mentorship, or other types of support. Note that Figure 1 does not show any dashed arrows between the discontinuation phase and phases of the entrepreneurship process other than potential entrepreneurship. In reality, however, an established entrepreneur may quit his/her entrepreneurial activities after which (s)he decides to set up another business, i.e. (s)he becomes a nascent entrepreneur. In addition, dashed arrows between the discontinuation phase and entrepreneurial intent and TEA may be added to Figure 1.

1.4 Adult Population Survey (APS) and National Expert Survey (NES)

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, entrepreneurial attitudes, and entrepreneurial aspirations within an economy. These indicators can then be compared between economies. The APS data collection covers the complete life cycle of the entrepreneurship process as depicted in Figure 1. In addition, the APS distinguishes between several types of entrepreneurs such as individuals who start a business because they pursue a lucrative business opportunity, and individuals who start a business because of a lack of employment alternatives (see Chapter 3). Furthermore, it is possible to distinguish between several types of entrepreneurs depending on the number of business owners and the number of employees, i.e. the discrimination between solo self-employed individuals versus team entrepreneurs or businesses with personnel. Chapter 4 focuses on these types of business owners and compares their growth expectations. Note that the APS sample does not only provide information about the current (potential) entrepreneurs, but that the sample is representative of the entire underlying adult population. This enables interesting analyses that compare specific characteristics of entrepreneurs with characteristics of paid employees or individuals who are not active on the labour market. An example of such an analysis refers to the differences in job satisfaction levels between self-employed individuals and employees (see Chapter 5).

The APS data are collected by standardized telephone surveys in each participating economy (or by means of face-to-face interviews in some economies). Each economy's sample must consist of at least 2,000 respondents of 18 years and older. In total, almost 200,000 interviews were conducted by GEM across 69 economies in 2012. The Dutch sample consists of 3,501 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 gender, age and education to make the sample representative along these dimensions for the Dutch adult population between 18 and 64 years of age.

NES

For the National Expert Survey (NES) at least 36 experts in each participating country are asked their opinions about nine topics which are believed to have an impact on a nation's entrepreneurial activity. In this way, the start-up environments in the participating countries can be compared on basis of these nine so-called "entrepreneurial framework conditions" (EFCs). Four experts – entrepreneurs or professionals – in each nation's NES sample should be active in each EFC category. The nine categories are financing, governmental policies, governmental programs, education and training, R&D transfer, commercial infrastructure, internal market openness, physical infrastructure, and cultural and social norms.

The present report focuses mainly on the findings from the Adult Population Survey. The results of the Dutch NES are discussed in Section 3.6.

Participating countries in 2012

Table 3 contains an overview of the participating economies. Among these economies, there are 28 Member Countries of the Organisation for Economic Co-operation and Development (OECD) and 22 Member States of the European Union (EU). A classification across the three stages of economic development is provided: *factor-*

driven economies, *efficiency-driven economies*, and *innovation-driven economies* (Table 2). In addition, the APS sample size for each participating economy is presented. Whereas the total number of participating economies equals 69, Table 3 shows the sample sizes for 67 countries only. At the time of writing this national report the APS results of India and Jamaica were not yet made available and are, therefore, not included in this report's calculations.

Table 3 Participating economies in GEM 2012

Economies	*Member OECD*	*Member EU*	*Sample size APS*
Factor-driven economies (13)			
Algeria*	no	no	4,995
Angola*	no	no	2,636
Botswana*	no	no	2,374
Egypt*	no	no	2,501
Ethiopia	no	no	3,005
Ghana	no	no	2,222
Iran*	no	no	3,178
Malawi	no	no	2,006
Nigeria	no	no	2,651
Pakistan	no	no	2,000
Palestine	no	no	2,000
Uganda	no	no	2,343
Zambia	no	no	2,157
Efficiency-driven economies (30)			
Argentina*	no	no	2,018
Barbados*	no	no	2,055
Bosnia and Herzegovina	no	no	2,001
Brazil*	no	no	10,000
Chile*	yes	no	2,420
China	no	no	3,684
Colombia	no	no	6,471
Costa Rica	no	no	2,041
Croatia*	no	no	2,000
Ecuador	no	no	2,004
El Salvador	no	no	2,180
Estonia*	yes	yes	2,004
Hungary*	yes	yes	2,000
Latvia*	no	yes	2,000
Lithuania*	no	yes	2,003
Macedonia	no	no	2,003
Malaysia*	no	no	2,006
Mexico*	yes	no	2,516
Namibia	no	no	1,959
Panama	no	no	2,000
Peru	no	no	2,071
Poland*	yes	yes	2,003
Romania	no	yes	2,004

Russia*	no	no	3,541
South Africa	no	no	2,928
Thailand	no	no	3,000
Trinidad & Tobago*	no	no	2,029
Tunisia	no	no	2,000
Turkey*	yes	no	2,401
Uruguay*	no	no	2,016
Innovation-driven economies (24)			
Austria	yes	yes	4,583
Belgium	yes	yes	2,010
Denmark	yes	yes	2,217
Finland	yes	yes	2,038
France	yes	yes	4,003
Germany	yes	yes	4,300
Greece	yes	yes	2,000
Ireland	yes	yes	2,000
Israel	yes	no	2,007
Italy	yes	yes	2,000
Japan	yes	no	2,010
Republic of Korea	yes	no	2,000
Netherlands	yes	yes	3,501
Norway	yes	no	2,000
Portugal	yes	yes	2,001
Singapore	no	no	2,001
Slovakia	yes	yes	2,000
Slovenia	yes	yes	2,010
Spain	yes	yes	21,900
Sweden	yes	yes	2,500
Switzerland	yes	no	2,003
Taiwan	no	no	2,009
United Kingdom	yes	yes	2,000
United States	yes	no	5,542

** Economy in transition to the next stage of economic development. Source of sample sizes: Xavier et al. (2013).*

1.5 Outline of the Dutch GEM report 2012

This Dutch GEM report is structured as follows. Chapter 2 focuses on entrepreneurial attitudes and perceptions of the Dutch adult population, and compares the 2012 situation with earlier years. In addition, Chapter 2 reports on the evolvement of entrepreneurial intentions over time. Chapter 3 describes the latest Dutch developments regarding entrepreneurial activity, and focuses on early-stage and established entrepreneurs. Furthermore, attention is devoted to the discontinuation of entrepreneurial activities. The results from the Dutch NES survey are also discussed in this chapter. Chapter 4 reports on the job growth expectations of several types of business owners such as solo self-employed individuals ("*zzp'ers*") and team entrepreneurs, whereas Chapter 5 zooms in on job satisfaction differences between self-employed individuals and individuals in paid employment. Table 1 provides a more detailed reader guide and reveals where information about specific indicators or topics can be found in each chapter.

2 Entrepreneurial perceptions, attitudes, and intentions

The present chapter focuses on entrepreneurial *perceptions, attitudes*, and *intentions* among the Dutch adult population in 2012. A longitudinal view of these measures is provided by comparing the Dutch numbers of 2012 with those of previous years. In addition, the Dutch results are compared from an international point of view. For this purpose, the averages of the 24 innovation-driven economies serve as the benchmark.

First, entrepreneurial *perceptions* indicate whether individuals perceive entrepreneurial opportunities in their environment, how they perceive their own entrepreneurial ability, and what their perception is towards business failure. Second, entrepreneurial *attitudes* refer to the general image of entrepreneurship in the Netherlands, and reveal the extent to which entrepreneurship is considered a favourable occupational choice. Third, entrepreneurial *intentions* provide a concrete dynamic measure of entrepreneurial activity in a country. Specifically, GEM asks individuals about their intentions to start a business within the next three years.

2.1 Entrepreneurial perceptions and potential entrepreneurship

The decision to become an entrepreneur, or the progress of an individual through the several phases of the entrepreneurship process (Figure 1), depends on a wide range of characteristics of the potential entrepreneur. One category of relevant determining factors refers to an individual's perception about entrepreneurship. Indeed, perception variables appear to be relevant in explaining the propensity of being a nascent or an established entrepreneur (Arenius and Minniti, 2005; Zhao and Seibert, 2006; Koellinger, Minniti, and Schade, 2007; Rauch and Frese, 2007).

The objective state of the environment in terms of its favourability towards pursuing entrepreneurial endeavours is important. An individual's subjective perception about this environment, however, may be even more relevant. The first entrepreneurial perception under study refers to the extent to which individuals see good opportunities for starting a new business in the area they live in. In addition to this perception about entrepreneurial opportunities in the environment, an individual's belief about one's own capabilities of starting a business is also available. Indeed, studies report that so-called entrepreneurial self-efficacy is a predictor of entrepreneurial entry. However, fear of failure may prevent individuals who perceive opportunities or believe they have the skills necessary for entrepreneurship to actually start a business. Hence, the third entrepreneurial perception deals with an individual's fear of business failure.

Individuals are considered to be *potential entrepreneurs* when they see enough opportunities in their living area for setting up a business, when they have the belief they have the capabilities to start a business, and when they are not afraid of business failure.

Developments in the Netherlands over time

Table 4 shows the three dimensions of potential entrepreneurship and their developments over time from 2001 onwards. Clearly, there is a sharp contrast with 2011 regarding 'perceived opportunities'. That is, whereas in 2011 48% of the Dutch

adults of 18-64 years old perceived good start-up opportunities in their living area, this percentage has reduced by almost one third to 34% in 2012.

Interestingly, individuals' perceptions of their own capabilities seem to be relatively independent of the economic situation. That is, the same percentage of the Dutch adults is convinced of their entrepreneurial knowledge, skill and experience as compared to 2011.

After a significant increase of fear of failure from 2010 to 2011, we observe a slight increase from 37% in 2011 to 39% in 2012. However, fear of failure for those seeing good start-up opportunities (not provided in Table 4) reduced from 35% in 2011 to 30% in 2012. This suggests that fewer individuals who perceive good start-up opportunities will be reluctant to start a business due to their fear of business failure.

Table 4 Entrepreneurial perceptions in the Netherlands, 2001-2012, percentage of adult population (18-64 years of age) that agrees with the statement

Item	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Perceived opportunities: "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	34
Perceived capabilities: "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	42
Fear of failure: "Would fear of failure prevent you from starting a business?"	25	24	28	32	29	29	21	26	27	26	37	39

Source: GEM APS 2012.

An international comparison

Table 5 reveals that the prevalence rates of perceived opportunities and perceived capabilities in the Netherlands are relatively on par with the rates in countries with comparable levels of economic development. However, we should note that the drop in perceived opportunities in the Netherlands is much more pronounced than the average reduction for this perception in the innovation-driven economies as a whole (from 35% in 2011 to 31% in 2012; numbers not provided in Table 5).

The average fear of business failure in the Netherlands during the past few years has been relatively low as compared to the averages of the innovation-driven, OECD, and EU economies. For example, in 2012, there is only one Member State (Slovenia) of the European Union that has a lower average fear of failure among those seeing good start-up opportunities than the Netherlands.

Table 5 Entrepreneurial perceptions internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age) that agrees with the statement

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
Perceived opportunities	63	41	31	33	31	34
Perceived capabilities	71	52	36	42	42	42
Fear of failure	28	37	44	44	47	39

Source: Panteia/GEM APS 2012.

Perceptions of different subgroups

The numbers in Table 5 may be misleading to some extent. That is, information about the entrepreneurial perceptions may be relevant especially for the individuals who are not engaged in entrepreneurship. Countries with many potential entrepreneurs among the 'non-entrepreneurs' are expected to show more entrepreneurial activity in the future as compared to countries with few potential entrepreneurs. For this purpose, Table 6 shows the entrepreneurial perceptions for the entire sample (see also last columns in Table 4 and Table 5), for the 'non-entrepreneurs', and for the entrepreneurs. This latter group of individuals consists of individuals with intentions to start a business, nascent entrepreneurs, and new and established entrepreneurs.

Table 6 reveals that there are considerable differences in terms of the entrepreneurial perceptions between the entrepreneurs and the non-entrepreneurs. For example, the perceptions of perceived opportunities among the entrepreneurs are almost twice as high as among the non-entrepreneurs. Regarding perceived capabilities, the differences are even more substantial. That is, whereas 82% of the Dutch entrepreneurs of 18-64 years old find themselves capable of running a business, hardly 30% of the non-entrepreneurs are convinced of their own entrepreneurial capabilities.

Table 6 Entrepreneurial perceptions of (non-)entrepreneurs in the Netherlands, 2012, percentage of adult population (18-64 years of age) that agrees with the statement

	Adult population	*Non-entrepreneurs*	*Entrepreneurs*
Perceived opportunities	34	27	53
Perceived capabilities	42	28	82
Fear of failure	39	44	26

Source: Panteia/GEM APS 2012.

2.2 Entrepreneurial attitudes

How do citizens perceive the occupational status of being an entrepreneur? Measuring such attitudes towards entrepreneurship is important, because entrepreneurial attitudes contain information about the image of entrepreneurs(hip). A more favourable image of entrepreneurs and entrepreneurship may indicate 'legitimation' or 'moral approval' of entrepreneurship within a culture which may influence the decision to engage in entrepreneurship (Etzioni, 1987; Freytag and Thurik, 2007).

GEM distinguishes between three entrepreneurial attitudes: individuals' opinions about entrepreneurship being a desirable career option, individuals' opinions about the level

of respect and status that entrepreneurs have, and respondents' assessments of the media attention of successful entrepreneurs.

Developments in the Netherlands over time

Table 7 shows that deviations in the three measures of entrepreneurial attitudes over time are minimal. However, each entrepreneurial attitude experienced a small decrease in 2012 as compared to 2011. Dutch adults are very positive about the general opinion whether starting an entrepreneurial career is an attractive career option. For years, around 80% of the Dutch adult population believes that starting a business is considered a desirable career choice. The Dutch citizens are slightly more reserved about the level of respect and status that entrepreneurs receive in the Netherlands. In 2012, 65% of the Dutch adults (18-64 years old) think that entrepreneurs have a high level of status and respect. Finally, 58% of the adult population believes that stories about successful entrepreneurs occur frequently in the public media.

Table 7 Entrepreneurial attitudes in the Netherlands, 2003-2012, percentage of adult population (18-64 years of age) that agrees with the statement

Item	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Entrepreneurship as desirable career choice: "In the Netherlands, most people consider starting a new business a desirable career choice"	77	81	79	80	85	85	84	85	83	79
Entrepreneurship is given high status: "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	65
Media attention for entrepreneurship: "In the Netherlands, you will often see stories in the public media about successful businesses"	63	59	58	59	61	61	64	61	62	58

Source: GEM APS.

An international comparison

Table 8 reveals how the entrepreneurial attitudes of the Dutch adults compare with those of other countries. One could conclude from Table 8 that entrepreneurship is considered an acceptable career option in the Netherlands given the large differences between the Netherlands and, for example, the innovation-driven economies. The Dutch averages for the other two entrepreneurial attitudes are much more in line with the unweighted averages of the innovation-driven economies.

Table 8 Entrepreneurial attitudes internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age) that agrees with the statement

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
Entrepreneurship as desirable career choice	76	70	55	56	58	79
Entrepreneurship is given high status	80	69	70	70	69	65
Media attention for entrepreneurship	68	60	56	52	50	58

Source: GEM APS 2012.

2.3 Entrepreneurial intentions

How many people intend to start a business within the next three years? This relevant question is answered in this section of Chapter 2. Entrepreneurial intentions are important to investigate because they provide valuable information about the dynamics of entrepreneurial activity within a country. That is, intention is an accurate predictor of entry into entrepreneurship (Krueger et al., 2000; Davidsson, 2006).

Developments in the Netherlands over time

Table 9 shows the development of entrepreneurial intentions among Dutch adults since they were first measured in the GEM APS in 2002. For the first time in GEM history, more than 10% of the Dutch adults intend to start a business within the next three years. There have been considerable increases in entrepreneurial intentions during the past years. Since 2008, the fraction of Dutch adults intending to start a business has almost doubled.

Table 9 Entrepreneurial intentions in the Netherlands, 2002-2012, percentage of adult population (18-64 years of age)

Item	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Entrepreneurial intent: "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	10.1

Source: GEM APS.

An international comparison

Entrepreneurial intentions have not changed substantially in countries with similar levels of economic development as the Netherlands. Table 10 shows that the Dutch intentions still lag behind those of the innovation-driven average, the OECD average, and the EU average. However, the differences have not become larger over the past year.

Entrepreneurial intent is traditionally high in factor-driven and efficiency-driven economies. In the factor-driven economies, almost one out of every two persons intends to start a business within the next three years. This average is much higher

than the figure that was found in 2011, but this difference can be explained by the different composition of the group of factor-driven countries in GEM 2012.

Table 10 Entrepreneurial intentions internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age)

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
Entrepreneurial intent	48.9	29.0	12.7	14.4	14.8	10.1

Source: Panteia/GEM APS 2012.

Perceptions of different subgroups

Of special interest is how the prevalence rate of intentional entrepreneurship differs across various subgroups. For the present purpose the 'non-entrepreneurs' are divided into two groups based on their entrepreneurial perceptions. That is, Table 11 shows a decomposition of entrepreneurial intent among the entire adult population, among the non-entrepreneurs who are *not* considered potential entrepreneurs ('non-potential entrepreneurs'), and among the non-entrepreneurs who are considered potential entrepreneurs ('potential entrepreneur'). A non-entrepreneur is considered a potential entrepreneur if this individual is not involved in any entrepreneurial activity yet, but responds 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?", with 'yes' to the question "Do you have the knowledge, skill and experience required to start a new business?", and responds with 'no' to the question "Would fear of failure prevent you from starting a business?". The 'non-potential entrepreneurs' are not involved in any entrepreneurial 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). For completeness, Table 11 also reports on entrepreneurial intent among the nascent, new, and established entrepreneurs (i.e., other entrepreneurs).

Not surprisingly, the potential entrepreneurs have considerably higher entrepreneurial intentions than the 'non-potential entrepreneurs'. Interestingly, entrepreneurial intent among the potential entrepreneurs has increased by almost one third from 22.2% in 2011 to 30.2% in 2012. Note that a considerable amount of active entrepreneurs intends to start a business within the next three years. This may hint at so-called portfolio entrepreneurs, who run several businesses simultaneously, or serial entrepreneurs, who have a clear exit strategy in mind for their current business and intend to set up a subsequent business.

Table 11 Entrepreneurial intentions of non-entrepreneurs and potential entrepreneurs in the Netherlands, 2012, percentage of adult population (18-64 years of age)

	Adult population	*'Non-potential' entrepreneur*	*Potential entrepreneurs*	*Other entrepreneurs*
Entrepreneurial intent	10.1	7.2	30.2	16.4

Source: Panteia/GEM APS 2012. The group of potential entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship.

2.4 Comparing potential and intentional entrepreneurs

In this section we take a further look at individuals with entrepreneurial potential and entrepreneurial intentions. For example, how do the gender and age distributions differ between these two groups of individuals? Such and other analyses provide information as to which individuals are more likely to have entrepreneurial potential or intentions.

Table 12 presents a gender, age and education decomposition for the 'non-potential entrepreneurs', the potential entrepreneurs, and individuals with entrepreneurial intentions. To enable a proper comparison across the three categories, individuals are taken into account who have "pure" entrepreneurial intentions only. That is, nascent, new, and established entrepreneurs ('other entrepreneurs' in Table 11) with entrepreneurial intentions are excluded from the calculations.

A second way to investigate the prevalence of entrepreneurial intentions across the demographic subgroups is illustrated in Figure 2. For each subgroup the percentage of individuals intending to start a business in the next three years is shown. Specific attention is devoted to "pure intentions" (also used in Table 12).

Based on Table 12 and Figure 2, one can conclude that the differences between women and men in terms of entrepreneurial potential and "pure" entrepreneurial intentions are not very large. Indeed, gender differences at an early phase of the entrepreneurship process seem to be smaller in the Netherlands than in many other European countries (Van der Zwan et al., 2012). The remainder of this report will show that gender differences at more advances phases of the entrepreneurship process will be much more pronounced.

Figure 2 shows that – irrespective of the definition being used – the incidence of entrepreneurial intent is most prevalent among the youngest individuals and that this incidence decreases as an individual grows older. Furthermore, entrepreneurial intentions seem to be largest among the highest educated individuals. Yet, a substantial amount of individuals with some secondary education (i.e., not finished secondary education) intends to start a business within the next three years. Low percentages for this category of individuals are found in Table 12 because of the relatively low amount of individuals with some secondary education.

2.5 Summary

As compared to other countries with similar levels of economic development the percentage of Dutch adults seeing good start-up opportunities has reduced since 2011, but the Dutch percentage is still above the average of countries with similar levels of economic development. Regarding one's own entrepreneurial capabilities and fear of business failure, there are hardly any differences as compared to 2011. Despite

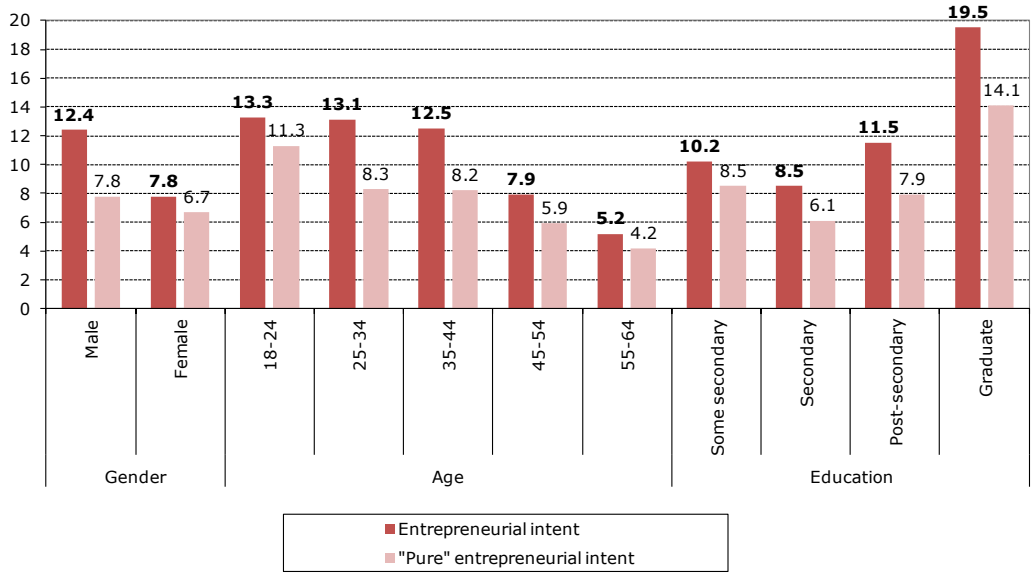
the drop in perceived entrepreneurial opportunities, more than 10% of the Dutch adult population intends to start a business within the next three years. Finally, the distribution of women and men among potential and intentional entrepreneurs seems to be relatively even in 2012. Finally, entrepreneurial intentions are most prevalent among the youngest individuals (18-24 years old) and the highest educated individuals.

Table 12 Demographic structure of (non-)potential and intentional entrepreneurs in the Netherlands, 2012

		'Non-potential entrepreneurs'	*Potential entrepreneurs*	*"Pure" intentional entrepreneurs*
Gender	Male	45%	59%	53%
	Female	55%	41%	47%
Age	18-24 years	16%	10%	21%
	25-34 years	19%	23%	22%
	35-44 years	22%	24%	26%
	45-54 years	21%	23%	19%
	55-64 years	22%	21%	13%
Education	Some secondary degree	6%	3%	6%
	Secondary degree (*Middelbare school*)	70%	55%	57%
	Post-secondary degree (*HBO*)	17%	26%	21%
	Graduate degree (*Universiteit*)	7%	16%	16%

Source: Panteia/GEM APS 2012. Potential entrepreneurs are defined as those individuals who are not involved in any entrepreneurial activity (e.g., entrepreneurial intent) yet. The group of "pure" intentional entrepreneurs excludes individuals who are also involved in TEA or established entrepreneurship.

Figure 2 Entrepreneurial intentions in the Netherlands, 2012, percentage of a given subgroup



Source: Panteia/GEM APS 2012. The group of individuals with "pure" entrepreneurial intentions excludes individuals who are also involved in TEA or established entrepreneurship.

3 Entrepreneurial activity

The present chapter focuses mainly on total early-stage entrepreneurial activity (TEA). TEA consists of individuals who are taking steps to start a business (nascent entrepreneurs) and owner-managers of businesses less than 3.5 years in existence (new entrepreneurs). This chapter zooms in on the prevalence rate of TEA, and on the demographic composition of these early-stage entrepreneurs. In addition, the characteristics of early-stage entrepreneurs are further unravelled by focusing on their aspirations along a number of dimensions.

In addition to the elaboration on this dynamic measure of entrepreneurial activity, this chapter devotes some attention to established entrepreneurs, i.e. individuals who have been owner-managers of a business for more than 3.5 years. Again, the demographic composition of this group of entrepreneurs is inspected. GEM 2012 also contains information about the involvement in business relations by entrepreneurs. This chapter provides an inspection of this involvement by established entrepreneurs.

Furthermore, this chapter discusses the results of the Dutch National Expert Survey that contains experts' assessments regarding the conditions that support or hamper entrepreneurial activity in the Netherlands.

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 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 evolution of early-stage entrepreneurship and its two components, nascent entrepreneurship and new entrepreneurship, from 2001 onwards. An interesting observation based on Table 13 is that each measure of entrepreneurial activity has doubled in terms of its prevalence within a time span of only four years, i.e. from 2008 to 2012. Such a pattern was observed earlier for the prevalence rate of entrepreneurial intentions (Chapter 2). Early-stage entrepreneurship has experienced the largest year-to-year increase in GEM history, i.e. by more than two percentage points from 8.2% in 2011 to 10.3% in 2012. This means that more than 10% of the Dutch adults of 18-64 years old is trying to set up a business or is the owner-manager of a new business. Note that the increase in TEA in 2012 is captured fully by the increase of new entrepreneurs. The proportion of individuals that is involved in running a new business has increased by more than 50% (from 4.1% in 2011 to 6.3% in 2012).

Table 13 shows that, as compared to 2011, relatively many individuals have managed to transform their nascent activities into a new firm. However, the actual number of people that actively undertakes steps to start a business is lower than in 2011 and seems to have attained a steady occurrence of around 4% of the Dutch adult population.

Table 13 Total early-stage entrepreneurial activity (TEA) in the Netherlands, 2001-2012, percentage of adult population (18-64 years of age)

Item	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
TEA: 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	10.3
Nascent entrepreneurship: "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	4.1
New entrepreneurship: "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	6.3

** Note that wages, profits, or payments in kind from this business should have been received after January 1, 2009. Furthermore, respondents partially or fully own this new business. Source: GEM APS.*

International comparison

Table 14 shows that the three measures of entrepreneurial activity decrease as the stage of economic development increases. Furthermore, we see that the Dutch TEA rate is considerably higher than the unweighted averages of the innovation-driven economies, the OECD economies, and the EU economies. The averages of these three groups of economies (innovation-driven, OECD, EU) hardly differ from those in 2011. Indeed, many innovation-driven economies experienced only small changes in their TEA rates from 2011 to 2012. Innovation-driven economies that experienced substantial increases are Slovenia (from 3.7% to 5.4%), United Kingdom (7.3% to 9.0%), the Netherlands (from 8.2% to 10.3%), and Singapore (from 6.6% to 11.6%).

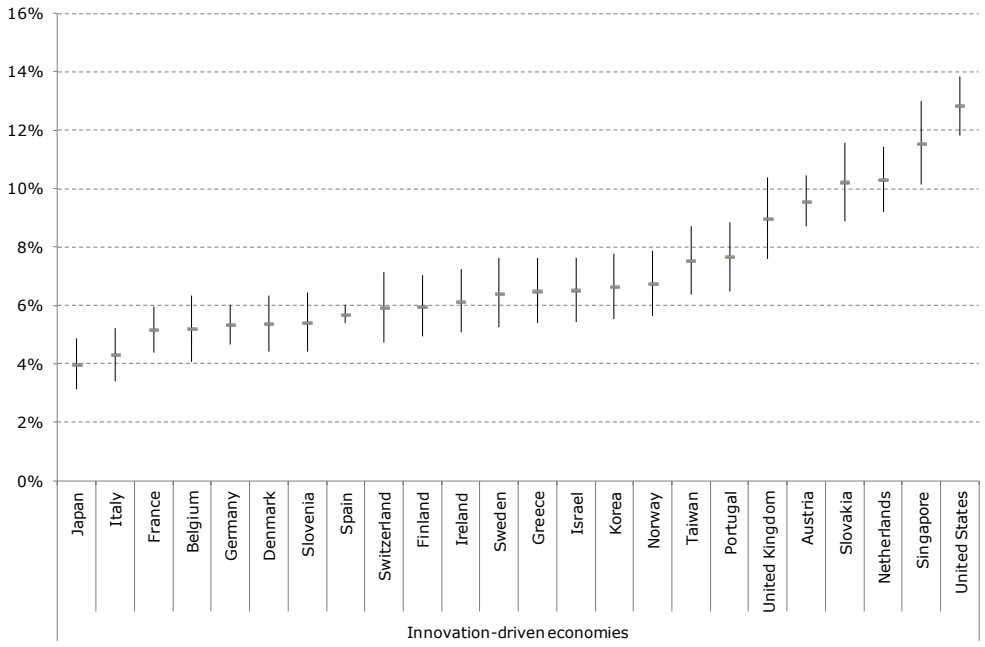
In 2011, there were only two innovation-driven economies that had higher TEA rates than the Netherlands, i.e. Australia (10.5%) and the United States (12.3%). In 2012 there are again two economies with higher TEA rates. Australia does not participate in GEM in 2012. The highest TEA rate among the innovation-driven countries can be found for the United States (12.8%), followed by Singapore with a TEA rate of 11.6%. The TEA rates of all innovation-driven economies are displayed in Figure 3. Note that this graph does not only provide the point estimates of the TEA rates among the underlying population, but that the lower and upper bounds of the 95% confidence interval are also provided. The remainder of this national report abstains from providing these lower and upper bounds.

Table 14 TEA rates internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age)

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
TEA	23.7	13.1	7.1	8.2	7.7	10.3
Nascent entrepr.	11.8	7.8	4.2	5.0	4.7	4.1
New entrepreneurship	12.7	5.6	3.0	3.4	3.2	6.3

Source: Panteia/GEM APS 2012.

Figure 3 Total early-stage entrepreneurial activity (TEA) in the innovation-driven economies, 2012, percentage of adult population (18-64 years of age)



Source: GEM APS 2012.

Demographic characteristics

Table 12 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 12, and adds the decomposition across gender, age, and education for the early-stage entrepreneurs.

Another way to investigate the prevalence rates of early-stage entrepreneurship across the demographic subgroups is presented in Figure 4. For each demographic subgroup Figure 4 shows the TEA rate, both for the Netherlands and for the innovation-driven economies (unweighted averages are used). Note that the differences between the Dutch figures and those of the innovation-driven economies in Figure 4 should be inspected in light of a "benchmark difference" in TEA rates between the Netherlands and the innovation-driven economies as displayed in Table 14, i.e. 10.3% versus 7.1%.

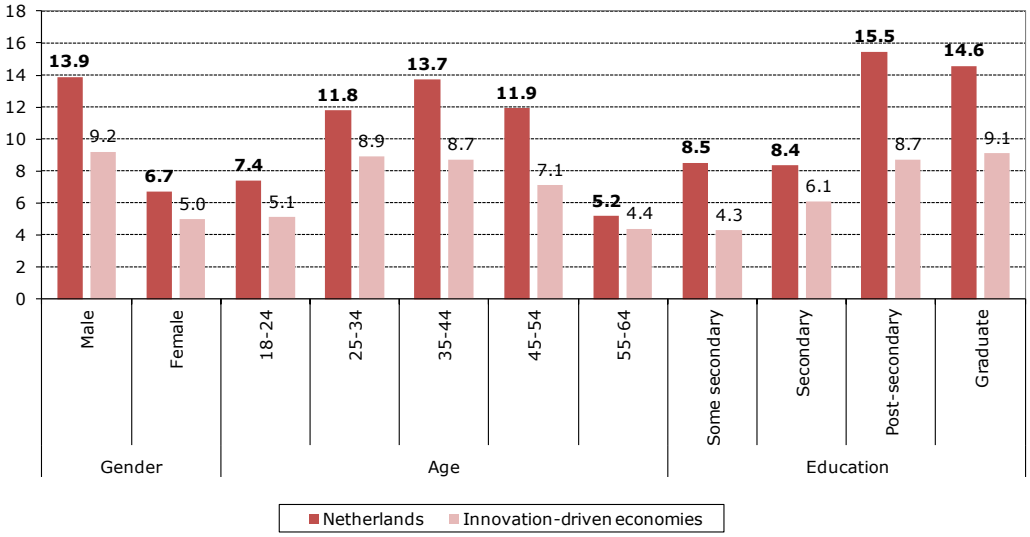
The difference between female TEA and male TEA has become larger as compared to 2011. In 2011, about 10.4% of the Dutch males were involved in early-stage entrepreneurship activity, whereas this was 6.0% for the females. Figure 4 shows that these percentages are 13.9% and 6.7% for females and males, respectively, in 2012 (compare with the smaller gender gap regarding entrepreneurial intentions in Figure 2). In other words, the probability of being an early-stage entrepreneur is more than twice as high for Dutch men than for Dutch women. Note that the male TEA rate experienced a stronger increase in 2012 as compared to the female TEA rate. Nonetheless, the number of women engaged in early-stage entrepreneurship in the Netherlands continues its upward trend. See also Bleeker et al. (2011) who observed a steady increase of female entrepreneurial activity between 2000 and 2009. Compared to the unweighted average of the innovation-driven economies, the Dutch female TEA rate is considerably higher (6.7% compared to 5.0%; see Figure 4).

Table 15 Demographic structure of (non-)potential, intentional, and early-stage entrepreneurs in the Netherlands, 2012

		'Non-potential entrepreneurs'	*Potential entrepreneurs*	*Intentional entrepreneurs*	*Early-stage entrepreneurs*
Gender	Male	45%	59%	53%	68%
	Female	55%	41%	47%	32%
Age	18-24 years	16%	10%	21%	10%
	25-34 years	19%	23%	22%	22%
	35-44 years	22%	24%	26%	32%
	45-54 years	21%	23%	19%	27%
	55-64 years	22%	21%	13%	10%
Education	Some secondary degree	6%	3%	6%	4%
	Secondary degree (*Middelbare school*)	70%	55%	57%	54%
	Post-secondary (*HBO*)	17%	26%	21%	30%
	Graduate degree (*Universiteit*)	7%	16%	16%	12%

Source: Panteia/GEM APS 2012. 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.

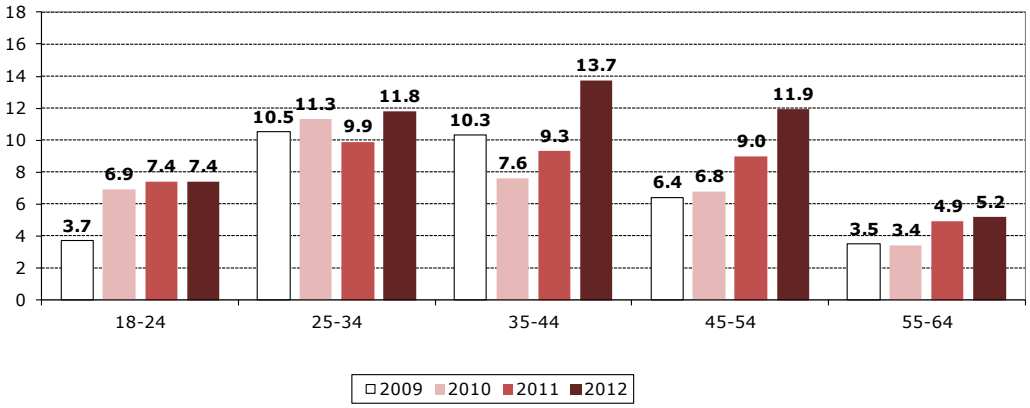
Figure 4 Total early-stage entrepreneurial activity (TEA) in the Netherlands and innovation-driven economies, 2012, percentage of a given subgroup



Source: Panteia/GEM APS 2012.

Concerning the age composition, Figure 4 reveals that the probability of being an early-stage entrepreneur is highest among the individuals between 35 and 44 years old. Note that the distribution of entrepreneurial intentions across the four age groups revealed a very different pattern in Figure 2. Figure 5 shows the Dutch prevalence rates of the five age groups for 2009-2012. The age group 35-44 witnessed the largest increase in early-stage entrepreneurial activity as compared to 2011, followed by the age group 45-54. Furthermore, the prevalence of early-stage entrepreneurs among the youngest group of individuals (18-24) has steadily increased over 2009-2011; no difference has occurred from 2011 to 2012.

Figure 5 Total early-stage entrepreneurial activity (TEA) in the Netherlands, 2009-2012, percentage of a given age category



Source: GEM APS.

Regarding educational background, Figure 4 shows a relatively high prevalence of early-stage entrepreneurs among the individuals with a higher education (post-secondary or graduate degree; *HBO* or *Universiteit*) as compared to the innovation-driven economies. In high-income countries, education has been shown to be positively related to the probability of being self-employed (Reynolds et al., 2003, Blanchflower, 2004). The high prevalence of early-stage entrepreneurs among the individuals with a high education in the Netherlands is remarkable because additional

education may increase entrepreneurial knowledge, abilities and skills but it simultaneously increases the value of paid employment as an alternative option which makes the entrepreneurial option less attractive and hence less likely (Casson, 1995; Parker 2009).

Immigrant early-stage entrepreneurship
For the first time, GEM 2012 contains information about another subgroup of individuals, i.e. immigrants and non-immigrants. Whereas in the majority of innovation-driven economies the prevalence of early-stage entrepreneurs among immigrants is higher than among non-immigrants, the reverse pattern can be observed for the Netherlands. That is, it turns out that 7.9% of the Dutch adult immigrants are early-stage entrepreneurs, whereas this is 10.7% for the Dutch adult non-immigrants. For comparison, the unweighted average of the innovation-driven economies is 8.0% for immigrant TEA and 6.9% for non-immigrant TEA. Immigrants are defined as individuals who were born in another country than the Netherlands or when at least one of their parents was born abroad. The Dutch sample consists of 389 immigrants which represents a weighted percentage of 13.5% of the total Dutch population.

Arguments why immigrants are more likely than non-immigrants to be entrepreneurs are mainly based on US data (Parker, 2009) and do not necessarily hold for the Dutch situation. In addition, there is considerably heterogeneity among groups of immigrants from different origins. In the Netherlands, immigrants mainly originate from non-western countries, with Turkey, Morocco, Suriname and the Antilles being the main donor countries. According to Jansen et al. (2003), a combination of differences in demographical composition of these groups of immigrants, and immigrant contingency effects partly explain the different entrepreneurship rates across the groups. Jansen et al. (2003) conclude that demographical differences in age and education suggest that native Dutch individuals are most likely to be entrepreneurs, followed by immigrants from Suriname and the Antilles. Immigrants from Turkey and Morocco would have the lowest rate of entrepreneurship. In addition, Jansen et al. (2003) investigate contingency effects, suggesting that the direction and size of the relationship between demographic variables and entrepreneurship may be contingent upon differences in culture and economic climate. Almost all identified immigrant contingency effects (e.g., urbanization, unemployment, culture) reduce the probability of being an entrepreneur for Dutch immigrants.

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 who are driven by "other motives" than opportunity-based or necessity-based motives only.

An interesting question is now whether the increase in early-stage entrepreneurial activity in the Netherlands can be attributed to an increase of either opportunity-based or necessity-based start-ups. Table 16 shows how these motivations behind

starting a business have evolved in the Netherlands. Traditionally, the percentage of Dutch individuals that start a business out of opportunity has outnumbered the percentage of individuals that start out of necessity. The number of individuals who started their business out of opportunity has increased substantially, and even doubled, from 4.3% in 2008 to 8.6% in 2012. However, over the past few years the rate of individuals that start a business out of opportunity as a percentage of total TEA individuals has remained stable (around 83%).

The low percentage of necessity entrepreneurs in the Netherlands is remarkable. Similar to 2011, there are only a handful of countries with lower percentages of necessity-based early-stage entrepreneurship. Figure 6 shows the rates of necessity TEA as a percentage of total TEA for the innovation-driven economies. Clearly, only the Scandinavian countries and Slovenia have marginally lower necessity-based TEA rates than the Netherlands. As suggested by Verheul et al. (2010), this may be the result of differences in regional institutional environments affecting entrepreneurial motivation and entrepreneurial engagement. In addition, because determinants of (nascent) opportunity and necessity entrepreneurship differ (Block and Wagner, 2010), this has consequences for policy making: Measures to stimulate opportunity entrepreneurship do not necessarily benefit necessity entrepreneurs, and vice-versa.

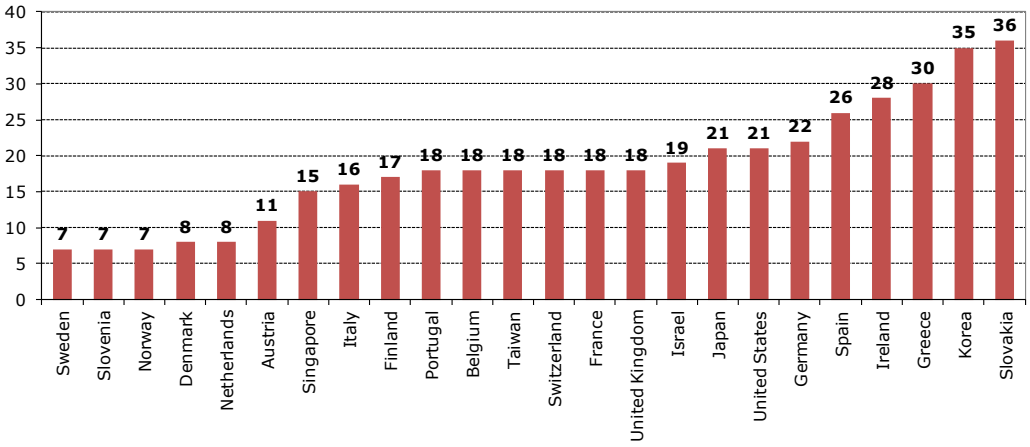
Interestingly, among individuals younger than 35 years, the Dutch necessity-based TEA rate is even the lowest among all innovation driven economies. See Kew et al. (2013) for more information about youth entrepreneurship based on the 2012 data.

Table 16 Motivation for the decision to be entrepreneurially active (TEA), the Netherlands, 2002-2012, percentage of adult population (18-64 years of age)

	2002	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Opportunity-driven motivation	4.0	3.0	4.3	3.9	4.9	3.9	4.3	5.0	6.1	7.0	8.6
Necessity-driven motivation	0.5	0.4	0.7	0.3	0.3	0.6	0.5	0.7	0.6	0.7	0.9
Other motivation	0.1	0.2	0.1	0.1	0.2	0.7	0.4	1.4	0.5	0.5	0.8
Total (TEA)	4.6	3.6	5.1	4.4	5.4	5.2	5.2	7.2	7.2	8.2	10.3

Source: GEM APS.

Figure 6 Necessity-driven TEA divided by total TEA for the innovation-driven economies, 2012



Source: Panteia/GEM APS 2012.

Sector decomposition

Table 17 compares the Netherlands with other economies regarding the sector distribution of early-stage entrepreneurship. A distinction can be made between four sectors: 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). The sector distribution of early-stage entrepreneurship is comparable with the rates in countries with similar levels of economic development.

Table 17 Sector distribution of early-stage entrepreneurs, internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age) involved in TEA

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
Extractive sectors	9%	7%	4%	5%	6%	4%
Transformative sectors	21%	25%	21%	23%	23%	25%
Business services	6%	14%	29%	28%	28%	28%
Consumer services	63%	54%	45%	45%	42%	43%

Source: Panteia/GEM APS 2012.

3.2 Aspirations of early-stage entrepreneurs

The previous sections focused on the rate of early-stage entrepreneurship without taking into account the entrepreneur's aspirations. These aspirations are, however, important because they contain information about the quality of a business. We zoom in on three dimensions of aspirations: the level of innovativeness of the product or service that the entrepreneur introduces, the expected growth of the business in the next five years, and the level of competitiveness in the market.

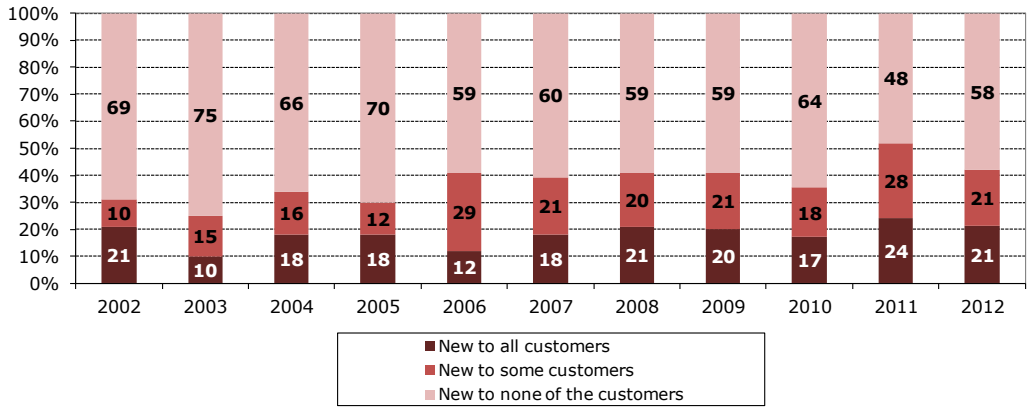
Product innovation

Regarding the level of innovativeness of the product or service, the early-stage entrepreneurs 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 (potential) customers at all.

Figure 7 shows how the level of innovativeness has evolved in the Netherlands. The level of product novelty stabilized during the period 2006-2010 after which a sharp increase can be witnessed for 2011. In 2012, there is a reversal of the increase in product novelty. Around 42% of the Dutch early-stage entrepreneurs (plans to) introduce a product that is new to all or some of the customers in the market compared to 52% in 2011. Ruis (2012) also focuses on product and service innovativeness of Dutch small- and medium-sized enterprises. Ruis (2012) finds a sharp decrease of product innovativeness in 2011 after which the measures stabilized in 2012. Differences between the results of Ruis (2012) and the results in Figure 7 could be related to the incorporation of nascent entrepreneurs and the exclusion of established entrepreneurs in the present analysis.

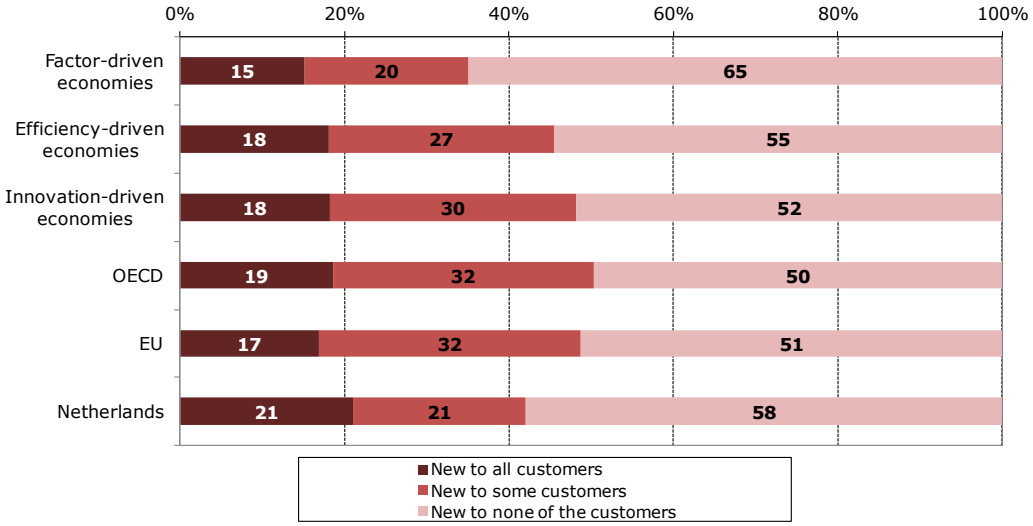
From an international point of view, it appears that the Dutch early-stage entrepreneurs are significantly less innovative in terms of their products and services as compared to the early-stage entrepreneurs in many other countries (Figure 8).

Figure 7 Product innovativeness of early-stage entrepreneurs in the Netherlands, 2012, percentage of adult population (18-64 years of age) involved in TEA



Source: Panteia/GEM APS.

Figure 8 Product innovativeness of early-stage entrepreneurs internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age) involved in TEA



Source: Panteia/GEM APS 2012.

Job growth expectations

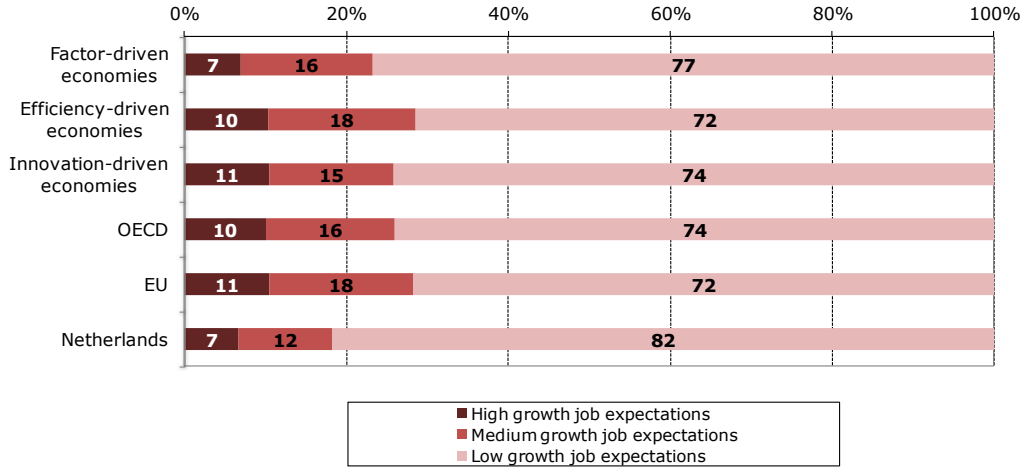
GEM asks early-stage entrepreneurs about the expected growth in the number of employees in the next five years. Based on the answers a classification is provided that distinguishes between three categories. We consider early-stage entrepreneurs to have low growth aspirations when they expect to employ 0 to 4 employees 5 years from now. Entrepreneurs with medium growth aspirations are those who expect to employ 5 to 19 employees in 5 years. Finally, those who expect to have at least 20 employees five years from now are considered to aspire high growth with their business.

Figure 9 shows this classification and the percentages of early-stage entrepreneurs that belong to each aspiration category. The percentages are shown for the Netherlands and the unweighted averages are again provided for the familiar sets of economies. Basically, all percentages have decreased somewhat in 2012 as compared to 2011. However, the averages for the Netherlands are low from an international point of view. That is, whereas in 2011 about 22% of the early-stage entrepreneurs had high or medium growth aspirations, in 2012 this percentage went down to 18%. Hence, more than 80% of the Dutch early-stage entrepreneurs have low growth aspirations in the sense that they expect to employ at most 4 employees five years from now.

Indeed, this is a considerable proportion of early-stage entrepreneurs with low growth aspirations. However, there are several other countries with even higher percentages of early-stage entrepreneurs with low job growth aspirations. A few examples are countries with lower incomes per capita such as Greece (86%) and Spain (87%), but also some countries with high incomes per capita including Norway (83%), Sweden (83%) and Switzerland (85%). Possible explanations lay in the institutional arrangements. For example, research in the determinants of ambitious or high-growth entrepreneurship shows that the existence of financial resources is positively related to the high-growth orientation of entrepreneurs (Bowen and De Clercq, 2007). Bowen and De Clercq (2007) and Stenholm et al. (2013) find that regulatory arrangements matter very little for high-growth new ventures, in particular in innovation-driven economies where low levels of regulations are in place. What matters most for the formation of high-growth ventures is an institutional environment where new opportunities are created by knowledge spillovers (e.g., university-industry collaborations) and the availability of capital.

Chapter 4 of this national report digs into the job growth expectations in much more detail.

Figure 9 Job growth expectations of early-stage entrepreneurs internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age) involved in TEA



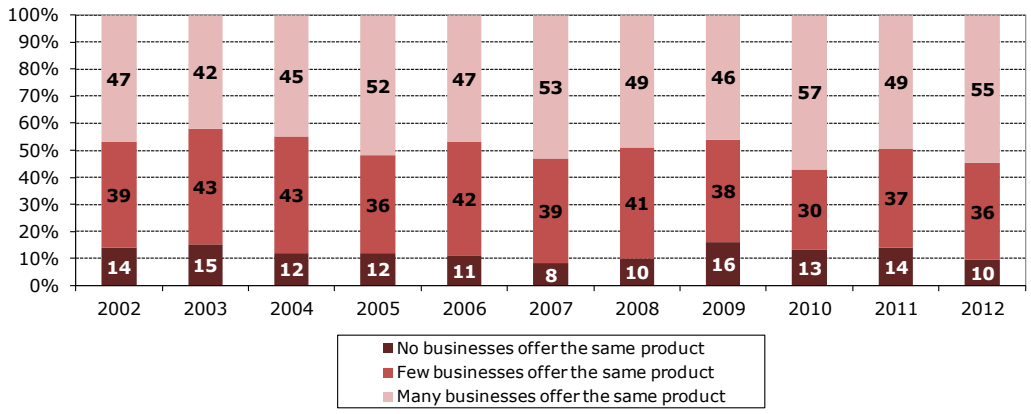
Source: Panteia/GEM APS 2012.

Competition level

The third dimension of growth aspirations refers to the perceived competition level in the market. 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 asked whether the market in which they (will) operate is characterized by many

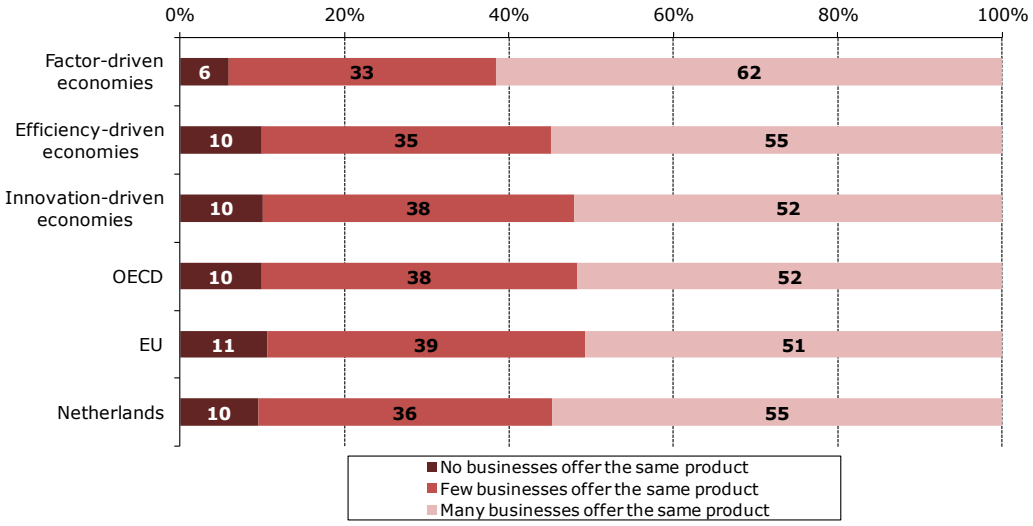
competitors or whether there are only few or even no competitors. Note that the answers to this question give indications of how entrepreneurs perceive competition in the market and that the answers do not provide objective assessments about the level of market competition. An overview of perceived competition among Dutch early-stage entrepreneurs is provided in Figure 10. Where in 2011 51% of the early-stage entrepreneurship stated to enter markets with no or few competitors, this percentage has slightly decreased to 46% in 2012. An international comparison is shown in Figure 11. It turns out that the competition levels of the Dutch early-stage entrepreneurs are on par with the "average" innovation-driven economy.

Figure 10 Perceived competitiveness of early-stage entrepreneurs in the Netherlands, 2002-2012



Source: Panteia/GEM APS.

Figure 11 Perceived competitiveness of early-stage entrepreneurs internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age) involved in TEA



Source: Panteia/GEM APS 2012.

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.

Developments in the Netherlands over time

Table 18 reveals how established entrepreneurship has evolved over time in the Netherlands. Clearly there is a positive trend, albeit this trend is somewhat less strong than with early-stage entrepreneurship. After a decline in 2011, the prevalence of established entrepreneurship has increased again in 2012. In 2012, 9.5% of the Dutch adult population is involved in owning and managing a business that exists for more than 3.5 years.

Table 18 Established entrepreneurship in the Netherlands, 2002-2012, percentage of adult population (18-64 years of age)

Item	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Established entrepreneurship: "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	9.5

** Note that wages, profits, or payments in kind from this business should have been received before January 1, 2009. Furthermore, respondents partially or fully own this new business. Source: Panteia/GEM APS.*

International comparison

There are countries that combine a high TEA rate with a low established entrepreneurship rate such as Singapore, and, to a lesser extent, Slovakia and Austria. There are also countries with low TEA rates and high established entrepreneurship rates such as Spain, Greece, and Korea. The Netherlands have a special position in that it scores high on both dimensions. That is, whereas only two other innovation-driven economies have higher TEA rates than the Netherlands, there are only three innovation-driven economies that have more established entrepreneurs. These countries are Korea (9.6%), Taiwan (10.4%), and Greece (12.3%). The high prevalence rate of established entrepreneurship in the Netherlands is illustrated in Table 19. Explaining the Dutch position relative to other countries is not straightforward. Van der Zwan et al. (2010) point at a variety of factors that may influence the different stages of entrepreneurial engagement. In other words, factors that influence individuals to start a business are not necessarily the same as factors that influence the survival of a business.

Table 19 Established entrepreneurship internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age)

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
Established entrepreneurship	11.4	7.8	6.7	6.7	6.6	9.5

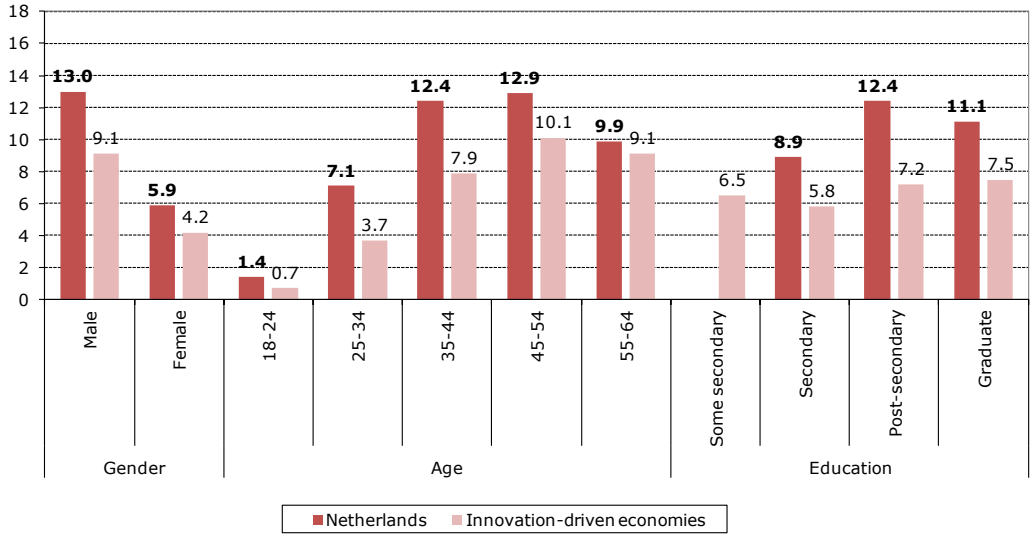
Source: Panteia/GEM APS 2012.

Demographic characteristics

Figure 12 provides a similar disentangling as Figure 2 and Figure 4, i.e. it shows the prevalence rate of established entrepreneurship for various subgroups of individuals. The overrepresentation of established entrepreneurs among men and among those aged 35-44 years as compared to the innovation-driven economies stands out. This

pattern is roughly similar to what we saw earlier in Figure 4 for early-stage entrepreneurship.

Figure 12 Established entrepreneurship in the Netherlands and innovation-driven economies, 2012, percentage of a given subgroup



Source: Panteia/GEM APS 2012. The Dutch rate of established entrepreneurship for individuals with some secondary education could not be provided because of too few observations.

3.4 Involvement in business relations by established entrepreneurs

Individuals rely on social capital to access resources when setting up their business (Brüderl and Preisendörfer, 1998; Davidsson and Honig, 2003). One component of social capital – network activities – plays an important role in this context. Entrepreneurs apply different network strategies that depend on the specific phase in the entrepreneurship process (Greve and Salaff, 2003). For example, entrepreneurs develop their network activities and draw on their family members and closest relations when setting up their firm, whereas they will devote more time in maintaining their networks once their business has become into existence (Greve and Salaff, 2003).

One particular facet of networking activities refers to the cooperation with other entrepreneurs, enterprises, and private or public organizations, which may benefit the development or growth of a business (Street and Cameron, 2007). Cooperating with others may be important to gain access to resources that are inaccessible or unavailable to an entrepreneur and his/her business. This year's GEM APS contains questions about the business relations or collaborating behaviour of entrepreneurs. These business relations may differ in the intensity with which entrepreneurs work together with other business entities. The specific survey questions about business relations concern topics including the production, selling, and creation of (new) products or services. Furthermore, information is retrieved about whether entrepreneurs work together to procure supplies, and whether entrepreneurs are involved in business relations to make the business more effective.

The APS data show that 43% of the Dutch established entrepreneurs know other entrepreneurs. This number, however, provides only basic knowledge about the business relations of established entrepreneurs. Table 20 zooms in on the behaviour of established entrepreneurs in terms of their business relations with other enterprises and private or public organizations on a variety of dimensions. For each dimension,

the percentage of established entrepreneurs that are involved in a specific type of business relation is given for the Netherlands. In addition, the unweighted average of the innovation-driven economies is provided for comparison.

Table 20 Involvement in business relations for the Netherlands and innovation-driven economies (unweighted average), 2012, percentage of established entrepreneurs (18-64 years of age) that agree with the statement

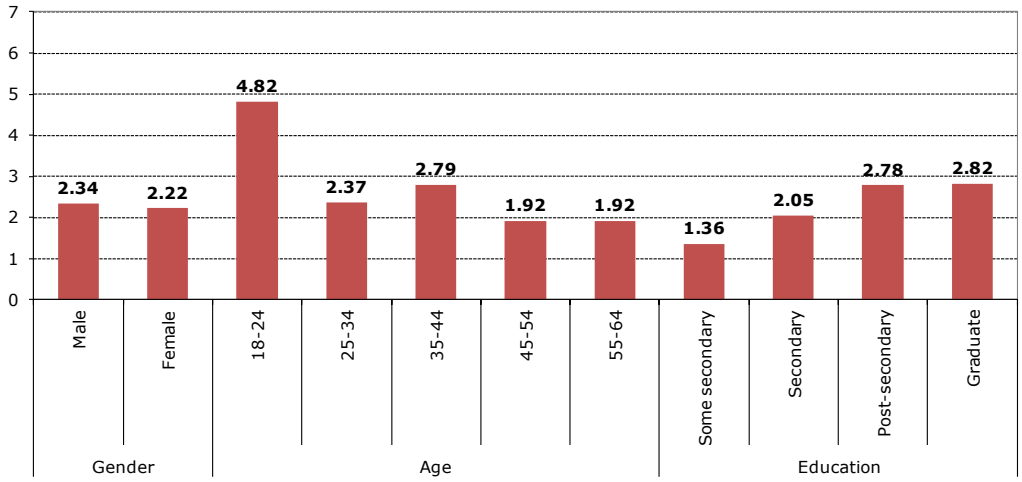
Is your business working together with other enterprises or organizations …	*Innovation-driven economies*	*Netherlands*
… to produce goods or services?	50	50
… to procure supplies?	41	25
… to sell your products or services to your current customers?	39	33
… to sell your products or services to new customers?	37	32
… to create new products or services to your current customers?	30	31
… to create new products or services to new customers?	28	27
… about how to make your business more effective?	37	32

Source: GEM APS 2012.

The general picture drawn from Table 20 is that Dutch entrepreneurs do not search for business collaborations too often. Indeed, Table 20 reveals that Dutch entrepreneurs are less involved in business relations regarding *selling* their products or improving the *effectiveness* of their business than entrepreneurs in many other innovation-driven economies. In terms of *producing* or *creating* new products or services, the Dutch averages are in line with the unweighted average of the group of innovation-driven economies.

Table 20 shows how established entrepreneurs may work together across seven dimensions. For the next analysis we calculate an "average score" which conveys information about the average inclination of established entrepreneurs to work together with other enterprises or organizations. This score ranges from 0 (no business relations established at all) to 7 (working together on all dimensions). The average score among the Dutch established entrepreneurs amounts to 2.30. Figure 13 shows this score for several subgroups of individuals depending on their gender, age, and educational attainment. Men seem to be more involved in business relations than women on average. However, a further inspection reveals that the score difference between women and men is insignificant at any reasonable significance level. Furthermore, the older entrepreneurs seem to be less involved in business relations than their younger counterparts. Finally, educational attainment seems to help in establishing business relations.

Figure 13 Involvement in business relations by established entrepreneurship in the Netherlands, 2012, average score seven dimensions



Source: Panteia/GEM APS 2012. The categories of individuals between 18-24 years old and individuals with some secondary education contain less than 10 observations. These numbers should thus be interpreted with caution.

3.5 Entrepreneurial exit

The present section elaborates on the fraction of the adult population that has exited entrepreneurship in the past twelve months. These individuals also indicate whether the relevant business continued or discontinued its activities after the individual exited the business. This distinction refers to the idea that an entrepreneurial exit does not equal an entrepreneurial failure. In addition to continued or discontinued activities, 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, 2.2% of the Dutch adult population experienced an entrepreneurial exit in 2012, which is a small increase (0.3% points) as compared to 2011. In about two thirds of the entrepreneurial exits, the exit coincides with firm exit, i.e. 1.5% of the Dutch adults experienced a firm exit with business closure in 2012.

Table 21 Entrepreneurial exit in the Netherlands, 2002-2012, percentage of adult population (18-64 years of age)

Item	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Exit with business closure: Sold, shut down, discontinued, or quit a business in the past 12 months; business did **not** 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	1.5
Exit without business closure: 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	0.7

Source: Panteia/GEM APS.

International comparison

Table 22 compares entrepreneurial exit rates from an international point of view. Clearly, the probability of exit decreases with the stage of economic development. Regarding the innovation-driven economies, the probabilities of entrepreneurial exit in the case of a business closure and business continuance, respectively, have remained equal in 2012 as compared to 2011 (numbers of 2011 not provided in Table 22). Although the Dutch rates have increased slightly, the averages are still lower than the average of the innovation-driven economies.

Table 22 Entrepreneurial exit internationally compared (unweighted average), 2012, percentage of adult population (18-64 years of age)

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
Exit with business closure	9.8	3.2	1.7	1.9	1.8	1.5
Exit without business closure	3.4	1.4	1.0	1.0	0.9	0.7

Source: Panteia/GEM APS 2012.

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.

In the Netherlands, lack of profitability has traditionally been a dominant reason for entrepreneurial exit. The occurrence has decreased somewhat as compared to 2011. In 2012, 21% of the Dutch exits were because of a lack of profitability, where this occurrence was 26% in 2011 and 17% in 2010.

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. Whereas in 2011 about 7% of all Dutch exits were due to problems getting finance, this percentage has increased slightly to 9% in 2012. However, this percentage remains substantially lower than many other countries with comparable levels of economic development.

We need to note however that the main reasons for quitting a business in the Netherlands fluctuate considerably across different years. For example, the percentage of exits that is due to another job or business opportunity in 2012 is higher than the average of the innovation-driven economies (16% versus 10%). The same reason accounted for only 5% of the Dutch exits in 2011 compared to 10% for the innovation-driven economies in that same year. Another exit reason that fluctuates considerably across years concerns retirement: between 2008 and 2012 the percentage of exits that was due to retirement ranged from 23% in 2008 to 1% in 2011. In 2012, this percentage is 4%.

Table 23 Main exit reason internationally compared, 2012, percentage of exits

	Factor-driven economies	*Efficiency-driven economies*	*Innovation-driven economies*	*OECD*	*EU*	*Netherlands*
An opportunity to sell	4%	3%	4%	4%	3%	2%
Business was not profitable	29%	30%	29%	29%	30%	21%
Problems getting finance	19%	17%	11%	13%	12%	9%
Other job/business opport.	6%	7%	10%	10%	10%	16%
Exit was planned in advance	3%	3%	4%	4%	4%	4%
Retirement	1%	2%	7%	6%	7%	4%
Personal reasons	19%	19%	17%	17%	15%	18%
An incident	5%	4%	5%	4%	3%	0%
Other reason/don't know	14%	15%	13%	13%	16%	26%

Source: Panteia/GEM APS 2012.

3.6 Triggers and barriers of entrepreneurship: Results of the Dutch NES

Whereas the majority of this report is devoted to the 2012 results of the Dutch Adult Population Survey due to the richness of the data, one interesting aspect of GEM has remained unaddressed so far, i.e. the results of the National Expert Survey (NES).

Different sets of framework conditions are of concern to the public and to policy-makers. The conditions that are expected to stimulate and support entrepreneurial activity are captured by the framework conditions as included in the NES (Xavier et al., 2013).

As already indicated in Chapter 1 of this report, the NES distinguishes between nine areas (Entrepreneurial Framework Conditions, EFCs) that are thought to stimulate or constrain the level and nature of entrepreneurial activity. At least 36 experts are asked to give their assessments about a wide range of statements that can be classified according to these EFCs. The experts were supposed to give a score on a

Likert scale with values of 1 (completely false), 2 (somewhat false), 3 (neither true nor false), 4 (somewhat true), and 5 (completely true) for each EFC. A high score for an EFC (value 4 or 5) indicates that the particular factor encourages entrepreneurial activity within a country whereas a low score (value 1 or 2) means that entrepreneurship is hampered on this area.

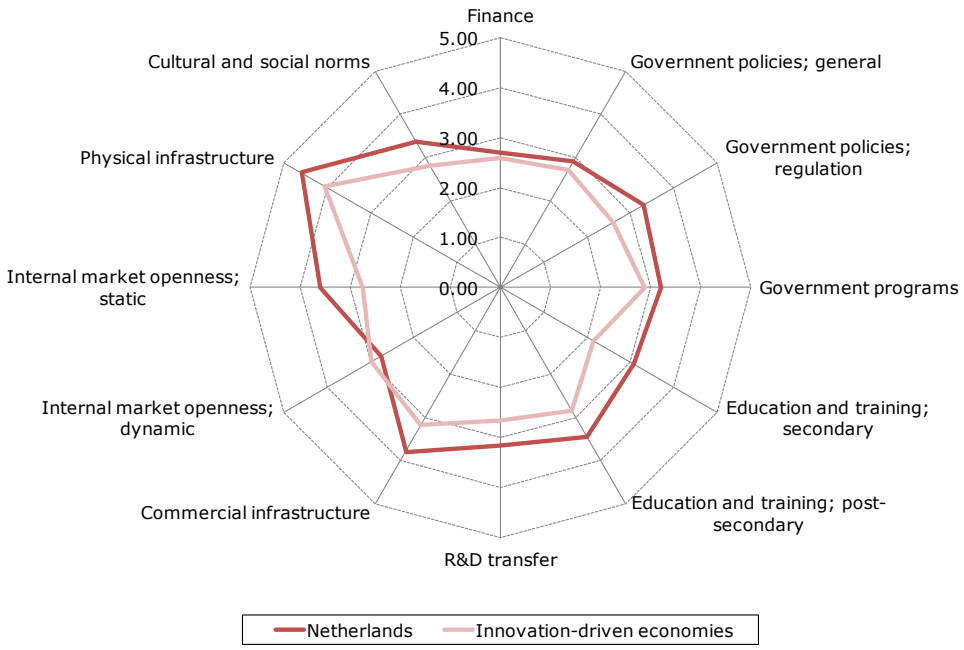
Entrepreneurial Framework Conditions

The EFCs are explained below (drawn from Xavier et al., 2013, Figure 3.1). For three EFCs a further disentangling is made between two sub-conditions. That is, *government policies* distinguishes between general policy and policy targeted at regulation issues. *Education and training* consists of a primary school and secondary school component on the one hand and a post-secondary school component on the other hand. Finally, *internal market openness* has a general, static, component that indicates how free the markets are for firms to enter, and a dynamic component that captures yearly changes of the internal markets.

- *Financing*: The availability of financial resources, equity, and debt (including grants and subsidies) for new and growing firms.
- *Government policies*: The extent to which government policies, such as taxes or regulations, encourage new and growing firms. Consists of two sub-conditions.
- *Government programs*: The extent to which government programs encourage new and growing firms.
- *Education and training*: The extent to which training in creating or managing new, small or growing businesses is incorporated within the education and training system at the primary or secondary school level (first sub-condition), or at the post-secondary school level (second sub-condition).
- *R&D transfer*: The extent to which national Research and Development (R&D) will lead to new commercial opportunities, and whether or not these are available for new, small and growing firms.
- *Commercial infrastructure*: The presence of commercial, accounting and other legal services and institutions that allow or promote the emergence of small, new and growing business entities.
- *Internal market openness*: As mentioned above there are two sub-conditions: *market dynamics*, i.e. the extent to which markets change from year to year, and *market openness*, i.e. the extent to which new firms are free to enter existing markets.
- *Physical infrastructure*: Ease of access to available physical resources – communication, utilities, transportation, land or space – at a price that does not discriminate against new, small or growing firms.
- *Cultural and social norms*: The extent to which existing social and cultural norms encourage entrepreneurial activities.

Figure 14 shows the scores for the 12 dimensions for the Netherlands and for the innovation-driven economies (unweighted average). Note that high scores (4 and 5) indicate that the EFC under investigation fosters the entrepreneurial climate whereas low scores (1 and 2) indicate that the particular EFC constrains the entrepreneurial environment. We first describe the results for the Netherlands and will continue to compare these results internationally.

Figure 14 Average expert scores for the Entrepreneurial Framework Conditions (EFCs) for the Netherlands and innovation-driven economies, 2012



Source: GEM NES 2012.

Results Dutch NES

A first observation is that none of the entrepreneurial framework conditions stand out as a clear barrier for the Netherlands in terms of scores below 2. This suggests very positive conditions for entrepreneurial activity in the Dutch context. Although there are these positive conditions in the Netherlands, there are three framework conditions with scores between 2 and 3. First, we observe that the financial support framework condition receives the lowest score from the Dutch experts (score 2.7). In particular, experts gave low scores on the availability of funding for new and growing firms through initial public offerings (IPOs), debt, or venture capital. Second, a score of 2.8 is found for the dynamic component of internal market openness, i.e. whether the yearly changes in both consumer and business markets are substantial and hard to anticipate upon. Third, the sub-condition of general government policies (i.e., national policy not related to regulation) receives a score of 2.9. With respect to this sub-condition it is noteworthy to mention that the experts gave particularly low scores on the statement that government policy consistently favours new firms.

The Netherlands perform very well in terms of infrastructure, both the physical and the commercial element. This implies that the basic requirements for starting and running a business are in place.

Although the average score for the research and development (R&D) framework condition does not seem to foster or hinder innovation and entrepreneurial activities in the Netherlands (it is just above 3), the importance addressed to innovation by policy-makers justifies a closer look. The R&D framework condition refers to the extent to which national R&D efforts will lead to commercial opportunities for young and growing firms. On the one hand, the Dutch experts consider the science and technology base to be supportive for creating world-class new technology-based ventures. On the other hand, the experts are less favourable concerning the transfer of new technologies and knowledge from universities and public research centres to

new and growing firms. In addition, they perceive unequal access to research and technology between new and growing firms and large established firms in favour of the large incumbents.

International comparison

When comparing the entrepreneurial framework conditions of the Netherlands with the innovation-driven economies, one observation is that the Dutch scores are well above the averages of comparable economies. This finding, again, suggests very favourable contextual conditions for entrepreneurship in the Netherlands. One exception refers to the dynamic measure of internal market openness. The scores are 2.8 and 3.0 for the Netherlands and the innovation-driven economies, respectively.

While inspecting the differences between the average of the innovation-driven economies and the Netherlands, we note that the Netherlands have a relative advantage in the following two areas. The first area is internal market openness in terms of low entry barriers to new firms. The second area is the incorporation of entrepreneurship education and teaching in secondary education.

First, with respect to internal market openness (Dutch score of 3.8), the experts consider this framework condition to encourage entrepreneurial activity. The average score of the innovation-driven economies is only 2.8. In terms of costs of market entry, effective and enforced antitrust laws and the behaviour of incumbents towards new entrants, we conclude that market entry of Dutch new firms is favourable relative to the situation in the other innovation-driven economies. However, as mentioned before, the dynamic component of market openness in terms of the yearly volatility of business-to-consumer markets and business-to-business markets is slightly less advantageous as compared to similar types of economies.

Second, with respect to the framework condition concerning education and training, the difference between the Netherlands and the innovation-driven economies is particularly remarkable (scores 2.1 and 3.1, respectively). This framework condition relates to the extent to which entrepreneurship receives attention in the educational and training system, both at the primary/secondary and at the post-secondary level. With respect to education and training in the primary and secondary phases, Dutch experts laud the education system for encouraging entrepreneurial qualities such as creativity, self-sufficiency and personal initiative. The Netherlands is the only country with a score over 3 for this particular condition. Although the attention for entrepreneurship and corresponding skills at the post-secondary level is also positive as compared to the other economies, the difference is not as pronounced. Despite some valuable insights into this particular framework condition, there is still little known about the influence of entrepreneurship education on entrepreneurial entry or business performance (Van Praag et al., 2009; Doms et al., 2010; Douhan and Van Praag, 2009; Van der Zwan et al., 2013).

Furthermore, the financial constraints to entrepreneurship seem to be large according to the experts, both in the innovation-driven economies as a whole, and in the Netherlands (scores 2.6 and 2.7 respectively). That is, the lowest Dutch score across all EFCs can be found for the finance dimension. The below-average scores for some countries for this framework condition need to be interpreted relative to the financial crisis that hit several innovation-driven economies such as Greece and Spain (Xavier et al., 2013). Despite the low average score for the finance condition, the Dutch

experts provided relatively high scores to the availability of equity funding and government subsidies for growing firms.

Finally, with respect to government policy we also observe a favourable regulatory environment in the Netherlands as compared to the innovation-driven countries. That is, in terms of the speed and ease of getting the required permits and licenses and the extent to which taxes are perceived as a burden for new and growing firms. Despite the relative advantage of government policy regulations, the Dutch experts repeatedly mention the regulatory burden as a potential constraining factor and hence an area for improvement.

In sum, the main conclusion to be drawn from the National Expert Survey is that the institutional framework conditions in the Netherlands foster a positive entrepreneurial climate. A framework condition that offers room for improvement concerns the funding possibilities of start-ups in terms of initial public offerings, debt, and venture capital.

3.7 Summary

In terms of actual entrepreneurial activity split into early-stage entrepreneurial activity and established entrepreneurial activity, the Netherlands keep their unique position as compared to other economies in scoring high on both dimensions. This is likely to be related to the favourable institutional framework conditions fostering entrepreneurship in the Netherlands as reflected by the National Expert Survey. However, in terms of the quality of start-ups, Dutch business owners are considerably more pessimistic about expected job growth and are significantly less innovative as compared to business owners in similar economies.

4 Job growth expectations

Chapter 3 of this report revealed that the job growth expectations of Dutch early-stage entrepreneurs are relatively low from an international point of view. The present chapter zooms in on these job growth expectations while focusing on a different group of individuals, i.e. Dutch new and established entrepreneurs.

First, we determine whether job growth expectations differ along several demographic dimensions including gender, age, and educational attainment. Second, we make a distinction between several types of business owners and determine how this form of heterogeneity affects job growth expectations. The GEM APS data allow a distinction between firm size in terms of the number of employees, between the number of business owners, and between the specific industry (ISIC4) in which the business is active. This enables a comparison between four different types of business owners. These four types are: solo self-employed individuals ("*zzp'ers*"), solo entrepreneurs, team entrepreneurs, and employer firms. The first two types – the solo self-employed and solo entrepreneurs – refer to individual business owners without any employees whereas team entrepreneurs work in a team of business owners, again without employees. The group of employer firms contains all businesses (new or established) with at least one employee.

4.1 The importance of growth ambitions

Various theoretical explanations on firm growth point towards differentiating growth patterns among business types (Hart, 2000). Most theories assume that entrepreneurs strive to maximize profits. In accordance, this drive is presumed to lead to the pursuit of firm growth in order to achieve this goal. In some industries the progression to minimum efficient scale (MES) is deemed necessary to run a viable business. But not all firms achieve firm growth. There is much heterogeneity in the way that entrepreneurs are capable or even willing to let their business grow (Davidsson, 1989). From an organizational perspective it is argued that divergent growth patterns are caused by differences in demographic characteristics of firms, which is an often neglected aspect in previous studies (Delmar, Davidsson, and Gartner, 2003). Characteristics found to be systematically related to particular growth patterns are firm age, firm size and industry affiliation. This industrial organization approach assesses small scale businesses as an early-stage form in the life cycle model of firms that will later grow into larger companies (Mueller, 1972). Burke, Millán, Román, and Van Stel (2013) specifically point at small scale as a deliberate start-up strategy that increases future survival probabilities. Other explanations for the diversity in growth patterns between firms consider psychological motivation as influential and address the willingness of entrepreneurs to grow their business (Davidsson, 1989; Wiklund and Shepherd, 2003). Psychological motivation theories indicate that individuals make decisions based on a perceived value of outcomes and the probability that those outcomes can be realized (Ajzen, 1991; Fishbein and Ajzen, 1975). In other words growth willingness is a deliberate individual choice, based on the desire to grow and the perceived capabilities to achieve this growth. Hence, it is important to find these ambitious types of entrepreneurs.

Whether from an industrial organization point of view or from an individual psychological perspective, small scale is still often considered to be a stage in the firm's lifecycle. Terjesen and Szerb (2008) examined what individual, firm and

national environment factors affect the growth expectations of nascent, new, and established entrepreneurs. They specifically focused on development stages of firms and found that the influence of individual demographics and personal context varies for each growth phase. Hart (2000) indicates that the firm's goals might change through its life cycle. Early-stage businesses show high growth ambitions (Verheul and Van Mil, 2011) whereas established, more mature businesses tend to display declining growth rates (Delmar, Davidsson, and Gartner, 2003) and growth expectations (Terjesen and Szerb, 2008).

What seems to be understudied in the literature is whether the aforementioned effect of firm heterogeneity on growth patterns has a more permanent character. In other words what if certain types of business owners do not always aspire growth and evolve along the life-cycle? This might be the case if the psychological motivation of the business owner is more focused on satisfying needs than profit maximization (Simon, 1959).

4.2 Growth expectations of business owners

Remember that GEM asks business owners about the number of employees they expect to employ five years from 2012, i.e. 2017. Clearly, this number provides information about the growth aspirations of a business owner in terms of the number of employees. Furthermore, GEM asks business owners about the current number of individuals they employ. This chapter defines *job growth expectations* as the difference in the expected number of employees five years from now and the current number of employees. These job growth expectations may results in a number larger than 0 (meaning an expected increase in the number of employees), 0 (no expected change), and smaller than 0 (an expected decrease). Furthermore, one may calculate the relative expected increase or decrease in the number of employees, defined as the absolute change divided by the current number of employees. Note that a business owner may employ 0 individuals at the moment. An expected increase of 1 employee is defined as a relative increase of 100% in this special case.

Table 24 reveals the job growth expectations of business owners. It turns out that the majority of the Dutch business owners do not expect a change in the number of employees within the next five years. That is, more than 70 percent of the business owners take into account that their number of employees maintains stable. Furthermore, one out of every five business owners expects an increase in the number of employees.

The average expected increase – in absolute terms – would be 1.9 persons in five years. This seems a small growth number in absolute terms, but has to be put into perspective as it is the average across all businesses, thus ignoring business size or business type. The remainder of this chapter takes account of these various size classes and will distinguish between several types of business owners. The expected growth in relative terms comes down to about 38 percent, which can be considered as substantial. Note that the average firm size, defined as the total number of business owners and employees, is 12.5 persons.

Table 24 Growth expectations in number of employees within the next five years in the Netherlands, 2012, several measures

Measure of job growth expectations	
Expected decrease	7% of business owners
No expected change	72% of business owners
Expected increase	21% of business owners
Average growth expectations (absolute terms)	1.9 employees
Average growth expectations (relative terms)	38%
Current average firm size (owners+employees)	12.5

Source: Panteia/GEM APS 2012.

Growth expectations are an outcome of the entrepreneur's willingness to grow and his or her assessment of the possibility and capability to achieve this growth (Verheul and Van Mil, 2011). Since socio-demographic characteristics are important determinants of individual-level growth ambitions (Terjesen and Szerb, 2008; Verheul and Van Mil, 2011) we present the demographic structure of business owners in the Netherlands in Table 25.

Table 25 shows how job growth expectations differ along the demographic dimensions of gender, age, and educational attainment. For each sub-dimension, Table 25 shows the fraction of individuals expecting a decrease or an increase of the number of employees. Furthermore, Table 25 reveals the expected job growth expectations in absolute and in relative terms.

First, we note that two thirds of the business owners is male (68%), that the average age of a business owner is 43.7 years, and that the majority of business owners has a secondary degree (numbers not shown in Table 25).

Table 25 reveals that gender is an important determinant of job growth expectations. Male business owners are more likely to expect an increase of the number of employees than female business owners. In addition, the average growth expectations in absolute and relative terms are more substantial for male than for female business owners. On average female business owners even anticipate upon a slight decrease of their personnel in the next five years.

Regarding the age of the business owner, it turns out that growth expectations decrease with age. Young business owners are more likely to report job growth than older business owners. The largest growth expectations in absolute sense are revealed by business owners between 25 and 35 years old. Clearly, in relative terms the youngest business owners (18-24 years) have the highest growth expectations, also indicating that their businesses are smaller on average.

Business owners with the highest levels of educational attainment (post-secondary or university level; *HBO* or *Universiteit*) have the largest job growth expectations, both in absolute and relative terms (last two columns of Table 25). The most ambitious business owners in terms of an expected increase of the number of employees are those with a post-secondary degree. On the other hand, in absolute growth terms, the most ambitious business owners are those with a university degree, i.e. they expect to

achieve growth with 5.7 additional employees in the next five years. However, the vast majority of business owners has a secondary degree and states to have below-average growth expectations of 1.3 persons in five years.

Table 25 Demographic structure and growth expectations of number of employees in next five years in the Netherlands, 2012

		Expected decrease	*No expected change*	*Expected increase*	*Growth expectations (abs.)*	*Growth expectations (rel.)*
Gender	Male	6%	69%	25%	2.9	51%
	Female	10%	78%	12%	-0.2	10%
Age	18-24 years	8%	59%	33%	2.3	92%
	25-34 years	11%	52%	37%	3.7	55%
	35-44 years	5%	73%	22%	1.9	53%
	45-54 years	5%	83%	12%	1.6	22%
	55-64 years	11%	72%	17%	0.6	11%
Education	Some secondary degree	8%	76%	16%	0.5	21%
	Secondary degree (*Middelb. school*)	8%	68%	25%	1.3	27%
	Post-secondary degree (*HBO*)	6%	58%	37%	2.0	30%
	Graduate degree (*Universiteit*)	7%	72%	21%	5.7	118%

Source: Panteia/GEM APS 2012.

Table 26 relates to another interesting aspect that may determine job growth expectations, i.e. the location from where the business is run. It can be argued that there are more constraints to accommodate job growth for home-based businesses than for firms on separate premises (Risselada, Schutjens, and Van Oort, 2013). It appears that almost 60% of business owners operate from home. Just over 25% of the business owners have a separate premise from where they operate and 10% are ambulant (numbers not shown in Table 26).

Table 26 reveals that home-based business owners are less likely to reveal an expected increase of the number of employees than business owners who are based with a firm on a separate premise. Remarkably the most prominent and highest job growth is expected by ambulant business owners, in absolute and in relative terms.

Table 26 Business location and growth expectations of number of employees in next five years in the Netherlands, 2012

	Expected decrease	*No expected change*	*Expected increase*	*Growth expectations (abs.)*	*Growth expectations (rel.)*
From home	4%	83%	13%	0.5	29%
Separate premise	15%	57%	28%	2.6	25%
Mobile service	3%	71%	26%	3.8	71%
Other	7%	74%	18%	0.4	28%

Source: Panteia/GEM APS 2012.

4.3 Emerging types of entrepreneurship

The rise of solo self-employment

An emerging group of entrepreneurs deliberately chooses to run their business in a solitary form. These solo self-employed often start their ventures out of the need of more independence and to create more autonomy in their work. Their main product consists of their own labor and skills offered in the form of services. Rapelli (2012) reports that 70 percent of the self-employed population in the European Union is involved in a business without employees and 26 percent mainly offers highly skilled services. In the Netherlands 55 percent of the self-employed population is solo self-employed and mainly offer their own labor and skills in the form of services (Kösters, 2012). It often turns out that solo self-employed do not make the transition to employer firms and grow in terms of employment (Terjesen and Szerb, 2008). This development contradicts the view that solo-entrepreneurship is an initial (start-up) phase in the life-cycle of firms, where eventually growth occurs in the sense of revenues and employment (see Hart, 2000; Burke et al. 2013). In addition there has been evidence of high shares of necessity-based entrepreneurship among this group (De Vries, Liebregts, and Van Stel, 2013).

The growing importance of entrepreneurial teams

A growing number of new ventures is started by teams of entrepreneurs (Kamm, Shuman, Seeger, and Nurick, 1990). This development occurs regardless of the geographic location, type of industry or the gender of the founders. An entrepreneurial team consists of two or more individuals who jointly establish and own a business in which (financial) interest is shared. Much is still unclear regarding entrepreneurial teams although there is an increasing interest in the literature on team-level entrepreneurship (Francis and Sandberg, 2000; Lechler, 2001). An important strand of literature studies team effectiveness as teams are expected to be more efficient than individual entrepreneurs, because the combination of skills and experience that they bring together and easier access to resources. Thus it can be hypothesized that entrepreneurial teams will have less need to accumulate additional human capital and display less growth ambition than individual entrepreneurs.

4.4 Four types of business owners in the GEM dataset

Business founders can have an entrepreneurial imprinting effect that can influence their venture's growth performance (Grilli, Jensen, and Murtinu, 2013). It can be argued that the imprinting effect is more manifest among new and emerging firm types, for instance solo self-employed and team entrepreneurs. In these small-scale ventures other forces such as the need for autonomy and necessity-based motivation

may prevail instead of profit maximization (De Vries, Liebregts, and Van Stel, 2013). Since these emerging business types include great shares in the developed economies (Rapelli, 2012), this development might have consequences for their growth potential. Therefore it is relevant to gain more insight in how growth aspirations are manifest among different (emerging) types of entrepreneurship. In this chapter we are able to distinguish between the following four types of business owners. We will determine how job growth expectations differ among these four types of business owners.

Solo self-employment
Typical examples of solo self-employed are the freelance information and communication specialist or the own-account construction worker. There is no official definition of solo self-employment, but there is the common demeanor that their work consists of offering specialized services. This strongly resembles the work of specialized employees or so-called professionals.

In this report the solo self-employed are defined as single business owners without employees who offer their labor and skills mainly in the form of services. The GEM dataset contains no information on the type of main product so we follow Rapelli (2012) and use a pragmatic, sectoral classification. Individual business owners without employees who are active in construction (ISIC4: 41-43), transportation and storage (ISIC4: 49-53) and all of the (business) service sectors (ISIC4: 58-98) are classified as solo self-employed individuals.

Solo entrepreneur
There are also individual business owners without employees who do not offer mainly services but sell goods instead. These solo-entrepreneurs are different from solo self-employed and employees because they undertake radically different work. Typical examples of solo entrepreneurs according to this definition are individual farmers, merchants, or restaurant owners. Their businesses are more entrepreneurial in a classical way as they need higher capital investments, need to maintain stocks and perceive higher entry and exit barriers. In the GEM APS dataset business owners are considered solo entrepreneurs when they operate without fellow business owners and employees, and are active in primary or secondary economic sectors (ISIC4: 01-39), wholesale retail and trade (ISIC4: 45-47), or accommodation and food services (ISIC4: 56-56).

Team entrepreneurs
Businesses with multiple owners that operate without employees are considered to be run by team entrepreneurs, irrespective of the industry in which they are active.

Employer firms
All businesses that employ personnel are classified as employer firms. As a consequence this includes team entrepreneurs who operate with employees. Again, all sectors are included in this definition.

4.5 Growth expectations and types of business owners

Our sample consists of 450 business owners of which 29% are solo self-employed, 8% are solo entrepreneurs, 10% are team entrepreneurs, and 53% operate employer firms. Hence, about 47% of the business owners do not employ any personnel (where the number of owners may differ).

Solo self-employed individuals are clearly underrepresented in our sample considering that prevalence rates of 55% were reported in 2012 (Kösters, 2012). We therefore need to be careful in extrapolating the results to macro-level effects.

Job growth expectations were revealed by 445 business owners and are displayed by the four distinguished types of business owners in Table 27. The aforementioned definitions of solo self-employed, solo entrepreneurs and team entrepreneurs implicitly imply no expected decrease for these types of business owners, because such a decrease would mean that their businesses are not in existence anymore five years from now. Nonetheless Table 27 clearly shows that job growth expectations are dissimilar for the types of business owners. Solo self-employed are the least ambitious and only a minor fraction of these solo self-employed individuals expects an increase in the number of jobs within the next five years. They indicate an average job growth of 0.6 employees, but because of their small scale the relative growth expectation is still considerable (56 percent).

Furthermore, one out of every five solo entrepreneurs expects job growth in their business. In absolute terms the job creation of this group of entrepreneurs is 0.4.

The most substantial growth ambitions can be found among employer firms. One out of every four employers expects to grow in terms of personnel and on average they indicate to create an additional 3 jobs within the next five years. Due to an average firm size of 22.3 persons the relative growth percentage is lower than average (shown in the last two columns of Table 27).

Table 27 Growth expectations of number of employees within next five years, by type of business owners, the Netherlands, 2012

	Solo self-employed	*Solo entrepreneurs*	*Team entrepreneurs*	*Employer firms*	*Total*
Expected decrease	0%	0%	0%	14%	7%
No expected change	85%	81%	76%	62%	72%
Expected increase	15%	19%	24%	24%	21%
Average growth expectation (absolute terms)	0.6	0.4	1.3	3.0	1.9
Average growth expectation (relative terms)	56%	41%	59%	24%	38%
Firm size (owners+employees)	1	1	2.3	22.3	12.5

Source: Panteia/GEM APS 2012.

4.6 Characteristics of types of business owners

How can these differences in terms of job growth expectations between the several types of business owners be explained? To further unravel the differences in growth expectations we explore individual-level characteristics, entrepreneurial perceptions, and start-up motivations of the various types of business owners. Because of the relatively low number of observations we merged the categories of solo entrepreneurs and team entrepreneurs into the category "other business types".

Socio-demographic characteristics

As mentioned before socio-demographic characteristics have been proven to be influential in the determination of job growth expectations (Terjesen and Szerb, 2008). The socio-demographic decomposition of the three remaining types of business owners is presented in Table 28. The lagging growth ambitions of solo self-employed that we found earlier can be explained by a relative high share of female entrepreneurs and a relatively high age. Nearly 40 percent of the solo self-employed are female and the majority is older than 45 years. In terms of gender we already noticed (Table 25) that male business owners are more inclined to create new jobs than female business owners. Furthermore, job growth expectations are lower among older than among younger business owners. Finally, Table 28 reveals that solo self-employed individuals and business owners of employer firms seem to be higher educated than solo entrepreneurs and team entrepreneurs.

Based on the individual characteristics the more prominent growth ambitions of employer firms can be attributed to the higher share of male entrepreneurs. Furthermore we can point at the level of education as a determining factor of positive job growth expectations.

Table 28 Demographic structure of types of business owners in the Netherlands, 2012

		Solo self-employed	*Employer firms*	*Other business types*	*Total*
Gender	Male	61%	71%	71%	68%
	Female	39%	29%	29%	32%
Age	18-24 years	6%	3%	7%	5%
	25-34 years	11%	19%	18%	17%
	35-44 years	21%	34%	35%	30%
	45-54 years	38%	28%	25%	30%
	55-64 years	24%	16%	15%	18%
Education	Some secondary degree	4%	3%	5%	4%
	Secondary degree (*Middelbare school*)	59%	57%	72%	60%
	Post-secondary degree (*HBO*)	28%	27%	17%	26%
	Graduate degree (*Universiteit*)	9%	13%	6%	11%

Source: Panteia/GEM APS 2012.

Business location

The business location varies greatly between the types of business owners, see Table 29. The solo self-employed operate mostly home-based businesses. This is not uncommon, because of the similarity with employee work activity and low entry barriers for this type of work (De Vries, Liebregts, and Vroonhof, 2012). In general, all that is required to offer (business) services are a desk, a computer and communication equipment. Home-based businesses are less ambitious considering job creation. Whether their growth ambition is hampered because they are home-based or that they prefer to operate from home because the lack of ambitions still needs to be scrutinized. Sometimes a lean, risk-aversive start-up strategy could prove beneficial for job growth in the long run (Burke, Millán, Román, and Van Stel, 2013).

Furthermore the larger presence of mobile service among solo self-employed in Table 29 has also been reported in previous studies (De Vries, Liebregts, and Vroonhof, 2012). Employer firms are more often located on a separate premise, which can provide an explanation for their high growth expectations.

Table 29 Business location by type of business owners in the Netherlands, 2012, percentage of the given subgroup of business owners

	Solo self-employed	*Employer firms*	*Other business types*	*Total*
From home	80%	46%	62%	59%
Separate premise	3%	42%	25%	27%
Mobile service	15%	5%	8%	9%
Other	1%	7%	5%	5%

Source: Panteia/GEM APS 2012.

Entrepreneurial perceptions and start-up motivation

Theories on ambitious entrepreneurship consider psychological motivation as influential for the diversity in growth patterns between firms and address the willingness of entrepreneurs to grow their business (Davidsson, 1989; Wiklund and Shepherd, 2003). Psychological motivation theories indicate that individuals make decisions based on a perceived value of outcomes and the probability that those outcomes can be realized (Ajzen, 1991; Fishbein and Ajzen, 1975). In other words growth willingness is a deliberate individual choice, based on the desire to grow and the perceived capabilities to achieve this growth. Hence, it is important to investigate if there is a substantial difference in the entrepreneurial perceptions (see also Section 2.1) and start-up motivation (Section 3.1) of the several types of business owners.

Table 30 presents the entrepreneurial perceptions and start-up motivations for the various groups of business owners. Furthermore, for each type of business owner Table 30 shows the percentage of individuals that knows an entrepreneur.

Interestingly, the solo self-employed – albeit indicating below-average growth expectations – perceive above-average entrepreneurial capabilities. They are also more often familiar with entrepreneurs in their direct environment. On the other hand they indicate the highest share of necessity-driven motivation across all types, which has been proven to be of negative influence on growth ambitions (Verheul and Van Mil, 2011).

In conjunction with the psychological motivation theory solo self-employed individuals perhaps perceive they have the capability to start a successful business and grow, but more often lack the motivation to grow. The higher growth ambitions of employer firms can be attributed to a high share of opportunity-driven motivation. Other firm types (solo and team entrepreneurs) clearly see less start-up opportunities and have a higher fear of failure than solo self-employed individuals and employer firms. They are also less likely to know entrepreneurs in their direct environment.

Table 30 Entrepreneurial perceptions and start-up motivations for types of business owners in the Netherlands, 2012, percentage of business owners of a specific type (18-64 years of age) that agree with the statement

	Solo self-employed	*Employer firms*	*Other firm types*	*Total*
Perceptions of entrepreneurship:				
Perceived start-up opportunities	50%	49%	43%	48%
Perceived entrepreneurial capabilities	94%	84%	86%	87%
Fear of business failure	21%	21%	27%	22%
Knowing an entrepreneur	61%	55%	47%	55%
Start-up motivation:				
Opportunity-driven motivation	69%	77%	70%	73%
Necessity-driven motivation	19%	10%	5%	12%
Other motivation	12%	14%	25%	15%

Source: Panteia/GEM APS 2012.

4.7 Summary

In this chapter we explored the growth expectations of business owners in the Netherlands. We tried to unravel growth expectations by investigating the socio-demographic decomposition and whether certain growth patterns are more associated with specific types of businesses. For this purpose we distinguished between four types of business owners with special interest for new and emerging types of entrepreneurship, namely solo self-employment and entrepreneurial teams.

We showed that there are serious indications that the type of business matters for expected job creation. Job growth ambitions are most prevalent and the highest for employer firms. Considering individual characteristics male business owners, and younger and higher educated business owners expect to grow faster. Solo self-employed individuals reveal relatively low growth ambitions. The solo self-employed are more often female, are relatively old and tend to start a business out of necessity than opportunity.

5 Job satisfaction

This chapter focuses on job satisfaction among self-employed workers and employees using the APS 2012 data for the Netherlands. Based on the observation made in prior studies that self-employed workers are more satisfied with their work than employees this chapter starts with a simple comparison of job satisfaction levels between self-employed individuals and employees. This analysis will reveal whether different job satisfaction levels can be observed between both groups of workers using the APS 2012 data.

Next, since favourable (adverse) work conditions may increase (decrease) work satisfaction this chapter discusses how job satisfaction relates to various work-related aspects. The work-related aspects considered include whether one perceives independence in conducting one's job, whether one's work is considered to be meaningful or not, and whether one is exposed to excessive stress or not.

Furthermore, since it has been suggested that job dissatisfaction may induce individuals to set up their own business, this chapter explores how job satisfaction relates to start-up intentions. In addition, because the work-related conditions discussed above could also affect start-up decisions, the link between such conditions and start-up intentions is explored as well.

Finally, job (dis)satisfaction may not only directly relate to start-up intentions, it could also affect or be impacted by some of the other determinants of entrepreneurship. We consider how job satisfaction relates to entrepreneurial perceptions including perceived start-up opportunities, perceived capabilities, and fear of business failure (see Chapter 2).

5.1 Job satisfaction of self-employed workers and employees

Job satisfaction refers to the extent to which individuals are satisfied with their work. Job satisfaction is a determinant of job performance and has, for example, been associated with higher employee turnover (Ryan, Schmit and Johnson, 1996). Various studies have confirmed that the self-employed are more satisfied with their work than employees (Blanchflower and Oswald, 1998; Blanchflower, 2000; Hundley, 2001; Benz and Frey, 2004; Millán et al., 2013). It has been argued that greater job satisfaction reported by the self-employed is due to procedural preferences for independence and flexibility (Hamilton, 2000; Hundley 2001; Benz and Frey, 2008).

In the 2012 APS a question on job satisfaction was included in the Dutch survey. The dataset includes 2,476 workers of which 590 are self-employed and 1,886 are employees. Respondents who combine self-employment with a job in paid employment are included in the group of self-employed individuals.

On a scale from 1 to 6, workers were asked to assess how satisfied they are with their work or main employment at the moment of the interview. For the purpose of this chapter this scale was transformed considering the two highest categories (5 and 6) as "satisfied" and all other categories (1 to 4) as "not satisfied". The reason behind the grouping of the first 4 categories is that very few individuals indicate to be dissatisfied or very dissatisfied (values 1 or 2).

Table 31 reveals that two thirds of the Dutch workers are satisfied with their work in 2012. The pattern that self-employed workers are more satisfied with their work than employees is confirmed by the GEM 2012 data for the Netherlands. While three quarters of the self-employed indicate to be satisfied with the work they do, this applies to less than two thirds of the employees. Furthermore, the correlation between the originally scaled job satisfaction variable (categories 1-6) and a self-employment dummy variable (coded 1 for self-employed and 0 for paid employees) is positive and significant at the 1% level. This indicates a positive relationship between job satisfaction and being self-employed.

Table 31 Job satisfaction by employment status in the Netherlands (*n*=2,476), 2012, percentage of workers (self-employed and employees) being satisfied with one's work

	Satisfied with one's work
Employment status:	
Self-employed	74.9%
Employees	64.9%
All workers	67.3%

Source: GEM APS 2012.

5.2 Perceived work conditions of self-employed workers and employees

To what extent are there differences in perceived working conditions between the self-employed and employees? It has been suggested that self-employment, as compared to paid employment, is associated with independence or autonomy in the sense that it gives workers more freedom in conducting their work.

Table 32 shows that three quarters of the workers indicate that they can decide how to conduct their job, and that the average is higher among the self-employed (about 90%) than among the employees (about 70%). Thus, the self-employed seem to have more freedom than the employees how to conduct their job. A large majority of the workers evaluates their work to be meaningful to them as also shown in Table 32. The self-employed are more optimistic in this respect than the employees (94.9% versus 86.3%).

Furthermore, it appears that the self-employed are more positive as compared to employees when it comes to their perception of being exposed to excessive stress. While almost 65% of the self-employed indicate not to be exposed to excessive stress, this is true for less than 60% of the employees.

In sum, self-employed workers evaluate working conditions more often as positive than employees when it comes to perceived independence, perceived meaningfulness, and perceived absence of severe stress in one's work.

Table 32 Perceived working conditions by employment status in the Netherlands (n=2,476), 2012, percentage of workers (self-employed and employees) that agree with the statement

	"I can decide how to conduct my job"	*"The work I do means a lot to me"*	*"I am not exposed to excessive stress"*
Employment status:			
Self-employed	89.4%	94.9%	64.1%
Employees	70.3%	86.3%	57.9%
All workers	74.6%	88.7%	59.4%

Source: GEM APS 2012.

5.3 Job satisfaction and perceived work conditions

It can be expected that perceived working conditions will be associated with whether one is satisfied with one's work or not. When looking at correlations between the originally scaled job satisfaction variable and the indicators for perceived working conditions we find a significant positive correlation between job satisfaction on the one hand and perceived independence, meaningfulness and absence of stress on the other hand (p-values<0.01). Among the group of employees all these correlations are significantly positive at 1%. Among the group of self-employed workers job satisfaction displays significant positive correlations with absence of stress (p<0.01) and work meaningfulness (p<0.05). The correlation between job satisfaction and perceived independence is, however, not significant (p>0.10) for the self-employed workers.

Table 33 also relates job satisfaction to the perceived working conditions for both groups of workers. Table 33 reveals that workers who have favourable perceptions of their working conditions are more satisfied with their job than workers without such favourable perceptions. In all cases the differences in terms of job satisfaction between those with favourable and unfavourable perceptions of working conditions are larger among employees than among self-employed workers.

Regarding perceived independence 68.3% of the employees who perceive they can decide how to conduct their work is satisfied with their job as opposed to 56.7% of those who do not perceive such freedom in their work. For the self-employed, however, this difference is not so large (75.2% versus 71.2%). Furthermore, of those employees who consider their work as meaningful 70.6% is satisfied with their job as opposed to 27.3% of the employees who do not consider their work as meaningful. Among the self-employed the difference is also large but not as large as among the employees (76.0% versus 55.2%). Finally, when it comes to perceived absence of stress the employees who do not experience excessive stress are more satisfied (71.5%) than the employees who experience such stress (55.8%). Among the self-employed who do not experience excessive stress, 79.8% indicates to be satisfied, while this is 66.0% of the self-employed who do experience stress.

Table 33 Job satisfaction of workers (self-employed and employees) by perceived work conditions in the Netherlands (*n*=2,476), 2012, percentage of workers being satisfied with one's work

	Self-employed	*Employees*	*All workers*
"I can decide how to conduct my work"			
Agree	75.2%	68.3%	70.3%
Disagree	71.2%	56.7%	58.3%
"The work I do means a lot to me"			
Agree	76.0%	70.6%	72.0%
Disagree	55.2%	27.3%	30.3%
"I am not exposed to excessive stress"			
Agree	79.8%	71.5%	73.6%
Disagree	66.0%	55.8%	57.9%
Average	74.9%	64.9%	67.3%

Source: GEM APS 2012.

5.4 Job satisfaction, perceived work conditions, and entrepreneurial intentions

Job satisfaction has been found to predict future job quits (Sousa-Poza and Sousa-Poza, 2007) and to be a push factor that draws individuals into entrepreneurship (Brockhaus, 1980). The GEM APS data for the Netherlands for 2012 indeed suggest that there is a negative relationship between job satisfaction and intentions to become an entrepreneur.

It can be seen in Table 34 that workers who are not satisfied with their work have higher intentions to set up their own business in the next 3 years than satisfied workers (12.8% versus 9.1%). This pattern exists among both groups of workers, but it is more prevalent among the employees. On average, start-up intentions are higher among the self-employed than among the employees (14.8% versus 8.9%; last row of Table 34). Furthermore, the correlation between the originally scaled job satisfaction variable (6 categories) and the intentional entrepreneurship dummy variable (coded 1 for those who intend to start a business in the next 3 years and 0 otherwise) is negative and significant at the 1% level. This finding suggests a negative relationship between job satisfaction and start-up intentions. Or, in other words, a positive relationship between job dissatisfaction and start-up intentions. This provides further support to the notion that dissatisfied workers may be more likely to intend to set up a business.

Table 34 Start-up intentions of workers (self-employed and employees) by job satisfaction and work conditions in the Netherlands (*n*=2,476), 2012, percentage of workers

	Self-employed	*Employees*	*Total*
Job satisfaction			
Satisfied	14.2%	7.4%	9.1%
Not satisfied	16.5%	11.9%	12.8%
"I can decide how to conduct my work"			
Agree	15.8%	8.9%	10.8%
Disagree	8.1%	9.0%	8.9%
"The work I do means a lot to me"			
Agree	14.3%	8.3%	9.8%
Disagree	29.6%	13.3%	15.0%
"I am not exposed to excessive stress"			
Agree	14.7%	8.5%	10.1%
Disagree	15.3%	9.5%	10.7%
Average	14.8%	8.9%	10.3%

Source: GEM APS 2012.

How do the various working conditions relate to intentions to set up one's own business? In theory one could argue that factors such as perceived independence, perceived work meaningfulness, and perceived absence of stress may induce employees to look for entrepreneurship as an alternative. Adverse conditions could induce individuals in paid employment to set up their own business. If we look at start-up intentions it can be seen that only when work is not considered to be meaningful this seems to be associated with relatively higher start-up intentions among employees, but especially among the self-employed. Workers who are exposed to excessive stress do not seem to have much higher start-up intentions than workers who are not exposed to such stress. Start-up intentions are below-average for self-employed workers who do not think they can decide themselves how to do their job. Possibly they are disappointed in self-employment as a career choice and they instead will look for alternative opportunities in paid employment. This explanation is only speculative as we cannot test it with our data.

5.5 Job satisfaction and entrepreneurial perceptions

In the previous section we discussed how job satisfaction relates to intentions to set up one's own business. The expectation, based on prior literature, was that workers who are not satisfied may have higher start-up intentions than workers who are satisfied with their job, which was indeed confirmed by our data. Thus, job satisfaction may be one of the drivers of entrepreneurship. It is, however, also possible that job (dis)satisfaction relates to other drivers of entrepreneurship such as entrepreneurial perceptions (perceived opportunities, perceived capabilities, fear of failure). It may be the case that job satisfaction impacts such predispositions but also that such predispositions influence job satisfaction. In this section, although it is not possible for us to reveal exact causal links, we will further explore this by discussing some of the associations that exist between job satisfaction and the entrepreneurial perceptions.

Job satisfaction and perceived entrepreneurial opportunities

Opportunity perception is considered to be one of the drivers of entrepreneurial activity. It might be the case that dissatisfied employees are more open to alternative employment opportunities and therefore more often perceive start-up opportunities. This idea is somewhat confirmed when we look at the correlations between the originally scaled job satisfaction variable and perceived start-up opportunities. While for the full sample of workers (self-employed and employees), we find no significant correlation between job satisfaction and the perception of start-up opportunities, for the subsample of employees the correlation is significantly negative ($p<0.05$), indicating that employees who are more (less) satisfied less (more) often see start-up opportunities. The correlation between job satisfaction and perception of start-up opportunities is not significant among the subsample of the self-employed.

Table 35 displays this relationship between job satisfaction and perceived start-up opportunities. For the entire sample of workers there does not seem to be a difference between those who are satisfied and those who are not satisfied in terms of perceiving good start-up opportunities. When distinguishing employees from self-employed workers it appears that employees who are not satisfied more often see good start-up opportunities than employees who are satisfied. Satisfied self-employed workers, however, see more opportunities to start a business than dissatisfied self-employed workers. This is perhaps not surprising as the self-employed are already entrepreneurially active and may be open to new opportunities when they are satisfied with their work. The paid employed, as already argued above, may be more open to and more actively look for opportunities, however, when they are not satisfied with their current job in paid employment. Table 35 also reveals that the self-employed have more favourable perceptions about start-up opportunities than employees (50.1% versus 30.9%).

Table 35 Perceived start-up opportunities of workers (self-employed and employees) by job satisfaction in the Netherlands (n=2,476), 2012, percentage of workers that agree with the statement

	Self-employed	*Employees*	*Total*
Job satisfaction			
Satisfied	51.4%	29.1%	35.3%
Not satisfied	46.5%	34.2%	36.7%
Average	50.1%	30.9%	35.8%

Source: GEM APS 2012.

Could it also be the case that workers who perceive good start-up opportunities are more satisfied with their work? According to our data this is not true among the subsample of employees. Of those who perceive good start-up opportunities 60.3% is satisfied with their work, while this is valid for 65.9% for those who do not perceive good start-up opportunities. It is somewhat true among the self-employed as 75.2% of those perceiving good start-up opportunities are satisfied with their work as opposed to 71.4% of those not perceiving such opportunities. The difference is not so large though.

Job satisfaction and perceived entrepreneurial capabilities

Individuals who believe they have entrepreneurial knowledge, skill and experience are more likely to set up their own business. Therefore, it can be in the interest of a potential entrepreneur to invest in his or her skills during the period before start up

(whilst being a latent entrepreneur). It seems likely that people who made such investment decisions are more likely to become entrepreneurs.

The correlation between the original job satisfaction variable and perceived capabilities is significant and positive ($p<0.01$) indicating that people who are more (less) satisfied with their work are more (less) convinced of their entrepreneurial capabilities. The correlation, however, is only significant among the subsample of the self-employed and not among the employees.

Table 36 shows that, among employees, the perception of having entrepreneurial capabilities is similar for those who are satisfied and for those who are dissatisfied with their work. Self-employed workers who are not satisfied with their work, however, less often perceive having entrepreneurial capabilities than those who are satisfied (81.1% versus 88.2%). Not surprisingly, self-employed workers are much more likely than employees to perceive having entrepreneurial capabilities (86.4% versus 32.1%).

Table 36 Perceived capabilities of workers (self-employed and employees) by job satisfaction in the Netherlands (n=2,476), 2012, percentage of workers that agree with the statement

	Self-employed	*Employees*	*Total*
Job satisfaction			
Satisfied	88.2%	32.2%	47.1%
Not satisfied	81.1%	31.8%	41.0%
Average	86.4%	32.1%	45.1%

Source: GEM APS 2012.

Entrepreneurial capabilities such as knowledge, skills and experience may also be valuable for a job in paid employment. One could argue that creative and enterprising individuals may find more satisfaction in their jobs. We find little evidence that this is the case. While workers on average seem to be a bit more satisfied with their job when they perceive having start-up skills as opposed to when they do not (70.0% versus 64.6%), employees who indicate having start-up skills are not more satisfied with their job than those who indicate not to have start-up skills (for both groups of employees around 65% indicates to be satisfied with their job). Among the self-employed, however, those who perceive having start-up skills are more satisfied than those who lack such skills (76.0% versus 64.5%).

Job satisfaction and fear of business failure

There is evidence from prior studies that some personal characteristics that are typically associated with entrepreneurs such as self-efficacy and locus of control are significantly positively related to job satisfaction (Judge and Bono, 2001). Here we relate job satisfaction to fear of failure.

Fear of failure is considered to be one of the factors that may prevent individuals from undertaking entrepreneurial activities. When using the originally scaled job satisfaction variable it appears that there is a significant negative correlation between job satisfaction and fear of failure for the full sample of workers. Further refinements indicate that this is true for both the self-employed and paid employees (all significant at 1%).

In Table 37 it can be seen that fear of failure increases when job satisfaction decreases, although this is much stronger among the self-employed than among the paid employed. Not surprisingly, the share of workers that indicates that fear of failure would prevent them from setting up their own business is much higher among employees than among the self-employed (43.4% versus 22.8%).

Table 37 Fear of business failure of workers (self-employed and employees) by job satisfaction in the Netherlands (*n*=2,476), 2012, percentage of workers that agree with the statement

	Self-employed	*Employees*	*Total*
Job satisfaction			
Satisfied	18.4%	41.6%	35.4%
Not satisfied	35.9%	46.8%	44.8%
Average	22.8%	43.4%	38.5%

Source: GEM APS 2012.

Are workers with fear of failure less often satisfied with their work? Among the paid employed those who indicate to have fear of failure are a bit less often satisfied with their work than those who have no fear of failure (62.1% versus 67.0%). Among the self-employed this pattern is similar but stronger (60.5% versus 79.1%). This could imply that fear of failure may actually indirectly induce employees to set up their own business through a push effect of decreased job satisfaction. Employees with fear of failure may be pushed into setting up their own business through job dissatisfaction.

5.6 Summary

This chapter explored various issues related to job satisfaction comparing two groups of workers: self-employed workers and employees. In accordance with prior studies our 2012 data for the Netherlands show that self-employed workers more often indicate to be satisfied with their work than employees. Furthermore, it is found that the self-employed are more positive about work-related conditions including perceived independence in conducting one's work, perceived meaningfulness of one's work and perceived absence of excessive stress. It appears that workers who are not satisfied with their work are more likely to have intentions to set up their own business in the next 3 years, which is in particular true for employees. In addition, workers who do not experience their work to be meaningful are more likely to set up their own business and this is even truer among the self-employed. We also explored the association between job satisfaction and various entrepreneurial perceptions. It is found, for example, that workers who are not satisfied with their work more often see good start-up opportunities and have a higher fear of failure. Also, the analysis indicates that self-employed workers who are not satisfied with their job less often believe they have the entrepreneurial skills than self-employed workers who are satisfied with their job.

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