

9. Variations in new firm life duration for immigrant and native entrepreneurs*

Veronique Schutjens, Nardo de Vries and Anne Risselada

9.1 INTRODUCTION

The first stage in a firm's life course is a crucial one. Entrepreneurs must realize their business ideas, acquire and effectively use available (financial) resources, manage their initial investments and costs, prove that their products or services can be delivered on time and with good quality, and build trusting and trustworthy partners and networks. This is not easy – many firms do not survive this so-called 'valley of death'. According to Brüderl et al. (1992), the 'liability of newness' predicts high failure rates for new firms directly after start-up, whereas the 'liability of adolescence' hypothesis predicts the lowest survival chances after three or four years, attributable to cognitive, financial and emotional barriers to ceasing business activities earlier.

Variation among firms in survival rates and life durations, however, is substantial. This has resulted in an academic search for explanations for the survival patterns of cohorts of new firms in three different research fields: entrepreneurial characteristics such as human capital, firm characteristics such as firm sector and size, and features of the context (Littunen et al. 1998; Schutjens and Wever 2000; Beckers and Blumberg 2013; Riva and Lucchini 2015). The latter field captures characteristics of both the economic setting, such as market size, growth and concentration, and sector competition and neighbourhood factors (accessibility, land prices, safety). In particular, the sizes of local markets (Wang 2009), local opportunities for start-up capital (Michelacci and Silva 2007) and access to social capital through local networks (Dahl and Sorenson 2009; 2012) have received ample attention. For firm survival in the Netherlands, neighbourhood factors such as liveability have also been proven important (Raspe et al. 2010); more specifically for the survival of ethnic firms, the local share

of co-ethnic firms is important (Beckers and Blumberg 2013). According to El Bouk et al. (2013), even indirect neighbourhood effects play a role in the success of immigrant firms; for instance, in districts in which ethnic groups are under-represented, strategic coalitions and networks with other (native) entrepreneurs prove to be even more difficult. However, contextual effects extend beyond neighbourhood (economic) characteristics to encompass structural and institutional components. These structural and institutional features entail formal regulations, laws and rules but also business culture, unwritten market or trade rules and ‘rules of the game’. In particular, the culturally bound informal institutional business characteristics that differ between sectors, regions, markets and countries are said to impact the survival chances of new firms set up by immigrant entrepreneurs (Zaheer 1995). It is expected that immigrant entrepreneurs in particular encounter the ‘liability of foreignness’ (Hymer 1970) in opening and subsequently operating their new businesses. These immigrant entrepreneurs are thought to lack knowledge of the market environment and the rules of the game in the host society, which hampers their firms’ survival, life durations and growth. In the host society, immigrant entrepreneurs are ‘mixed embedded’: they are not only strongly anchored, both socially and professionally, in their ethnic communities but also in non-familiar institutional settings (Kloosterman et al. 1999). However, in the search for explanations for the lagging survival rates of immigrant firms compared with native firms, many studies fail to control for intervening factors such as firm sector (Fertala 2008); entrepreneurial characteristics (Mata and Portugal 2002; Riva and Lucchini 2015) and firm age (Beckers and Blumberg 2013).

Insight into the effect of the complex interaction between the characteristics of entrepreneurs, firms and their (institutional) contexts on firm duration or survival is still lacking. This is problematic, as without insight into the specific barriers in the life course of immigrant firms, potential solutions cannot be identified – nor can policy implications and policy instruments be formulated. If we do not know how these start-ups develop after their launch, inclusive entrepreneurship policies, aimed at increasing the start-up rate among disadvantaged and under-represented groups (Marchese 2014), might even turn out to be ineffective. Therefore, in this chapter, we explore whether the life durations of cohorts of new firms in Amsterdam, the Netherlands, differ between native and immigrant entrepreneurs, acknowledging for particular factors. The research question is: To what extent do the survival chances of new Amsterdam firms differ with respect to entrepreneur ethnicity, controlling for other entrepreneurial and firm characteristics, and does this differ between neighbourhood contexts?

We use a unique data set that combines information on the firm and entrepreneur levels from the LISA (Dutch National Information System on Jobs and Business Establishments), the Municipality of Amsterdam Research and Statistics Department, and Statistics Netherlands (CBS). Amsterdam was chosen for two reasons. First, the Dutch capital houses a relatively high number of immigrant entrepreneurs, not only compared with the total number of entrepreneurs but also compared with other adult population groups. The share of immigrant entrepreneurs in Amsterdam is relatively high (De Vries et al. 2009, p.20 and p.23). The second reason was data availability, on both local firms (LISA data, originating from the Project on 'Dynamic Neighborhoods in Dynamic Urban Economies') and real estate characteristics, made available by the Amsterdam Research and Statistics department (O&S). The latter data set enabled us to include business site characteristics in our analyses.

The following section presents an overview of the literature on the survival chances of new firms and their determinants, resulting in the three hypotheses to be tested in this chapter. Section 9.3 explains the data and methods used. Sections 9.4 and 9.5 present the results of the bivariate and the multivariate analyses on new firm survival chances. Section 9.6 concludes and discusses our findings.

9.2 SURVIVAL CHANCES AND LIFE DURATION OF NEW FIRMS: A LITERATURE OVERVIEW

Many firms die young. According to the academic literature regarding organizations' survival chances, this is because of the so-called 'liability of newness' (Stinchcombe 1965); in the first years after start-up, most firms are particularly vulnerable. Entrepreneurs must produce new products and services in unfamiliar markets, and they make mistakes from which they must learn over time. Their production or service delivery is neither efficient nor optimal in the beginning, causing competitive disadvantages. Furthermore, both within and outside the new firm, the entrepreneur, the employees and all stakeholders involved (e.g., financiers, customers, suppliers, advisors) must build trust and trusting relationships, which takes time and therefore money. Of course, we need to also acknowledge that quitting business activities early in the firm life course, is not always problematic. Although, at first, halting entrepreneurial activities seems to be a negative choice driven by problematic circumstances, for many ex-entrepreneurs, instead it is a positive step towards new labour market opportunities, such as higher earnings or challenges in a new job – or even a new firm. From the occupational choice perspective, people continuously balance the pros and

cons of entrepreneurship vs. being an employee (Evans and Leighton 1989; Riva and Lucchini 2015). Moreover, the tremendous variation in the reasons former entrepreneurs give for closing their businesses suggests that push motives are paralleled by pull motives: higher earnings, status or responsibilities in a (steady) job, a better balance between work and home, and selling the firm for a substantial amount of money (Schutjens et al. 2003).

However, in fact, only a limited number of new firms survive the 'valley of death' (Gibb 1990): the first four to five years of existence. This vulnerability of young firms particularly manifests itself at higher spatial levels in the high positive correlation between regional firm exit rates and regional firm entry rates. Regions characterized by high entry rates also show high exit rates, in particular in the first years (Audretsch and Fritsch 2002). These exits may of course involve both new and established (i.e., incumbent) firms. When incumbent firms are driven out of the market by newcomers, this is labelled as an 'entrepreneurial regime'; the regional firm population is in fact being replaced, which may signal economic change. However, regions in which new firms leave the market rapidly are characterized as 'revolving door regimes' – according to Audretsch and Fritsch, the 'last in–first out' principle. This latter pattern of young firms exiting the market during this time period has been found in a number of empirical studies, although the effect varies between business sectors (Brixy and Grotz 2007).

The only way to trace whether new firms in particular are prone to exiting the market is to perform longitudinal analysis, because this enables following (new) firms over time. Additionally, it enables determining whether the 'liability of newness' or the 'liability of adolescence' applies (Brüderl et al. 1992); the latter suggests that new firms' survival chances are the lowest some years after start-up rather than immediately. This delay has financial, cognitive and emotional explanations. New firms may survive the first year thanks to the amount of start-up capital they have. Furthermore, it takes time for an entrepreneur to gain insight into the firm's failure. Information about whether the quality of the products or services delivered matches the demand, and whether the necessary cash flow, stocks and productivity for optimal production are available, is not always known to the entrepreneur directly after start-up. The emotional explanation refers to the difficulty in confessing to friends, family and acquaintances that the firm did not survive, which may delay the firm's exit. Because of these aspects, according to the 'liability of adolescence', the curve of the hazard rate of new firms reaches its top later than it does according to the 'liability of newness' theory.

Explanations of firm survival chances can be categorized into three groups (Schutjens and Wever 2000). The first set is related to entrepreneur

characteristics, often denoted as human and social capital. Examples are age, experience, gender, ethnicity, networks and network use. A second set relates to firm characteristics, such as sector, age, and size. The final set of explanations links characteristics of the environment to firm survival chances. Factors belonging to this group are either market related (size, structure and growth of the market, market competition) or more structural, such as business cycle or formal vs. informal institutions, the latter being related to business cultures and ways of doing business. These institutions may vary between markets, sectors, regions and countries.

Although this chapter focuses on the survival of the new firms of immigrant entrepreneurs in particular, the following literature review briefly addresses other (sets of) explanations for firm survival, because exploring the ‘genuine’ effect of ethnicity on firm success should include controlling for the possible intervening roles of other factors related to the entrepreneur, firm or environment. However, the emphasis in the following synthesis of conceptual and empirical studies in the field is on ethnicity.

9.3 ENTREPRENEUR CHARACTERISTICS

9.3.1 Ethnicity

In his study on foreign investments, Hymer (1976) described the ‘liability of foreignness’ effect. This ‘liability’ states that foreign firms have lower survival chances than native firms (Zaheer 1995) because the former lack knowledge about and experiences with the specific markets and institutional environments of the host countries, in particular the laws, regulations and business cultures. This lack of knowledge and experience also applies to immigrant entrepreneurship and, more generally, to the field of ethnic entrepreneurship. A recent empirical study shows that the yearly firm survival chances within the four largest immigrant groups in the Netherlands are substantially and significantly lower than are those within the native (Dutch) group (Beckers and Blumberg 2013). However, what is the case in the first difficult life stages of new firms? ‘Liability of foreignness’ suggests that immigrant firms have more difficulty surviving these first years than Dutch firms. Empirical studies from other countries, however, show different outcomes. Mata and Portugal (2002) did not find significant differences in new firm survival chances between native and immigrant entrepreneurs in Portugal. Recently, Riva and Lucchini (2015) found no evidence of lower survival chances of migrant businesses in Milan, compared to their native Milanese counterparts – instead, they concluded that foreign-born owners even displayed significantly lower

risks of discontinuing the business. Supported by their general findings on higher firm survival rates in times of recession, the authors suggest that for migrant groups limited labour market opportunities might have prevented them from quitting their business activities (Riva and Luccini 2015). In contrast, after controlling for various personal and environmental factors, from her study in Upper Bavaria, Fertala (2008) concluded that non-German firms exited the market significantly more quickly than German firms in the first years after start-up. However, young firms established by immigrant entrepreneurs were more successful in regions with relatively high shares of ethnic minorities, suggesting an interactive effect between external (regional) factors and entrepreneur ethnicity. Although Fertala's study acknowledged the effect of control variables, firm sector was excluded from the analysis, thereby neglecting the differences between market concentration and economic growth between sectors.

9.3.2 Other Personal Characteristics

Beckers's 'human capital theory' (1964) assumes that investments in humans pays off, and that returns on investments, as expressed in wages, will eventually be greater than the initial investment costs, such as time, training and, of course, money. Initially this idea was applied to employees and business strategy regarding human resources; however, these human investments also apply to entrepreneurs and the success of their businesses (Mincer 1974; Blanchflower and Oswald 1998), for which ample empirical evidence exists (Bruins et al. 2000b). One of these empirical studies, using the longitudinal Dutch Start-up panel of the EIM, which began in 1994 and followed entrepreneurs over time, specifically focused on the effects of human and social capital on business success (Bosma et al. 2004). Although this study does not control for firm or external (neighbourhood) characteristics, the authors conclude that human and social capital investments by entrepreneurs benefit their new firms. With respect to both survival chances and life duration, it was found that prior entrepreneurial and sector experience had positive effects. This specific effect of experience even dominated the effects of entrepreneurial age and education level (Parker 2012).

9.4 FIRM CHARACTERISTICS

Studies related to firm demography emphasize firm characteristics in the explanation of firm survival. This approach is based on 'organizational ecology' (Carroll and Hannan 2000), in which organizations' entry, growth

and survival are studied in analogy to population demographics (Van Wissen 2000). The main firm characteristics addressed are firm age, size, sector and growth over the past few years.

9.4.1 Firm Age

The 'liability of newness' hypothesis states that firm age is positively related to firm survival chances. However, in his duration models of manufacturing start-ups in Baden-Württemberg, Strotmann (2007) found empirical evidence for the 'liability of adolescence', in which survival chances are lowest a number of years after start-up rather than immediately afterwards.

9.4.2 Firm Size

The 'liability of smallness' (Hannan and Freeman 1977) suggests that large firms have better survival chances than small firms. Often, large firms have acquired sufficient financial capital to remain solvent and a (market) reputation that could increase investor confidence. Additionally, in large firms, more people can identify and explore new opportunities in markets, products and processes, which might help to avert problems. Having a business partner is helpful too; there is empirical evidence that team start-ups have an initial advantage compared with solo ventures (Dirks et al. 2002; Stam et al. 2004).

9.4.3 Firm Sector

Between sectors, vast differences exist in market concentration, competition, size, growth and entry barriers. This renders studies on business success that do not properly control for type of firm sector somewhat obsolete – market environment is crucial to all firms (Fritsch et al. 2006; Kloosterman 2010), but especially to entrepreneurs positioning their new firm and either adapting to or proactively searching for available opportunities (c.f. Storti 2014).

9.4.4 Firm Growth

Realized firm growth, often expressed in an increased number of employees, could affect firm survival chances either positively or negatively. On the one hand, new employees increase production and also productivity eventually, which in turn increases market position and firm performance. On the other hand, hiring new personnel requires entrepreneurial

management and even leadership capabilities that may be absent, which could decrease employee productivity and, in the end, firm success.

9.4.5 Home-Based Businesses

The exact number of firms operating from entrepreneurs' homes is unknown; however, it is clear that the number of home-based businesses is considerable (Mason et al. 2011). Estimations differ enormously – the most recent figure for Dutch cities is that 60% of all active firms are home-based businesses (Risselada 2013, p. 66), many located in residential areas (Raspe et al. 2010). Often these are new or young firms that benefit from low rents and the opportunity to flexibly invest personal time and business space in the firm's early, vulnerable life stage. However, not all business activities can be conducted from home.

As of now, it is still unclear whether home-based firms perform better than firms located elsewhere. On the one hand, firm location and business site costs are limited when entrepreneurs operate their firms from home, and therefore, overhead costs are relatively low. This could help firms survive the first years of existence. On the other hand, endogeneity is involved because these low overhead (sunk) costs could encourage home-based entrepreneurs to close their firms relatively quickly when other (job) opportunities arise.

9.4.6 Rent or Owner Occupied

If a firm is home-based, the type of business premises also impacts overhead costs and therefore business survival chances. Entrepreneurs who invested in purchasing the home where their business is located might be more reluctant to close their businesses than might those who rent (Risselada 2013, p. 68).

9.5 CHARACTERISTICS OF THE CONTEXT: NEIGHBOURHOOD FEATURES

External influences on firms' success and survival chances have been the main focus of the 'industrial economics' literature, which attributes a considerable role to (macro) economic determinants (Geroski 1995; Fotopoulos and Louri 2000). Technological complexity, specific entry barriers and market structure, concentration and growth differ between types of markets and sectors, which also determine firm entry, firm growth and firm exit. This is why firm sector is one of the main determinants of business success.

The literature on regional and urban economics attempts to explain firm success from a spatial angle. Empirical studies emphasize and find effects of regional population density, unemployment rates, agglomeration economies and specialization on the share of new firms; however, in contrast, empirical work on firm exits vs. survival is rather limited. Fotopoulos and Louri (2000) made a first attempt to combine market context and regional factors in their study on the survival chances of new Greek manufacturing firms. From their analysis, they concluded that market context, business cycle and urban environment all impact business success. Based on their study of West German start-ups between 1983 and 2000, Fritsch et al. (2006) concluded that the impact of regional features such as BRP growth, the number of employees active in R&D and even features of neighbouring regions on new firm survival varies between different sectors, i.e., different economic and market contexts.

9.5.1 Local or Regional Market Size

In explaining business success, economic geography and regional economics have traditionally emphasized regional business context. Many new firms initially operate in familiar local or regional markets before they increase market scope, although ICT developments and opportunities have also enabled start-ups to begin global activities immediately (Hessels 2008). Increased demand for products and services, for instance caused by employment growth that increases income and purchasing power or caused by population growth, opens up market opportunities, and may especially benefit new entrepreneurs (Wang 2009; Fertala 2008; Renski 2011). As a rule, start-ups in regions with high economic and market growth will therefore show higher survival rates than their counterparts in regions in which market opportunities are stagnant. In her longitudinal study, controlling for many other factors, Fertala (2008) found empirical evidence for both a positive correlation between survival chances and regional population density and a negative correlation between survival and regional unemployment rates.

9.6 A MULTI-DISCIPLINARY APPROACH IN STUDYING THE SUCCESS OF IMMIGRANTS' FIRMS

The literature review above integrates new firm success factors from different disciplines: economics, economic geography and industrial economics. Many conceptual studies on firm survival combine these factors

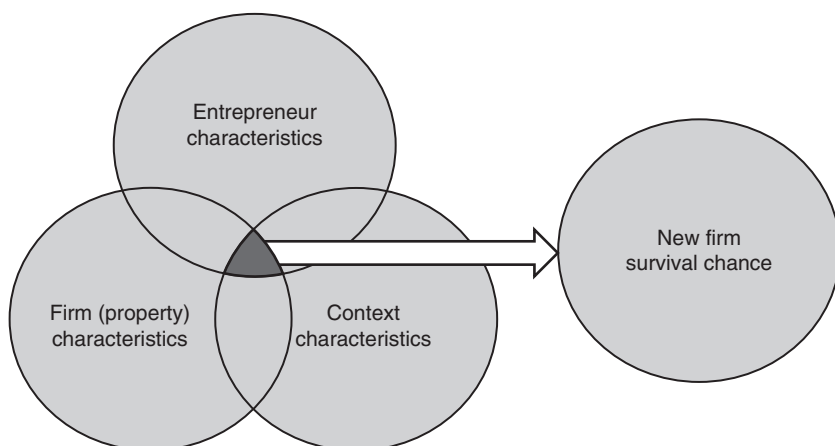


Figure 9.1 Integrating the three dimensions that explain new firm survival

in a multi- or trans-disciplinary (Welter 2012) approach. Kloosterman et al. (1999) introduced the term ‘mixed embeddedness’ to encompass the anchoring of immigrant entrepreneurs in the social (ethnic group), economic and political-institutional dimensions that all impact business success. In her conceptual study on the interaction between ethnicity, market opportunities and successful entrepreneurship, including the transnational links of immigrant entrepreneurs in particular, Wang (2013) even advocates ‘trans-disciplinary’ and ‘multi-scaled’ research.

In contrast to the number of conceptual studies about immigrant firm success and survival, the number of empirical studies on immigrant entrepreneurship is rather limited, largely owing to the limited availability of data on the many dimensions needed to fully understand and analyse the phenomenon (see Figure 9.1). The three studies that empirically integrate the most different dimensions of new immigrant firm success, capturing entrepreneur, firm and context characteristics, are the longitudinal analysis of Fertala (2008) on firm survival in the German region of Munich, the study on firm success in the Netherlands (Beckers and Blumberg 2013) and the recent study on survival chances of Milanese entrepreneurs (Riva and Lucchini 2015).

Based on the literature review above, the following three hypotheses are formulated, with a focus on isolating the potential effect of entrepreneur ethnicity (*hypothesis 1*) and on the interaction between the three explanatory dimensions identified (entrepreneur, firm, context) in explaining new firm survival (hypotheses 2 and 3):

1. The effect of entrepreneur ethnicity on the survival chances of new firms is neutralized when other entrepreneur and firm characteristics are controlled for;
2. strong neighbourhood socio-economic contexts positively impact new firm survival when other factors are controlled for;
3. the relationship between entrepreneur and firm characteristics and new firm survival varies between neighbourhood socio-economic contexts.

9.7 DATA AND METHODS

We constructed a database combining micro-level information on firms and their entrepreneurs over the period 2005–2008, and macro-level information at the neighbourhood level. This required a complex matching procedure to combine existing data files on Dutch inhabitants, firms and firm developments, types of business premises and business location addresses.

The matching procedures began with a Utrecht University data set (UU data set) on firm establishments in the municipality of Amsterdam. This data set originated from a research project¹ on firm developments in residential areas that contained yearly, detailed, micro-level firm information during the period of analysis from the National Information System of Employment register (Landelijk Informatiesysteem Arbeidsmarkt, LISA). The yearly firm characteristics included were year of registration as firm birth, sector, size and address. Using the business address as the key variable, we succeeded in matching the data with real estate data from the Department Research and Statistics (O&S) property database (Vastgoedbestand) for the municipality of Amsterdam. The resulting UU data set enabled year-on-year comparisons of whether new business establishments were still active, whether they had moved or survived, the types of businesses and business premises, and neighbourhoods where businesses were located.

Because the UU database lacked information on the entrepreneurs involved, and more specifically, the characteristic of specific relevance to this study – ethnicity – the data had to be matched with population registers. Using the Chamber of Commerce identification codes within the protected environment of Statistics Netherlands (CBS), register data from the Algemeen Bedrijven Register (ABR) could be linked to the UU data set. The ABR data included personal identification of each entrepreneur, which accordingly matched with the personal information included in the Sociaal Statistisch Bestand (SSB) and the Gemeentelijke Basisadministratie (GBA). The matching procedure resulted in a micro-level data set of new

firms established in Amsterdam between 2005 and 2008 on the characteristics of the entrepreneurs (such as age, gender, ethnicity, labour market experience) and of the neighbourhoods where these firms were located during the period of analysis.

The longitudinal research format entailed that all business establishments that began between 2005 and 2008 were followed during that same period. The start-up cohort of 2005 could be followed for 3.5 years on average, assuming that start-ups and exits occurred randomly throughout the year. The start-up cohorts of 2006 and 2007 were traced for 2.5 and 1.5 years, respectively. Of the start-up cohort of 2008, we could only follow the first six months. After pooling the data, we aggregated the firms established in subsequent years. That is, we could analyse the first six months of business life for all start-up cohorts (2005, 2006, 2007 and 2008); the first 1.5 years for firm cohorts (2005, 2006 and 2007); the first 2.5 years for cohorts (2005 and 2006); and, finally, all 3.5 years for the start-up cohort of 2005 only. In every step in the matching procedure, we lost a considerable number of cases, either because key identifiers did not match or because crucial information or key variables were lacking (for all details, see Schutjens et al. 2014). For instance, for only half of all cases was ethnicity – our key independent variable – known. After controlling for data errors (firms being coded as start-ups while at the same time being registered as over a year old), we were left with 9,885 new firm establishments (referred to below as new firms) that began in Amsterdam between 2005 and 2008.

9.7.1 Key Variables and Methods

Firm survival is measured by the firm's absence from the data set in year $t + 1$. Our key independent variable, ethnicity, is categorized by native vs. immigrant, and within the immigrant group, most descriptive tables distinguished between western and non-western and first- vs. second-generation immigrants, based on the definitions of the Dutch Bureau of Statistics.

In our multi-disciplinary approach, we controlled for entrepreneur, firm and context characteristics at time of start-up: gender, age by category (up to 35; 35–45; 45 or older), work experience during the four years before start-up (up to 2 years, 2–3 years, over 3 years), firm sector, type of business premises (home-based, rent or owner-occupied), the socio-economic status of the neighbourhood, and the share of non-western immigrants' firms in the neighbourhood business population (see Beckers and Blumberg 2013).

9.8 THE COMPOSITION OF NEW FIRMS: A FIRST DESCRIPTION

Before turning to the analysis of new firm life duration, we provide a short description of the data at hand. The new firms in the dataset vary substantially according to ethnicity, start-up year and entrepreneur and firm characteristics.

9.8.1 Comparing New Native and Immigrant Firms

Nearly 40% of all Amsterdam start-ups between 2005 and 2008 are led by an entrepreneur of immigrant origin, although that percentage decreases slightly. The number of non-western immigrant firms is only slightly larger than that for western immigrant firms. One-third of all immigrant entrepreneurs are second-generation; this share increases significantly especially among non-western immigrants (the share of second-generation immigrant entrepreneurs' firms increases from 18% to 25% between 2005 and 2008). Among western immigrant entrepreneurs, the share of second-generation entrepreneurs decreases from 49% in 2005 to 43% in 2008.

9.8.2 Entrepreneur Characteristics

Males are overrepresented among all entrepreneurs of new firms. This is most prominent among non-western immigrant entrepreneurs (over 76%), although within the second generation, the share of female entrepreneurs is increasing. The opposite applies for western immigrants; among this group, male overrepresentation is higher among second-generation entrepreneurs than among the first generation.

Immigrant entrepreneurs of new firms are substantially younger than their Dutch counterparts. Second-generation immigrant entrepreneurs in particular are relatively young, which can be entirely attributed to the second-generation, non-western immigrants (nearly 80% began their firms before 35 years of age). Among the second-generation western immigrants, the share of young entrepreneurs is even lower than it is among the first generation.

In a number of years, immigrant entrepreneurs have far less work experience than natives. One-fourth of all immigrant entrepreneurs have even fewer than two years of work experience. Surprisingly, this share is largest among first-generation western immigrants, who seem to begin their businesses relatively quickly after arriving in Amsterdam. It could be that in the CBS data, work experience in the home country is not accurately registered.

Table 9.1 Ethnicity and generation* by start-up year, in percentages

| | Start-up year 2005 | Start-up year 2006 | Start-up year 2007 | Start-up year 2008 | Total |
|-----------------------|--------------------|--------------------|--------------------|--------------------|-------|
| Native | 60.8 | 61.6 | 61.8 | 62.6 | 61.9 |
| Immigrant | 39.2 | 38.4 | 38.2 | 37.4 | 38.1 |
| 1st generation | 26.5 | 26.0 | 25.2 | 24.8 | 25.5 |
| 2nd generation | 12.7 | 12.4 | 13.0 | 12.6 | 12.6 |
| Non-western immigrant | 21.1 | 20.1 | 21.3 | 19.6 | 20.4 |
| 1st generation | 17.2 | 16.0 | 16.1 | 14.7 | 15.8 |
| 2nd generation | 3.9 | 4.1 | 5.2 | 4.9 | 4.6 |
| Western immigrant | 18.1 | 18.3 | 16.9 | 17.8 | 17.7 |
| 1st generation | 9.3 | 9.9 | 9.0 | 10.1 | 9.7 |
| 2nd generation | 8.8 | 8.3 | 7.8 | 7.7 | 8.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total N | 1519 | 2508 | 2465 | 3393 | 9885 |

Note: * According to the definition and characterization of the National Bureau of Statistics.

Table 9.2 Personal characteristics of the entrepreneurs, by ethnicity and generation, in percentages

| | Native | | Immigrant | | Non-western immigrant total | | Non-western immigrant 1st generation | | Non-western immigrant 2nd generation | | Western immigrant total | | Western immigrant 1st generation | | Western immigrant 2nd generation | | Total | |
|--|-------------------|-----------------|----------------|----------------|-----------------------------|----------------|--------------------------------------|-------|--------------------------------------|----------------|-------------------------|----------------|----------------------------------|-------|----------------------------------|----------------|-------|-------|
| | total | Immigrant total | 1st generation | 2nd generation | total | 1st generation | 2nd generation | total | 1st generation | 2nd generation | total | 1st generation | 2nd generation | total | 1st generation | 2nd generation | | |
| Entrepreneur characteristics | | | | | | | | | | | | | | | | | | |
| Gender | Male | 65.8 | 70.6 | 71.7 | 68.4 | 76.2 | 76.9 | 73.6 | 64.2 | 63.1 | 65.5 | 67.6 | 63.1 | 65.5 | 67.6 | 63.1 | 65.5 | 67.6 |
| | Female | 34.2 | 29.4 | 28.3 | 31.6 | 23.8 | 23.1 | 26.4 | 35.8 | 36.9 | 34.5 | 32.4 | 36.9 | 34.5 | 32.4 | 36.9 | 34.5 | 32.4 |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Age | Up to 35 | 33.3 | 42.7 | 38.6 | 51.0 | 45.5 | 35.8 | 78.9 | 39.6 | 43.3 | 35.2 | 36.9 | 43.3 | 35.2 | 36.9 | 43.3 | 35.2 | 36.9 |
| | 35-45 | 40.6 | 37.1 | 40.4 | 30.4 | 37.6 | 43.1 | 18.5 | 36.5 | 35.9 | 37.2 | 39.3 | 35.9 | 37.2 | 39.3 | 35.9 | 37.2 | 39.3 |
| | 45 or older | 26.1 | 20.2 | 21.0 | 18.6 | 16.9 | 21.1 | 2.6 | 23.9 | 20.8 | 27.6 | 23.8 | 20.8 | 27.6 | 23.8 | 20.8 | 27.6 | 23.8 |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Work experience to 4 years prior to start-up | Less than 2 years | 7.9 | 25.2 | 32.8 | 10.1 | 20.0 | 22.2 | 12.1 | 31.3 | 49.9 | 8.9 | 14.5 | 49.9 | 8.9 | 14.5 | 49.9 | 8.9 | 14.5 |
| | 2-3 years | 9.3 | 11.1 | 10.6 | 12.0 | 13.2 | 12.8 | 14.3 | 8.7 | 7.1 | 10.7 | 10.0 | 7.1 | 10.7 | 10.0 | 7.1 | 10.7 | 10.0 |
| | Over 3 years | 82.7 | 63.7 | 56.6 | 77.9 | 66.9 | 64.9 | 73.6 | 60.0 | 42.9 | 80.4 | 75.5 | 42.9 | 80.4 | 75.5 | 42.9 | 80.4 | 75.5 |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total | Total N | 6118 | 3767 | 2517 | 1250 | 2014 | 1560 | 454 | 1753 | 957 | 796 | 9885 | 957 | 796 | 9885 | 957 | 796 | 9885 |

In summary, we might already conclude that the huge variety in personal characteristics clearly indicates the need to differentiate between types of immigrant entrepreneurs.

9.8.3 Characteristics of Firms and Business Premises

Most new businesses are active in professional services, followed by consumer services (hotel and catering, retail and other services). The share of business services start-ups is highest among native entrepreneurs and second-generation western immigrants. In general however, most immigrant entrepreneurs begin with consumer services, in particular the second-generation, non-western immigrants. Among western immigrants, the share of start-ups in construction is particularly high.

The sector choices of new start-ups did not change substantially between 2005 and 2008. Among native entrepreneurs, the share of business services increases but the share of consumer services decrease slightly. This also occurs among second-generation immigrant entrepreneurs; however, the share of consumer services remains particularly high among new non-western immigrant firms (about 50%).

The majority of the start-ups begin in the entrepreneurs' homes (Table 9.5). In most cases, the entrepreneurs rent their premises. Relatively few non-western immigrant entrepreneurs operate their firms from their homes (only 23%); however, this is far more true for the first-generation entrepreneurs than for the second generation, possibly in line with the sectors in which the firms are active (see Table 9.3). Entrepreneurs' operating their firms from homes they own is most prevalent among both native entrepreneurs and second-generation western immigrant entrepreneurs.

9.8.4 Start-Up Location: Type of Neighbourhood

Nearly half of all new firms are located in neighbourhoods characterized by low socio-economic status (47%). However, this share is highest among non-western immigrants, at 72%; there is very little difference between first- and second-generation immigrants. The distribution of western immigrant entrepreneurs across neighbourhood types is comparable with the distribution of native immigrants. Finally, and in line with our previous findings, Table 9.6 shows that native entrepreneurs' new start-ups are located in neighbourhoods with low shares of non-western firms (16%). In contrast, for non-western immigrant entrepreneurs, this average share is 27%.

Table 9.3 Business sectors by ethnicity and generation, in percentages

| Sector | Native | Immigrant total | | | | Immigrant 2nd generation | | Non-western immigrant total | | Non-western immigrant 2nd generation | | Western 1st generation | | Western 2nd generation | | Total |
|----------------------|--------|-----------------|-------|-------|-------|--------------------------|-------|-----------------------------|-------|--------------------------------------|-------|------------------------|-------|------------------------|-------|-------|
| | | 2.7 | 2.4 | 3.0 | 1.3 | 2.1 | 2.5 | 2.8 | 7.3 | 5.1 | 3.9 | 1.5 | 7.2 | 4.3 | 2.6 | |
| Manufacturing | 7.2 | 13.0 | 16.8 | 5.4 | 12.2 | 13.7 | 14.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 9.4 | |
| Construction | 4.0 | 6.3 | 6.3 | 6.4 | 6.5 | 6.9 | 6.1 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 4.9 | |
| Transport, wholesale | 30.8 | 40.6 | 41.8 | 38.2 | 50.8 | 50.2 | 28.9 | 53.1 | 53.1 | 28.2 | 28.2 | 28.2 | 28.2 | 28.2 | 34.6 | |
| Consumer services | 12.5 | 9.8 | 8.2 | 13.0 | 7.1 | 6.5 | 12.9 | 9.0 | 9.0 | 10.9 | 10.9 | 10.9 | 10.9 | 10.9 | 11.5 | |
| ICT | 42.7 | 27.8 | 23.8 | 35.7 | 21.2 | 20.2 | 35.3 | 24.7 | 24.7 | 29.8 | 29.8 | 29.8 | 29.8 | 29.8 | 37.0 | |
| Business services | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Total | 6118 | 3767 | 2517 | 1250 | 2014 | 1560 | 1753 | 454 | 454 | 957 | 957 | 957 | 957 | 957 | 9885 | |

Table 9.4 Business sectors over time, by ethnicity and generation, in percentages

| Sector | Native | Immigrant total | Immigrant 1st generation | Immigrant 2nd generation | Non-western immigrant total | Non-western immigrant 1st generation | Non-western 2nd generation | Western immigrant total | Western 1st generation | Western 2nd generation | Total | |
|----------------------|--------|-----------------|--------------------------|--------------------------|-----------------------------|--------------------------------------|----------------------------|-------------------------|------------------------|------------------------|-------|------------|
| | | | | | | | | | | | | generation |
| Start-ups in 2005 | | | | | | | | | | | | |
| Manufacturing | 3.1 | 3.5 | 4.2 | x | 3.1 | 3.8 | x | 4.0 | x | x | 3.3 | |
| Construction | 5.9 | 7.4 | 9.4 | x | 5.6 | 6.1 | x | 9.5 | 15.5 | x | 6.5 | |
| Transport, wholesale | 5.3 | 9.1 | 9.4 | 8.3 | 10.3 | 11.1 | x | 7.6 | x | 9.0 | 6.8 | |
| Consumer services | 35.8 | 42.6 | 42.2 | 43.5 | 53.3 | 49.4 | 70.0 | 30.2 | 28.9 | 31.6 | 38.4 | |
| ICT | 13.2 | 11.7 | 11.4 | 12.4 | 8.4 | 8.8 | x | 15.6 | 16.2 | 15.0 | 12.6 | |
| Business services | 36.7 | 25.7 | 23.3 | 30.6 | 19.3 | 20.7 | x | 33.1 | 28.2 | 38.3 | 32.4 | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Start-ups in 2006 | | | | | | | | | | | | |
| Manufacturing | 3.2 | 2.1 | 2.6 | x | 1.8 | x | x | 2.4 | x | x | 2.8 | |
| Construction | 6.9 | 13.8 | 18.1 | 4.8 | 10.1 | 10.4 | x | 17.9 | 30.5 | x | 9.6 | |
| Transport, wholesale | 4.8 | 6.9 | 6.1 | 8.4 | 6.2 | 6.5 | x | 7.6 | 5.6 | 10.0 | 5.6 | |
| Consumer services | 30.8 | 39.9 | 41.0 | 37.6 | 52.2 | 51.7 | 53.9 | 26.4 | 23.7 | 29.7 | 34.3 | |
| ICT | 11.7 | 9.4 | 7.5 | 13.2 | 7.1 | 7.0 | x | 11.8 | 8.4 | 15.8 | 10.8 | |
| Business services | 42.6 | 28.0 | 24.6 | 35.0 | 22.6 | 22.1 | 24.5 | 33.8 | 28.5 | 40.2 | 37.0 | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |

Table 9.4 (continued)

| Sector | Native | Immigrant total | Immigrant 1st generation | Immigrant 2nd generation | Non-western immigrant total | Non-western 1st generation | Non-western 2nd generation | Western immigrant total | Western 1st generation | Western 2nd generation | Total | |
|--------------------------|--------|-----------------|--------------------------|--------------------------|-----------------------------|----------------------------|----------------------------|-------------------------|------------------------|------------------------|-------|--|
| | | | | | | | | | | | | |
| Start-ups in 2007 | | | | | | | | | | | | |
| Manufacturing | 2.8 | 3.3 | 4.2 | x | 2.3 | 2.5 | x | 4.6 | 7.2 | x | 3.0 | |
| Construction | 8.8 | 13.4 | 16.7 | 6.9 | 14.1 | 16.1 | 7.9 | 12.5 | 17.9 | 6.2 | 10.5 | |
| Transport, wholesale | 3.9 | 6.3 | 6.4 | 5.9 | 6.5 | 7.0 | x | 6.0 | 5.4 | 6.7 | 4.8 | |
| Consumer services | 29.7 | 39.9 | 41.1 | 37.5 | 49.7 | 49.5 | 50.4 | 27.4 | 26.0 | 29.0 | 33.6 | |
| ICT | 12.5 | 8.0 | 6.4 | 10.9 | 5.0 | 4.0 | 7.9 | 11.8 | 10.8 | 13.0 | 10.8 | |
| Business services | 42.3 | 29.2 | 25.1 | 37.2 | 22.5 | 20.9 | 27.6 | 37.7 | 32.7 | 43.5 | 37.3 | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| Start-ups in 2008 | | | | | | | | | | | | |
| Manufacturing | 2.1 | 1.6 | 1.9 | x | 1.8 | 2.0 | x | 1.3 | x | x | 1.9 | |
| Construction | 7.0 | 14.8 | 19.5 | 5.6 | 15.5 | 18.2 | 7.3 | 14.1 | 21.3 | 4.6 | 9.9 | |
| Transport, wholesale | 3.0 | 4.7 | 4.8 | 4.5 | 5.0 | 5.0 | x | 4.3 | 4.4 | 4.2 | 3.6 | |
| Consumer services | 29.5 | 40.9 | 42.9 | 36.9 | 49.5 | 49.9 | 48.5 | 31.3 | 32.7 | 29.5 | 33.7 | |
| ICT | 12.8 | 10.6 | 8.4 | 14.8 | 8.1 | 7.0 | 11.5 | 13.2 | 10.5 | 16.9 | 12.0 | |
| Business services | 45.7 | 27.5 | 22.6 | 37.3 | 20.0 | 17.8 | 26.7 | 35.8 | 29.4 | 44.1 | 38.9 | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |

Table 9.5 Business premises by ethnicity and generation, in percentages

| | Native | Immigrant total | Immigrant 1st generation | Immigrant 2nd generation | Non-western immigrant total | Non-western immigrant 1st generation | Non-western immigrant 2nd generation | Western immigrant total | Western 1st generation | Western 2nd generation | Total |
|---------------------------|--------|-----------------|--------------------------|--------------------------|-----------------------------|--------------------------------------|--------------------------------------|-------------------------|------------------------|------------------------|-------|
| Home-based and ownership | 15.5 | 18.9 | 20.1 | 16.5 | 23.0 | 25.3 | 15.1 | 14.1 | 11.5 | 17.3 | 16.8 |
| Home-based rent | 47.6 | 58.0 | 59.6 | 54.6 | 59.2 | 57.3 | 65.9 | 56.5 | 63.5 | 48.0 | 51.6 |
| Home-based owner-occupied | 36.9 | 23.1 | 20.3 | 28.9 | 17.8 | 17.4 | 19.1 | 29.4 | 25.1 | 34.7 | 31.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total N | 5578 | 3470 | 2328 | 1142 | 1871 | 1446 | 425 | 1599 | 882 | 717 | 9048 |

Table 9.6 Neighbourhood type by entrepreneur ethnicity and generation, in percentages

| | Native | Immigrant total | Immigrant 1st generation | Immigrant 2nd generation | Non-western immigrant total | Non-western immigrant 1st generation | Non-western immigrant 2nd generation | Western immigrant total | Western immigrant 1st generation | Western immigrant 2nd generation | Total | |
|---|---------------|-----------------|--------------------------|--------------------------|-----------------------------|--------------------------------------|--------------------------------------|-------------------------|----------------------------------|----------------------------------|-------|-------|
| Neighbourhood characteristics | | | | | | | | | | | | |
| Socio-economic status | High | 12.6 | 7.6 | 6.0 | 10.9 | 3.7 | 3.3 | 5.1 | 12.1 | 10.4 | 14.2 | 10.7 |
| | Medium | 47.3 | 33.8 | 31.1 | 39.1 | 24.3 | 24.2 | 24.4 | 44.8 | 42.5 | 47.6 | 42.1 |
| | Low | 40.1 | 58.6 | 62.9 | 50.0 | 72.0 | 72.5 | 70.4 | 43.1 | 47.1 | 38.1 | 47.2 |
| | Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | Total N | 5974 | 3712 | 2483 | 1229 | 1991 | 1541 | 450 | 1721 | 942 | 779 | 9686 |
| Neighbourhood share of firms of non-western migrants (average 2005-2008, neighbourhood PC4) | | | | | | | | | | | | |
| | Average | 15.9 | 22.6 | 24.1 | 19.6 | 27.2 | 27.5 | 25.9 | 17.3 | 18.4 | 16.0 | 18.4 |
| | Std deviation | 10.3 | 14.7 | 15.1 | 13.6 | 15.3 | 15.4 | 14.9 | 12.0 | 12.6 | 11.2 | 12.6 |
| | Total N | 6118 | 3767 | 2517 | 1250 | 2014 | 1560 | 454 | 1753 | 957 | 796 | 9885 |

9.9 THE ROLE OF ENTREPRENEUR ETHNICITY IN FIRMS' SURVIVAL CHANCES: ARE NEW FIRMS' SURVIVAL CHANCES LOWER FOR IMMIGRANTS THAN FOR NATIVES?

9.9.1 At First Sight: Differential Yearly Survival Chances by Entrepreneur Ethnicity

In this section, we focus on whether the survival chances of new firms in their first years of existence differ between entrepreneurs from different ethnic groups.

In the first years after start-up, firm survival chances do not differ between types of entrepreneurs (see the bottom rows of Table 9.7). Thus, initially and within the first 1.5 years, entrepreneur ethnicity does not play a role. However, the differences appear to increase when we consider the first 3.5 years (the analysis of which was only possible for the 2005 start-up cohort). In the group of entrepreneurs whom we were able to follow for their first 3.5 years, we observed a larger share of survivors among native entrepreneurs. In particular, only 46.7% of all new second-generation, non-western immigrant firms survive the first 3.5 years; this figure is over 61% and over 59% for native and western immigrants, respectively. The survival chances of western immigrants' firms mirror those of their native Dutch counterparts. However, among non-western immigrants, the difference in new firm survival chances between the first and second generations is considerable; the share of the latter generation that survived the first 3.5 years is 47%, whereas for the first generation, this percentage is 54%. For western immigrants' firms, the difference in survival chances between the first and second generations is negligible.

Although the pattern reflected in Table 9.7 suggests that an entrepreneur's ethnicity does indeed impact firm survival chances, this may also be the effect of other factors. For instance, new entrepreneurs' sector choices, firm types and personal or firm characteristics may be related to their ethnicities, and this might have influenced the results. And as we have seen in section 9.4, the characteristics of firms and entrepreneurs differ substantially between immigrants and natives. Therefore, the next section describes a multivariate analysis in which we control for all other factors available in the data. Because we showed that the difference between generations among entrepreneur ethnic groups is rather minimal and that the firm life chances of native and western immigrants are rather similar, we focus on only one dimension: the difference between non-western entrepreneurs vs. all other entrepreneurs.

Table 9.7 Shares of firms surviving the first years of existence, by start-up year, ethnicity and generation, in percentages

| | Native total | Immigrant total | Immigrant 1st generation | Immigrant 2nd generation | Non-western immigrant total | Non-western immigrant 1st generation | Non-western immigrant 2nd generation | Western immigrant total | Western 1st generation | Western 2nd generation | Total |
|--------------------------|--------------|-----------------|--------------------------|--------------------------|-----------------------------|--------------------------------------|--------------------------------------|-------------------------|------------------------|------------------------|-------|
| Start-ups in 2005 | | | | | | | | | | | |
| Total (N) | 923 | 596 | 403 | 193 | 321 | 261 | 60 | 275 | 142 | 133 | 1519 |
| Survived up to 0.5 year | 95.8 | 94.3 | 94.8 | 93.3 | 94.7 | 94.6 | x | 93.8 | x | 92.5 | 95.2 |
| Survived up to 1.5 years | 81.3 | 76.8 | 77.2 | 76.2 | 74.5 | 76.6 | 65.0 | 79.6 | 78.2 | 81.2 | 79.5 |
| Survived up to 2.5 years | 69.7 | 64.4 | 64.5 | 64.2 | 62.6 | 64.0 | 56.7 | 66.5 | 65.5 | 67.7 | 67.6 |
| Survived up to 3.5 years | 61.4 | 55.7 | 55.6 | 56.0 | 52.6 | 54.0 | 46.7 | 59.3 | 58.5 | 60.2 | 59.2 |
| Exited within 3.5 years | 38.6 | 44.3 | 44.4 | 44.0 | 47.4 | 46.0 | 53.3 | 40.7 | 41.5 | 39.8 | 40.8 |
| Start-ups in 2006 | | | | | | | | | | | |
| Total (N) | 1546 | 962 | 651 | 311 | 504 | 402 | 102 | 458 | 249 | 209 | 2508 |
| Survived up to 0.5 year | 97.1 | 97.7 | 98.2 | 96.8 | x | x | x | 96.7 | x | x | 97.3 |
| Survived up to 1.5 years | 86.2 | 83.5 | 83.6 | 83.3 | 83.9 | 84.6 | 81.4 | 83.0 | 81.9 | 84.2 | 85.1 |

| | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Survived up to 2.5 years | 76.9 | 74.3 | 74.3 | 74.3 | 74.2 | 75.4 | 69.6 | 74.5 | 72.7 | 76.5 | 75.9 |
| Exited within 2.5 years | 23.1 | 25.7 | 25.7 | 25.7 | 25.8 | 24.6 | 30.4 | 25.5 | 27.3 | 23.5 | 24.1 |
| Start-ups in 2007 | | | | | | | | | | | |
| Total (N) | 1524 | 941 | 621 | 320 | 525 | 398 | 127 | 416 | 223 | 193 | 2465 |
| Survived up to 0.5 year | 94.8 | 95.3 | 95.0 | 95.9 | 94.9 | 94.7 | x | 95.9 | 95.5 | x | 95.0 |
| Survived up to 1.5 years | 84.0 | 84.8 | 82.4 | 89.4 | 84.6 | 83.7 | 87.4 | 85.1 | 80.3 | 90.7 | 84.3 |
| Exited within 1.5 years | 16.0 | 15.2 | 17.6 | 10.6 | 15.4 | 16.3 | 12.6 | 14.9 | 19.7 | 9.3 | 15.7 |
| Start-ups in 2008 | | | | | | | | | | | |
| Total (N) | 2125 | 1268 | 842 | 426 | 664 | 499 | 165 | 604 | 343 | 261 | 3393 |
| Survived up to 0.5 year | 96.9 | 96.1 | 96.1 | 96.2 | 95.9 | 95.6 | 97.0 | 96.4 | 96.8 | 95.8 | 96.6 |
| Exited within 0.5 years | 3.1 | 3.9 | 3.9 | 3.8 | 4.1 | 4.4 | x | 3.6 | 3.2 | 4.2 | 3.4 |

9.10 MULTIVARIATE ANALYSIS: THE ROLE OF ENTREPRENEUR ETHNICITY UNRAVELLED

To what extent do the survival chances of new Amsterdam firms differ with respect to entrepreneur ethnicity, controlling for other entrepreneurial and firm characteristics, and do these chances differ between neighbourhood contexts?

Tables 9.8, 9.9 and 9.10 describe the logistic regression analyses of the first 1.5, 2.5 and 3.5 years of existence, respectively. In each model, per table, new factors are included to observe the change in parameter size, and signal when new explanations are added. The main finding is that the relatively low survival chances of non-western immigrants' new firms in the first 2.5 years are the result of a composition effect. It is shown that in the early life stage, limited work experience and youth are the main causes of business failure in this group and that after controlling for these, the (negative) effect on the survival chances of a non-western immigrant's firm is no longer significant. This is no surprise as Table 9.2 has already shown that the share of young entrepreneurs (under 34 years of age) involved in new firms is 45% (compared with 33% of native entrepreneurs). Related to this is the large share of non-western entrepreneurs who began with only meagre work experience (20% have less than 2 years of work experience, compared with only 8% for native entrepreneurs). Additionally, as is also shown in Tables 9.8, 9.9, and 9.10, both age and work experience are positively related to new firm survival chances. Furthermore, many non-western immigrants begin their new businesses in sectors in which new firm survival chances are relatively low: consumer services, construction, transportation and wholesale. This of course decreases the chances that their firms would survive.

If we follow the 'liability of newness' hypothesis with special focus on the first 18 months in a firm's life course, ethnicity does not play a role in new firm success, but the human capital of the entrepreneur together with sector choice does have an effect. However, this changes somewhat when we extend the period of analysis to 2.5 or 3.5 years. Tables 9.9 and 9.10 in particular show that when we consider longer periods, although composition effects remain, they decrease in importance. In particular when we apply a 3.5-year period of analysis after start-up, the chances of surviving these first 42 months are negatively influenced by entrepreneur ethnicity, even when we control for other entrepreneur and firm characteristics. The relatively low firm survival chances of non-western immigrant entrepreneurs remain significant, and the type of neighbourhood has an impact on survival chances as an interaction effect. In weaker neighbourhoods especially, with their relatively low socio-economic profiles, non-western

Table 9.8 New firm survival chances within the first 1.5 years after start-up, logistic regression

| | Neighbourhood socio-economic status | | | | | |
|--|-------------------------------------|------------|----------|-----------|------------|---------|
| | High SES | Medium SES | Low SES | High SES | Medium SES | Low SES |
| Ethnicity (ref = native and western immigrant) | | | | | | |
| Non-western immigrant | -0.106 | -0.054 | -0.036 | -0.036 | -0.019 | -0.085 |
| Gender (ref = male) | | | | | | |
| Female | 0.079 | 0.104 | 0.126 | 0.134* | 0.132 | 0.125 |
| Age (ref = up to 35) | | | | | | |
| 35-44 | 0.144* | 0.147* | 0.210*** | 0.232*** | 0.231*** | 0.212* |
| 45 or older | 0.058 | 0.087 | 0.178* | 0.172** | 0.168* | 0.028 |
| Work experience to 4 years before start-up (ref = less than 2 years) | | | | | | |
| 2 to 3 years | 0.148 | 0.151 | 0.196 | 0.207 | 0.207 | 0.245 |
| Over 3 years | 0.238*** | 0.229** | 0.249*** | 0.242** | 0.243** | 0.176 |
| Sector (ref = consumer services) | | | | | | |
| Manufacturing | 0.319 | 0.319 | 0.390 | 0.385 | 0.378 | 0.428 |
| Construction | 0.084 | 0.084 | 0.100 | 0.110 | 0.112 | 0.257 |
| Transport and wholesale | -0.361*** | -0.361*** | -0.363** | -0.413*** | -0.415*** | -0.349 |
| ICT | 0.328*** | 0.328*** | 0.382*** | 0.364*** | 0.359*** | 0.305 |
| Business services | 0.120 | 0.120 | 0.066 | 0.049 | 0.045 | 0.147 |

Table 9.8 (continued)

| | Neighbourhood socio-economic status | | | | | | | | | | | | |
|---|-------------------------------------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----|----------|--|--------|
| | High SES | | | Medium SES | | | Low SES | | | SES | | | |
| | β | β | β | β | β | β | β | β | β | β | β | | |
| Business premises (ref = non-home-based) | | | | | | | | | | | | | |
| Home-based rent | | | 0.086 | | 0.107 | | 0.107 | | 0.107 | | 0.334 ** | | -0.106 |
| Home-based owner-occupied | | | 0.119 | | 0.127 | | 0.131 | | 0.172 | | 0.338 ** | | -0.11 |
| Neighborhood (ref = high SES) | | | | | | | | | | | | | |
| Type pc 6 code | | | | | -0.071 | | -0.058 | | | | | | |
| Socio-economic status | | | | | -0.105 | | -0.051 | | | | | | |
| Neighbourhood share of firms of non-western migrants (average 2005–2008, neighbourhood PC4) | | | | | -0.003 | | -0.012 | | | | | | -0.002 |
| Constant | 1.652 *** | 1.363 *** | 1.273 *** | 1.110 *** | 1.182 *** | 1.204 *** | 1.014 *** | 1.020 *** | 1.376 *** | | | | |
| -2 Log likelihood | 5811.523 | 5791.921 | 5771.618 | 5213.281 | 5118.411 | 5117.786 | 444.326 | 2119.424 | 2427.143 | | | | |
| Cox & Snell R Square | 0.000 | 0.002 | 0.005 | 0.007 | 0.008 | 0.008 | 0.034 | 0.013 | 0.007 | | | | |
| Nagelkerke R Square | 0.001 | 0.004 | 0.009 | 0.012 | 0.013 | 0.013 | 0.058 | 0.022 | 0.011 | | | | |
| N | 6492 | 6490 | 6490 | 5811 | 5708 | 5708 | 538 | 2413 | 2757 | | | | |

Table 9.9 New firm survival chances within the first 2.5 years after start-up, logistic regression

| | Neighbourhood socio-economic status | | | | | | | | | | | |
|--|-------------------------------------|---------|-----------|------------|-----------|-----------|---------|---------|--------|-----|---|--|
| | High SES | | | Medium SES | | | Low SES | | | SES | | |
| | β | β | β | β | β | β | β | β | β | β | β | |
| Ethnicity (ref = native and western immigrant) | | | | | | | | | | | | |
| Non-western immigrant | -0.191*** | -0.163* | -0.131 | -0.13 | -0.105 | -0.071 | 0.727 | 0.108 | -0.21 | | | |
| Gender (ref = male) | | | | | | | | | | | | |
| Female | | 0.055 | 0.074 | 0.065 | 0.069 | 0.064 | 0.727 | -0.047 | 0.025 | | | |
| Age (ref = up to 35) | | | | | | | | | | | | |
| 35-44 | | 0.123 | 0.128 | 0.171** | 0.172** | 0.172** | 0.607* | 0.329** | 0.009 | | | |
| 45 or older | | 0.146 | 0.171 | 0.256** | 0.232** | 0.227** | 0.543 | 0.361** | 0.056 | | | |
| Work experience to 4 years before start-up (ref = less than 2 years) | | | | | | | | | | | | |
| 2 to 3 years | | 0.037 | 0.028 | 0.111 | 0.105 | 0.101 | 0.576 | -0.034 | 0.156 | | | |
| over 3 years | | 0.110 | 0.102 | 0.129 | 0.124 | 0.126 | 0.072 | 0.056 | 0.208 | | | |
| Sector (ref = consumer services) | | | | | | | | | | | | |
| Manufacturing | | | 0.361 | 0.545** | 0.553** | 0.543** | -1.655 | 0.695 | 0.400 | | | |
| Construction | | | 0.051 | 0.081 | 0.098 | 0.097 | 0.429 | -0.196 | 0.226 | | | |
| Transport and wholesale | | | -0.399*** | -0.374** | -0.417*** | -0.422*** | -0.916 | -0.435* | -0.405 | | | |
| ICT | | | 0.254** | 0.331** | 0.307** | 0.295** | -0.145 | 0.421* | 0.234 | | | |
| Business services | | | 0.031 | 0.017 | 0.010 | -0.001 | 0.535* | -0.191 | 0.077 | | | |

Table 9.9 (continued)

| | Neighbourhood socio-economic status | | | | | |
|---|-------------------------------------|------------|-----------|-----------|------------|-----------|
| | High SES | Medium SES | Low SES | High SES | Medium SES | Low SES |
| Business premises (ref = non home-based) | | | | | | |
| Home-based rent | 0.065 | 0.102 | 0.103 | 0.379 | 0.223 | -0.104 |
| Home-based owner-occupied | 0.099 | 0.130 | 0.140 | 0.186 | 0.309 | -0.127 |
| Neighborhood (ref = high SES) | | | | | | |
| Type pc 6 code | | -0.119 | -0.092 | | | |
| Socio-economic status | | -0.179 | -0.066 | | | |
| | | | -0.006 | -0.076 | -0.015 | -0.004 |
| Neighbourhood share of firms of non-western migrants (average 2005–2008, neighbourhood PC4) | | | | | | |
| Constant | 1.024 *** | 0.836 *** | 0.796 *** | 0.637 *** | 0.743 *** | 0.787 *** |
| -2 Log likelihood | 4709.888 | 4701.782 | 4685.288 | 4160.054 | 4103.162 | 4100.778 |
| Cox & Snell R Square | 0.001 | 0.003 | 0.007 | 0.009 | 0.010 | 0.011 |
| Nagelkerke R Square | 0.002 | 0.004 | 0.010 | 0.014 | 0.014 | 0.015 |
| N | 4027 | 4026 | 4026 | 3551 | 3490 | 3490 |
| | | | | | 325 | 1482 |
| | | | | | | 1683 |

Table 9.10 New firm survival chances within the first 3.5 years after start-up, logistic regression

| | Neighbourhood socio-economic status | | | | | |
|--|-------------------------------------|------------|----------|----------|------------|----------|
| | High SES | Medium SES | Low SES | High SES | Medium SES | Low SES |
| Ethnicity (ref = native and western immigrant) | | | | | | |
| Non-western immigrant | -0.339*** | -0.318** | -0.275** | -0.25* | -0.257* | -0.237 |
| Gender (ref = male) | | | | | | |
| Female | 0.032 | 0.084 | 0.158 | 0.165 | 0.161 | 0.108 |
| Age (ref = up to 35) | | | | | | |
| 35-44 | 0.050 | 0.066 | 0.068 | 0.086 | 0.088 | 0.128 |
| 45 or older | 0.261* | 0.304** | 0.402*** | 0.401*** | 0.402*** | 0.403* |
| Work experience to 4 years before start-up (ref = less than 2 years) | | | | | | |
| 2 to 3 years | 0.408* | 0.419* | 0.455* | 0.465* | 0.463* | 0.475 |
| Over 3 years | 0.120 | 0.133 | 0.208 | 0.194 | 0.196 | 0.225 |
| Sector (ref = consumer services) | | | | | | |
| Manufacturing and construction | 0.165 | 0.336 | 0.354* | 0.360** | 1.339 | 0.433 |
| Transport and wholesale | -0.236 | -0.144 | -0.166 | -0.165 | -1.339 | 0.199 |
| ICT | 0.469** | 0.587*** | 0.565*** | 0.559*** | 2.579** | 0.671** |
| Business services | 0.010 | 0.081 | 0.095 | 0.086 | 0.990** | 0.065 |
| | | | | | | -0.439** |

Table 9.10 (continued)

| | Neighbourhood socio-economic status | | | | | |
|---|-------------------------------------|------------|----------|----------|------------|----------|
| | High SES | Medium SES | Low SES | High SES | Medium SES | Low SES |
| Business premises (ref = non-home-based) | | | | | | |
| Home-based rent | -0.091 | -0.13 | -0.129 | 0.170 | -0.223 | -0.222 |
| Home-based owner-occupied | -0.021 | -0.034 | -0.027 | 0.407 | 0.035 | -0.293 |
| Neighborhood (ref = high SES) | | | | | | |
| Type pc 6 code | | 0.144 | 0.149 | | | |
| Socio-economic status | | 0.113 | 0.199 | | | |
| | | | -0.004 | -0.129 | 0.001 | -0.003 |
| Neighbourhood share of firms of non-western migrants (average 2005–2008, neighbourhood PC4) | | | | | | |
| Constant | 0.445*** | 0.221 | 0.117 | -0.011 | -0.122 | -0.097 |
| -2 Log likelihood | 2047.116 | 2040.161 | 2030.018 | 1821.050 | 1785.440 | 1785.069 |
| Cox & Snell R Square | 0.005 | 0.009 | 0.016 | 0.021 | 0.021 | 0.022 |
| Nagelkerke R Square | 0.006 | 0.012 | 0.021 | 0.028 | 0.029 | 0.029 |
| N | 1519 | 1519 | 1519 | 1367 | 1338 | 1338 |
| | | | | 129 | 564 | 645 |

immigrant entrepreneurs have difficulty maintaining their firms even after the other factors are accounted for. In better-off neighbourhoods, the effect is also negative, but the parameter size is much smaller and is no longer significant.²

In sum, when the first 3.5 years after firm start-up are considered, relatively more new non-western immigrant firms fail compared with other new firms, even when we control for entrepreneur, firm and neighbourhood characteristics.

Although our analyses cover a relatively short business life span (up to 3.5 years after start-up), we may conclude that explanations for new firm survival appear to change. The negative effect on the survival of new firms begun by entrepreneurs from non-western immigrant origin is greater and more significant when analysing longer time spans, and it remains so even after controlling for other characteristics. The relatively poor performance of non-western immigrant start-ups in the first 1.5 years is not attributable to entrepreneur ethnicity but to relatively limited work experience, youth and having selected business sectors in which firm survival is relatively hard. After some years, substantially more non-western immigrant entrepreneurs close their businesses than other entrepreneurs; even in these cases, however, the local start-up business environment appears to be an important predictor of firm survival, even eliminating the genuine ethnicity effect. However, in socio-economically weak contexts, we witness a persistent higher firm exit rate among non-western entrepreneurs than among other entrepreneurs.

9.11 DISCUSSION

Central to our literature review and the conceptual model presented is a multi-disciplinary approach, as the factors that impact business success are many and can be viewed from different angles and perspectives. Because of the high correlation between entrepreneur ethnicity and other personal, firm and context characteristics, any analysis is rendered obsolete when the other potential determinants are not controlled for. To this end, we have combined three dimensions of explanations (i.e., characteristics of the entrepreneur, the firm and the context) to detect whether there is a genuine effect of entrepreneur ethnicity on new firm survival. We found empirical evidence for the 'liability of adolescence' hypothesis in the survival patterns of both native and immigrant new firms in Amsterdam. However, a more interesting result was that non-western immigrant entrepreneurs' firms do not survive for as long as firms started by native or western immigrant entrepreneurs, mainly because of the former entrepreneurs' relative

youth and relatively limited work experience. In addition, firm sector played a role – non-western immigrants often establish their firms in business sectors characterized by relatively low survival chances. Only when we considered a longer time span of 3.5 years did we find an additional (negative) effect of being a non-western immigrant entrepreneur on firm life duration. This suggests that in a firm's very early years, the effect of institutional or market barriers on immigrant firm success, often referred to in the 'mixed embeddedness' literature, is dominated by the effect of the limited human capital of immigrant entrepreneurs. However, after three years, immigrant entrepreneurs appeared to encounter different difficulties or barriers than native entrepreneurs, regardless of their age, work experience or firm sector.

Based on the literature survey in section 9.2, we presented three hypotheses. First, we expected that a negative influence of ethnicity on firm success would disappear when other factors were controlled for. This was only true for the first 2.5 years of existence. After this period, there appeared to be a separate (negative) effect of entrepreneurs' being of non-western origin on the chances that their new firms would survive. A second expectation was that neighbourhood socio-economic status would also impact new firms' survival chances. For this, we found no empirical evidence. However, the type of neighbourhood did impact the negative effect of entrepreneur ethnicity on firm survival – i.e., there was an interaction effect. This held even when other factors were controlled for. Finally, we expected that the relationship between entrepreneur and firm characteristics on the one hand and new firm survival on the other hand would vary in different and contrasting neighbourhood settings. Our results suggested that we cannot reject this hypothesis: in different neighbourhood socio-economic contexts, other determinants of firm survival appeared to apply. The model results for the separate neighbourhood types indicated differing explanatory factors. This could be attributable to differing opportunities for non-western immigrant start-up entrepreneurs.

Our findings correspond with the mixed embeddedness concept interconnecting firm success approaches from the supply (entrepreneurs and their networks) and demand side (socio-economic and political environments) (Kloosterman et al. 1999; Rath and Schutjens 2015). The relatively low firm longevity for migrant entrepreneurs was also found for The Netherlands (Beckers and Blumberg 2013) and for Germany (Fertala 2008). However, the recent evidence of higher survival changes for migrant entrepreneurs in Milan, Italy, by Riva and Lucchini (2015) sharply contrasts these findings. The latter authors suggest that their results might be due to differential labour market alternatives for migrant and native

entrepreneurs. Also the absence of including work experience in their analyses might have affected their findings.

9.12 CONCLUSIONS

This contribution has analysed whether the survival chances of new firms in their early stages varied among entrepreneurs belonging to different ethnic groups. Our study is unique in that it combined entrepreneur, firm and neighbourhood characteristics in one multi-disciplinary setting focused on the survival chances of new firms. Whereas other studies have either focused on all firms rather than new firms (Beckers and Blumberg 2013), neglected firm sector (Fertala 2008) or analysed only the first year of existence (Dagevos 2009), our study attempted to encompass as many factors and time frames as possible.

Our main finding is that the relatively low survival chances of non-western immigrants' new firms in the first 2.5 years are the result of a composition effect. It is shown that in the early life stage, limited work experience, youth and sector choice are the main causes of business failure in this group and that after controlling for these, the (negative) effect on the survival chances of a non-western immigrant's firm is no longer significant. However, when a longer time span is considered (the first 3.5 years), there remains a separate negative effect of ethnicity on firm survival, especially in districts with relatively low socio-economic status. These shifting explanations of business success, that are clearly visible even within our short period of analysis, suggest that firm dynamics in the first life stage are considerable. We conclude that not only their survival chances but also their explanations are dynamic. Mechanisms for new firm survival appear to change over time, even during firms' vulnerable early life stages.

Inclusive entrepreneurship policies aim to support social inclusion and create opportunities for disadvantaged or under-represented groups on the labour market to start a business (Marchese 2014). Many of these efforts may turn out to be in vain if these start-ups do not survive the first stage in a firm's life course. Our findings have several implications for policies aimed at increasing survival chances of immigrant firms. First, policy makers should be aware that explanations for firm survival appear to change over time. In the earlier stages of the start-up process, firm exit is predominantly an effect of the lack of experience, youth and selecting business sectors in which firm survival is relatively hard. Therefore, it is important to make an effort to increase the human capital of immigrant entrepreneurs. The role of (tailored) financial education is often stressed (Marchese 2014). (Nascent) immigrant entrepreneurs should be thoroughly informed

prior to their start-up about the market and institutional environment they want to start their business in. Furthermore, the younger and less experienced immigrant starters should be informed about existing alternative career opportunities, to give them at least an opportunity to postpone an early, less prepared business start-up. Regarding the standalone negative effect of entrepreneur ethnicity on firm survival in the firm's adolescence stage (after 3.5 years), it is not clear which specific barriers to survival are at stake. Therefore, it can be beneficial to provide specific coaching for and information exchange between immigrant entrepreneurs reaching this particular stage in the firm life course. Second, our findings should make policy makers more aware that neighbourhood context matters in the case of immigrant entrepreneurship. For instance, the location choice is very important in the early stage development of the immigrant business. Guidance in this location choice could help prevent selection effects of immigrant start-ups in high competition business sectors and in low status socio-economic areas. Furthermore, spatial and economic development plans could be designed in a way that fosters immigrant entrepreneurship. Especially in low socio-economic status neighbourhoods, a greater ethnic and sectoral heterogeneity of entrepreneurship could help reduce competition and improve the survival chances of immigrant firms.

There are specific limitations of this empirical research that might have influenced our results. First, although the data set used enabled the analysis of three contrasting dimensions of firm survival determinants, it still failed to include all relevant factors. For instance, information was lacking about entrepreneurs' personality features (so-called traits), education levels, financial and social capital, work experience in the home country and firm growth. Including these aspects might add additional insight into the determinants of firm success. Second, at every step in the complex matching procedure, we lost a considerable number of cases, either because key identifiers did not match or because crucial information or key variables were lacking. For instance, for only half of all cases was ethnicity – our key independent variable – known. Third, although the 'genuine' effect of entrepreneur ethnicity on new firm survival chances after the first years of the business is intriguing, it is still unclear exactly why these non-western immigrant firms survived less often. The mechanisms behind this lagging firm survival of non-western immigrant entrepreneurs, however, cannot be adequately traced in a quantitative analysis based merely on register data. In future attempts to assess the exact impact of entrepreneur ethnicity on new firm survival, it is recommended that the research area be extended in order to compare different urban and institutional settings. The robustness of our findings and model parameters would also greatly benefit from the inclusion of more cohorts

that are then also followed over a longer period. Furthermore, it should be noted that survival chance is only one particular aspect of new firm success. Future studies on new immigrant firm performance will benefit from a broader perspective that also uses innovation, employment growth and sales growth as indicators of business success (c.f. Riva and Lucchini 2015). Finally, in future investigations of new firm survival, qualitative research is highly recommended, preferably in a longitudinal setting, which would enable closely tracking exiting firms in order to interview the (ex-)entrepreneurs as soon as possible about their exit motivations. This could help to shed light on the limited survival chances of new immigrant firms as well as the entrepreneur, firm and external circumstances and conditions that impact firm success. Moreover, this qualitative research is also needed to pinpoint whether there are specific barriers to survival or even growth in non-western immigrant firms' early years and, if so, what those barriers are and how they can be overcome.

NOTES

- * The chapter has been written in the framework of the research program SCALES carried out by Panteia/EIM and financed by the Dutch Ministry of Economic Affairs. The research was funded by the Foundation Chair of Ethnic Entrepreneurship VNO-NCW in collaboration with the Universities of Amsterdam and Utrecht, and the Netherlands Institute for City Innovation Studies (NICIS, now Platform 31). All calculations are our own based on micro data sets collected by Statistics Netherlands (ABR, SSB, RAV and GBA).
1. The data set was generated through the project 'Dynamic Neighbourhoods in Dynamic Urban Economies', coordinated by the Universities of Amsterdam and Utrecht, and the Netherlands Institute for City Innovation Studies (NICIS, now Platform 31).
 2. The sizes and signs of parameters and significances remained approximately the same when neighbourhoods of medium and high socio-economic status were included in one group.

REFERENCES

- Audretsch, D.B. and M. Fritsch (2002). Growth regimes over time and space. *Regional Studies* **36**(2), 113–124.
- Becker, G.S. (1964). *Human Capital*. New York: Columbia University Press.
- Beckers, P.J. and B. Blumberg (2013). Immigrant entrepreneurship on the move: a longitudinal analysis of first- and second-generation immigrant entrepreneurship in the Netherlands. *Entrepreneurship and Regional Development*, **25**(7–8), 654–691.
- Blanchflower, D.G. and A.J. Oswald (1998). What makes an entrepreneur? *Journal of Labour Economics*, **16**(1), 26–60.
- Brixy, U. and R. Grotz (2007). Regional patterns and determinants of birth and

- survival of new firms in Western Germany. *Entrepreneurship and Regional Development*, **19**(4), 293–312.
- Bruins, A., F. van Uxem, V.A.J.M. Schutjens and E. Wever (2000). New firm life paths: the need for differentiation. In J. van Dijk and P.H. Pellenbarg (eds). *Demography of Firms, Spatial Dynamics of Firm Behavior* (NGS 262). Utrecht and Groningen: KNAG, pp. 49–66.
- Bouk, El F., Vedder, P. and Y. te Poel (2013). The networking behavior of Moroccan and Turkish immigrant entrepreneurs in two Dutch neighborhoods: the role of ethnic density. *Ethnicities*, **13**(6), 771–794.
- Bosma, N., M. van Praag, R. Thurik and G. de Wit (2004). The value of human and social capital investments for the business performance of startups. *Small Business Economics*, **23**, 227–236.
- Brüderl, J., P. Preisendorfer and R. Ziegler (1992). Survival chances of newly founded business organizations. *American Sociological Review*, **57**, 227–242.
- Carroll, G.R. and M.T. Hannan (2000). *The Demography of Corporations and Industries*. Princeton, NJ: Princeton University Press.
- Dagevos, J. (2009). Werkloosheid, uitkeringen en werk. In M. Gijsberts and J. Dagevos (eds). *Jaarrapport integratie 2009*. Den Haag: Sociaal Cultureel Planbureau, pp. 139–167.
- Dahl, M.S. and O. Sorenson (2009). The embedded entrepreneur. *European Management Review*, **6**(3), 172–181.
- Dahl, M.S., and O. Sorenson (2012). Home sweet home: entrepreneurs' location choices and the performance of their ventures. *Management Science*, **58**(6), 1059–1071.
- Dirks, F., P. Hospers, V.A.J.M. Schutjens and E. Stam (2002). *De meerwaarde van een team start-up?* Den Haag: Raad voor het Zelfstandig Ondernemerschap.
- Evans, D.S. and L. Leighton (1989). Some empirical aspects of entrepreneurship. *American Economic Review*, **79**(3), 519–533.
- Fertala, N. (2008). The shadow of death: do regional differences matter for firm survival across native and immigrant entrepreneurs? *Empirica*, **35**, 59–80.
- Fotopoulos, G. and H. Louris (2000). Location and survival of new entry. *Small Business Economics*, **14**, 311–321.
- Fritsch, M., U. Brixey and O. Falck (2006). The effect of industry, region and time on new business survival – a multi-dimensional analysis. *Review of Industrial Organization*, **28**, 285–306.
- Geroski, P.A. (1995). What do we know about entry? *International Journal of Industrial Organization*, **13**, 421–440.
- Gibb, A. (1990). Small business in the UK: state of development, expectations and policy. Durham University Business School, Occasional Paper no. 9094.
- Hannan, M.T. and J. Freeman (1977). The population ecology of organisations. *American Journal of Sociology*, **82**, 929–964.
- Hessels, J. (2008). International entrepreneurship: value creation across national borders. Erasmus University Rotterdam, Erasmus Research Institute of Management (PhD Series 144).
- Hymer, S.H. (1976). *The International Operations of National Firms: A Study of Direct Investment*. Cambridge, MIT Press.
- Kloosterman, R.C., J. van der Leun and J. Rath (1999). Mixed embeddedness: (in)formal economic activities and immigrant business in the Netherlands. *International Journal of Urban and Regional Research*, **23**(3), 252–265.
- Kloosterman, R.C. (2010). Matching opportunities with resources: a framework

- for analyzing (migrant) entrepreneurship from a mixed embeddedness perspective. *Entrepreneurship and Regional Development*, **22**(1), 25–45.
- Littunen, H., E. Storhammar and T. Nenonen (1998). The survival of firms over the critical first 3 years and the local environment. *Entrepreneurship and Regional Development*, **10**, 189–202.
- Marchese, M. (2014). Entrepreneurial activities in Europe: finance for inclusive entrepreneurship. *OECD Employment Policy Papers*, **5**, Paris: OECD Publishing.
- Mason, C.M., S. Carter and S. Tagg (2011) Invisible businesses: the characteristics of home-based businesses in the United Kingdom, *Regional Studies*, **45**(5), 625–639.
- Mata, J. and P. Portugal (2002). The survival of new domestic and foreign-owned firms. *Strategic Management Journal*, **23**, 323–343.
- Michelacci C. and O. Silva (2007). Why so many local entrepreneurs? *Review of Economics and Statistics*, **89**(4), 615–633.
- Mincer, J. (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press.
- Parker, S.C. (2012). Do serial entrepreneurs run successively better-performing businesses? *Journal of Business Venturing*, **28**(5), 652–666.
- Raspe, O., A. Weterings, M. van den Berge., F. van Oort, G. Marlet, V. Schutjens and W. Steenbeek (2010). *Bedrijvigheid en leefbaarheid in stedelijke wijken*. Den Haag: Planbureau voor de Leefomgeving (PBL).
- Rath, J. and V. Schutjens (2015). Migrant entrepreneurship: alternative paradigms of economic integration. In Triandafyllidou, A. (ed.), *Handbook on Immigrant and Refugee Studies*. Routledge International Handbook Series. London: Routledge, pp.96–103.
- Renski, H. (2011). External economies of localization, urbanization and industrial diversity and new firm survival. *Papers in Regional Science*, **90**(3), 473–502.
- Risselada, A. (2013). Housing the mobile entrepreneur: the location behaviour for firms in urban residential neighborhoods. PhD thesis, Faculty of Geosciences, Utrecht University.
- Riva, E. and M. Luccini (2015). The effect of the country of birth of the owner on business survival: evidence from Milan Metropolitan Area, Italy. *Journal of Ethnic and Migration Studies*, **41**(11), 1794–1814.
- Schutjens, V.A.J.M. and E. Wever (2000). Determinants of new firm success. *Papers in Regional Science*, **79**(2), 135–159.
- Schutjens, V.A.J.M., M. Rosenbrand and R. van Engelenburg (2003). *Bedrijfsbeëindiging van jonge ondernemingen in Nederland. Keuze of noodzaak?* Scheveningen, Raad voor Zelfstandig Ondernemerschap.
- Schutjens, V.A.J.M., N. De Vries, A. Bruins and A. Risselada (2014), *Verklaringen van de overlevingskans van bedrijven, gestart door allochtone ondernemers*. Zoetermeer: Panteia/EIM.
- Stam, F.C., V.A.J.M. Schutjens and F. Dirks (2004). The performance of team start-ups in the first phases of the life course. Proceedings of the 12th High Technology Small Firms Conference. Twente: Universiteit Twente, pp.96–107.
- Stinchcombe, A.L. (1965). Social structure and organizations. In March, J. (ed.), *Handbook of Organisations*. Chicago: Rand McNally, pp.142–193.
- Storti, L. (2014). Being an entrepreneur: emergence and structuring of two immigrant entrepreneur groups. *Entrepreneurship and Regional Development*, **26**(7–8), 521–545.

- Strotmann, H. (2007). Entrepreneurial survival. *Small Business Economics*, **28**, 87–104.
- Vries, N. de, J. Snoei and C. Bertens (2009). *Beter inzicht in multicultureel ondernemerschap. Een analytisch raamwerk en een empirische verkenning*. Zoetermeer: EIM.
- Wang, Q. (2009). Gender, ethnicity, and self-employment: a multilevel analysis across US metropolitan areas. *Environment and Planning A*, **41**, 1979–1996.
- Wang, Q. (2013). Constructing a multilevel spatial approach in ethnic entrepreneurship studies. *International Journal of Entrepreneurial Behaviour and Research*, **19**(1), 97–113.
- Welter, F. (2012). All you need is trust? A critical review of the trust and entrepreneurship literature. *International Small Business Journal*, **30**(3), 193–212.
- Wissen, L. van (2000). A micro-simulation model of firms: applications of concepts of the demography of the firm. *Papers in Regional Science*, **79**, 111–134.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, **38**(2), 341–364.