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## 4 Who values the status of the entrepreneur?

*Mirjam van Praag*

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### INTRODUCTION

Recent research reveals the relevance of (inter)personal factors in occupational choice preference development. For instance, empirical studies by Falck et al. (2008) as well as Nanda and Sørensen (2008) address identity and peer group effects as determinants of the choice for entrepreneurship. Parker and Van Praag (2009) show, based on theory, that the group status of 'entrepreneurship' shapes people's occupational preferences and thus their choice behavior. Moreover, the status of entrepreneurship enters individuals' utility functions, leading to a spillover effect: while people base their occupational decisions on their own relative utility from entrepreneurship versus employment, their decisions may simultaneously affect the composition and status of the profession.

This chapter addresses empirically the following explorative questions: does perceived occupational status affect occupational choice or preferences and, in particular, the choice and preferences for entrepreneurship? What are the determinants of occupational status? Which (job) characteristics affect status? What individual characteristics determine an individual's view on the status of the entrepreneurial profession? Are the individual determinants of their perceived status of the entrepreneurial profession related to the determinants of the choice and preferences for entrepreneurship? These questions are addressed using the results of a survey of 800 university students in the Netherlands.

Answering these questions is instructive: if it is the case that individual choices are affected by perceived status, one can affect choices by changing status. In particular, the study of the occupational or personal determinants of status may reveal where to start changing status and preferences (also given the spillover effects as discussed by Parker and Van Praag, 2009 and the peer group effects discussed by Nanda and Sørensen, 2008) thus encouraging entrepreneurship.

The motivation for the student focus is based on recent studies that collectively demonstrate (1) that the preference for entrepreneurship is not high among more highly educated individuals (Van Der Sluis et al., 2008); whereas (2) the relative private returns to education are higher for entrepreneurs than for employees (Van Der Sluis and Van Praag, 2004, Van Der Sluis et al. 2007, Van Der Sluis and Van Praag, 2007), apparently also in the Netherlands (Parker and Van Praag, 2006); (3) the economic benefits from entrepreneurship are large (Van Praag and Versloot, 2007; Parker, 2004) but a large fraction is derived from a small number of entrepreneurs (Parker, 2009; Henrekson and Johansson, 2008); and finally (4) people who tend to generate high incomes as entrepreneurs are also – on average – the ones likely to grow their firms (Van Der Sluis et al., 2008). Hence, since these performance measures (income and growth) are correlated positively, one can safely assume that higher education levels not only lead to higher incomes but also to higher growth and the creation of economic benefits. Therefore,

from a policy perspective, it is important to find instruments motivating this group to become entrepreneurs, and one such instrument might be status. This may be of particular relevance in European countries such as the Netherlands: evidence shows that the desire to become an entrepreneur is lower in Europe than in the USA, especially among people with higher levels of education (CBS, 2007, 2008). This motivates the choice for sampling Dutch students.

This chapter is organized as follows. The next section will introduce the theoretical notion of (group) status. In particular we shall develop this notion in relationship to professions and entrepreneurship. Needless to say, this introduction is partly based on studies outside the field of economics and business. The third section will discuss the data set, variables and empirical methodology. The fourth section discusses the results; the final section concludes.

## PROFESSIONAL STATUS: THE DEVELOPMENT OF A CONCEPT

### A Little History of the Concept 'Status' and its Determinants

Max Weber (1864–1920) introduced the term 'status' as part of his three-component theory of stratification (social class, social status and religion). He defined status as 'an effective claim for social esteem'. He defined occupations as status groups, i.e. a group of persons who successfully claimed a specific social esteem within a larger group.

Max Weber also had explicit ideas about the determinants of professional status ranking – the determinants of status. He argued that occupational status depends, above all, on the amount of training required and the opportunities for earnings (Weber, 1978 [1922], p. 144). Individual factors, however, would play no role: the status of occupations is uniform and set (Balkwell et al., 1982). Weiss and Fershtman (1998) show that, consistent with early Weber, people ranking occupations according to status do so irrespective of their own individual attributes, such as education, age, income or their country of residence. Furthermore, status rankings of occupations correlate strongly across countries and persist over time (Treiman, 1977). Any variance in the subjective evaluations of occupational status of different occupations is best explained by observable characteristics of the occupations themselves, specifically by the mean income and education in each occupation (Fershtman and Weiss, 1993, p. 948).

Brown (1955) identifies eleven possible occupation-related determinants of occupational status, based on North and Hatt (1947): (i) necessity to the public welfare, (ii) respect, (iii) cleanness of the job, (iv) education or training needed, (v) talent or skills needed, (vi) income, (vii) leisure time/vacations, (viii) personal references ('Do you know people who perform the occupation, and is that a positive association?'), (ix) rich history, (x) hard work needed and (xi) the social or altruistic level of the job. Villemez (1974) adds 'power' as the twelfth occupation-related determinant.

However, other studies show that, in addition to job characteristics, individual characteristics determine the perceived status of occupations (Hendrickx and Ganzeboom, 1998; Katz, 1992). How the relative status of entrepreneurship is affected by professional and individual characteristics is a matter for empirical study – as yet unperformed.

### **Status of Professions in Economics**

Only recently have economists become interested in concepts such as social status. It was recognized that economic theory fails to explain a number of socioeconomic phenomena by ignoring possible interdependencies of preferences across people (Bisin and Verdier, 1998). The social status of a profession is possibly affected by other people's preferences or behavior (Parker and Van Praag, 2009). In turn, status itself may affect people's preferences.

Frank (1984, 1988) was one of the first economists to recognize the importance of status. Frank (1984) claimed that a person's status among his peers is no less important than his absolute income level in determining his sense of well-being.

Since the early 1990s, status is incorporated in models as a determinant of individual utility (and thus of behavior; see, for instance, Fershtman and Weiss, 1993; Weiss and Fershtman, 1998; Ederer and Pataconi, 2007; Clark et al, 2007; Kwon and Milgrom, 2007; Grund and Sliwka, 2007, and Parker and Van Praag, 2009).

### **How to Measure the Status of a Profession**

Traditionally there are two ways of measuring status. The first is based on the occupational prestige study by North and Hatt (1947). Their study, performed at the National Opinion Research Center and known as the NORC study, analyzed public attitudes regarding the prestige of 90 selected occupations. The 1989 NORC general social survey includes an evaluation of the status of occupations (Hodge et al., 1964). Respondents rank occupations according to their social standing. We call this subjective status measurement.

This original NORC study was extended by Duncan (1961), who developed an objective rather than a subjective measure of occupational status, the so-called socioeconomic index (SEI). This was accomplished by linking the prestige scores from the NORC study to the income and education information in the census, thus producing a formula to calculate and predict prestige based solely on education and income for all occupations (Nakao and Treas, 1994; Hodge, 1981), leading to the 1989 Total Based SEI.

Consistent with Weber (and Weiss and Fershtman, 1998), the status of a profession is operationalized, in most economics studies, by the mean income for the profession (Ederer and Pataconi, 2007; Kwon and Milgrom, 2007; Parker and Van Praag, 2009).

### **Status and Entrepreneurship**

Status and entrepreneurship have been little studied so far. Besides the theoretical study by Parker and Van Praag (2009), we know of only one empirical study addressing some of the central questions of this chapter. Malach-Pines et al. (2005) show that the perception of high-tech entrepreneurs as cultural heroes, thus endowed with high social status, among MBA students in a particular country is correlated with the level of entrepreneurial activity in that country as well as with the average risk-taking propensity and willingness to engage in entrepreneurial activity of the sampled MBA students in a country. The sample includes three countries: Hungary, Israel and the USA.

### Positioning of this Study

In this study the status of the profession 'entrepreneurship' is empirically evaluated as well as its determinants and the association between an individual's status rank and her willingness and plans to become an entrepreneur. In terms of the determinants of status, both characteristics of the profession and of the individual may determine a person's rank as entrepreneur among other professions. The possible profession-related determinants presented to the respondents are based on Brown (1955) (except iii, viii and xi) and Villemez (1974). The possible individual determinants of status rank analyzed are sourced from the entrepreneurship literature. In terms of the measurement of status, we conform to the method of the original (1989) NORC study. Thus respondents simply state their perceived status of the entrepreneur and of 19 other occupations. Hence we shall test empirically which are determinants of the perceived status of the occupation 'entrepreneur' relative to 19 other professions that are in the choice set of students.

The current study differs from that of Malach-Pines et al. (2005) in several ways: the analysis is not limited to high-tech entrepreneurs;<sup>1</sup> the unit of analysis is the individual student, not the country, as in Malach-Pines et al.; and, unlike Malach-Pines et al., the determinants of entrepreneurial status are analyzed, which might be a relevant instrument for conceiving policy measures to stimulate entrepreneurship if evidence is found that status and entrepreneurial activity are indeed positively related. In the next section, we discuss the data and the methodology used.

## DATA AND METHODOLOGY

### Sample

Our quantitative analysis is based on a sample of university students, normally between 18 and 23 years old, in the Netherlands taken in 2007. Questionnaires were distributed to students in university libraries, at exams, by email and through websites. We recollated 818 complete questionnaires. Below, we discuss the variables collected through this questionnaire, along with their basic descriptive statistics.

### Questionnaire and its Core Questions

A questionnaire was developed including survey questions of a subjective nature.<sup>2</sup> In the key question, number 19, respondents are asked to establish the ranking of the occupation 'entrepreneur' within a selection of 20 occupations, randomly listed (see Table 4.1):<sup>3</sup>

Each respondent graded each occupation on a scale from 1 to 10. Based on this, a ranking was made per individual respondent. The average grade of the entrepreneur is 7.0, whereas the average rank is 8. Twelve percent of the individuals graded the entrepreneur highest, whereas 22 percent put the entrepreneur in the top 3 of the ranking.

The two occupational rankings previously discussed, NORC (1989) and the Total Based SEI (1989), are used as benchmarks. Please note that these measures are from different decades, continents and sub-populations. As shown in Table 4.2, the entrepreneur ranks higher in our study than in the others, although, in general, the patterns in of the

Table 4.1 *Questionnaire, question no. 19*

19. Please rate the following occupations according to their ‘status’, in other words which occupations in your opinion have a very low status (1) or a very high status (10)?

| Occupation            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----------------------|---|---|---|---|---|---|---|---|---|----|
| University professor  |   |   |   |   |   |   |   |   |   |    |
| Policeman             |   |   |   |   |   |   |   |   |   |    |
| Physician             |   |   |   |   |   |   |   |   |   |    |
| Mailman               |   |   |   |   |   |   |   |   |   |    |
| Actuary               |   |   |   |   |   |   |   |   |   |    |
| Management consultant |   |   |   |   |   |   |   |   |   |    |
| Lawyer                |   |   |   |   |   |   |   |   |   |    |
| Marketing manager     |   |   |   |   |   |   |   |   |   |    |
| Architect             |   |   |   |   |   |   |   |   |   |    |
| Teacher (high-school) |   |   |   |   |   |   |   |   |   |    |
| Journalist            |   |   |   |   |   |   |   |   |   |    |
| Electrician           |   |   |   |   |   |   |   |   |   |    |
| Computer programmer   |   |   |   |   |   |   |   |   |   |    |
| Entrepreneur          |   |   |   |   |   |   |   |   |   |    |
| Engineer              |   |   |   |   |   |   |   |   |   |    |
| Barber                |   |   |   |   |   |   |   |   |   |    |
| Real-estate agent     |   |   |   |   |   |   |   |   |   |    |
| Accountant            |   |   |   |   |   |   |   |   |   |    |
| Mayor                 |   |   |   |   |   |   |   |   |   |    |
| High-court judge      |   |   |   |   |   |   |   |   |   |    |

rankings are similar. Nevertheless, we conclude from Table 4.2 that the ranking of occupational status is not universal and will probably diverge across countries and/or over time and may therefore depend on individual characteristics as well (see the discussion in the second section).

Question 20 establishes the occupation-related determinants of occupational status:<sup>4</sup>

20. *What is occupational status dependent on, according to you? (multiple answers possible)*
- |                                   |                                    |                             |
|-----------------------------------|------------------------------------|-----------------------------|
| <i>Income</i>                     | <i>Required education/training</i> | <i>Public importance</i>    |
| <i>Respect</i>                    | <i>Talent</i>                      | <i>Amount of spare time</i> |
| <i>Rich history of occupation</i> | <i>Power</i>                       | <i>Hard work</i>            |
| .....                             |                                    |                             |

**Dependent Variables**

Three variables are considered endogenous and used as dependent variables in the regressions. The first is the perceived status of the entrepreneur, measured in three ways, all relative to the status of other occupations. The first measure of status positions the status rank in the average of the percentile in the sample distribution of the rank and is estimated by means of OLS (ordinary least squares). The second measure of status is a dummy variable that takes on the value one if an individual ranks entrepreneur first

Table 4.2 Occupational status and reference rankings

| Rank     | Occupation            | Status     | Std         | NORC (1989)           | Total 1989 SEI        |
|----------|-----------------------|------------|-------------|-----------------------|-----------------------|
| 1        | High-court judge      | 8.7        | 1.36        | Physician             | Physician             |
| 2        | Physician             | 8.5        | 1.25        | Lawyer                | University professor  |
| 3        | University professor  | 8.3        | 1.47        | University professor  | Lawyer                |
| 4        | Lawyer                | 7.9        | 1.34        | Architect             | Actuary               |
| 5        | Mayor                 | 7.7        | 1.68        | Engineer              | Engineer              |
| 6        | Engineer              | 7.6        | 1.51        | High-court judge      | High court judge      |
| 7        | Architect             | 7.4        | 1.39        | Mayor                 | Architect             |
| <b>8</b> | <b>Entrepreneur</b>   | <b>7.0</b> | <b>1.55</b> | High-school teacher   | Management consultant |
| 9        | Accountant            | 6.9        | 1.55        | Accountant            | High-school teacher   |
| 10       | Marketing manager     | 6.7        | 1.53        | Management consultant | Accountant            |
| 11       | Management consultant | 6.7        | 1.51        | Computer programmer   | Computer programmer   |
| 12       | Actuary               | 6.1        | 1.64        | Journalist            | Journalist            |
| 13       | Journalist            | 6.1        | 1.57        | Policeman             | Marketing manager     |
| 14       | Real-estate agent     | 5.9        | 1.67        | Marketing manager     | <b>Entrepreneur</b>   |
| 15       | High-school teacher   | 5.6        | 1.60        | <b>Entrepreneur</b>   | Real-estate agent     |
| 16       | Computer programmer   | 5.5        | 1.63        | Electrician           | Police man            |
| 17       | Police man            | 5.3        | 1.84        | Real estate agent     | Mayor                 |
| 18       | Electrician           | 4.4        | 1.70        | Mailman               | Mailman               |
| 19       | Barber                | 3.8        | 1.66        | Actuary               | Electrician           |
| 20       | Mailman               | 3.7        | 1.69        | Barber                | Barber                |

and zero otherwise. The third measure is a dummy variable taking on the value one for individuals who rank the entrepreneur in the status top 3 and zero otherwise. The latter two measures are estimated in a probit regression. The descriptive statistics for the status measure are shown in Table 4.2.<sup>5</sup>

The second dependent variable measures the willingness of individuals to become an entrepreneur. It is a dummy variable, taking on the value of one if the respondent answers 'entrepreneur' to the question 'If you could choose, would you rather be an entrepreneur or an employee?' and zero if they answer 'employee'. The majority of the respondents, 61 percent, turn out to be willing to become an entrepreneur. The variable's determinants are estimated using a probit equation.

The third dependent variable measures the perceived likelihood of becoming an entrepreneur. It is the answer, on a 10-point scale, to the question: 'What is the likelihood that you will become an entrepreneur within the next ten years?' The distribution of this likelihood variable, estimated by means of OLS, is shown in Table 4.3.

### Explanatory Variables

We are particularly interested in the similarity and differences of the determinants of the perceived status of entrepreneurship and the common factors found in the literature that determine (i) the likelihood of entrepreneurship and (ii) the performance of entrepreneurs. Hence the questionnaire includes the most important potential determinants of

*Table 4.3 Sample frequencies of the subjective likelihood of becoming an entrepreneur*

| Stated likelihood of becoming an entrepreneur (scale 1–10), % |      |    |      |
|---|------|----|------|
| 1   | 12.7 | 6  | 11.5 |
| 2   | 11.9 | 7  | 12.1 |
| 3   | 14.5 | 8  | 9.2  |
| 4   | 10.1 | 9  | 3.7  |
| 5   | 9.7  | 10 | 4.6  |

likelihood and performance as derived from the entrepreneurship literature. We further assess to what extent one's willingness and likelihood to become an entrepreneur are associated with these factors as well as with the perceived status of entrepreneurship. Thus entrepreneurial status is used both as a dependent and as an independent variable. Factors are categorized into human capital, social capital and peer group effects, attitudes and background variables. Information on financial capital is lacking.

### **Human capital**

Human capital is measured along various dimensions; see Table 4.4 for sample averages. The first is education. We measure whether students are enrolled in a vocational or academic program. First-year students are distinguished from Bachelor and Master students respectively. An individual's education level is found to be positively associated with entrepreneurship performance, whereas the empirical results on the relationship with the likelihood of becoming an entrepreneur are found to be ambiguous (Van der Sluis et al., 2008). Five education fields are distinguished: economics and business; social sciences; health; science and technical studies; and humanities (including law). Previous studies find that science and technical orientations lead to better performance as an entrepreneur (Van Praag and Cramer, 2001; Hartog et al., 2008).

The second measure of human capital included as a potential explanatory factor is experience. In general, empirical evidence indicates that the success of entrepreneurship is positively related to (the variety of) previous general labor market and, in particular, to entrepreneurship experience (e.g. Davidsson and Honig, 2003; Lazear, 2005; Van Der Sluis et al., 2008). Respondents have indicated whether they are or have been an entrepreneur and how many different previous jobs they have held.

### **Social capital and the peer group**

Social capital is expected to have a positive relationship with entrepreneurship choices and outcomes: it can provide networks that facilitate the discovery of opportunities, as well as the identification and collection of resources (Birley, 1985; Greene and Brown, 1997; Uzzi, 1999; Davidsson and Honig, 2003). We concentrate on the effect of an entrepreneurial environment (see also Gianetti and Simonov, 2004; Nanda and Sørensen, 2008), which is indicated by a dummy variable and a count variable based on the following two questions respectively; see Table 4.4 for statistics:

32. Do you know somebody in your surroundings that started as an entrepreneur in the last two years?



Table 4.4 Sample averages (%) of the human and social capital variables

| <b>Education variables</b>   |    |
|--|----|
| Education level  |    |
| ● Professional or vocational Bachelor                                    | 83 |
| ● University (Bachelor or Master phase)                                  | 17 |
| Education stage  |    |
| ● First year   | 27 |
| ● Bachelor   | 50 |
| ● Master   | 23 |
| Education field  |    |
| ● Economics and business   | 62 |
| ● Social sciences  | 15 |
| ● Health   | 8  |
| ● Science and technical studies  | 7  |
| ● Humanities (including law)   | 8  |
| <b>Experience variables</b>  |    |
| Dummy for entrepreneurship experience (1 = 'yes'; 0 = 'no')              | 6  |
| Number of different jobs ever held:                                      |    |
| ● 0–1  | 9  |
| ● 2  | 17 |
| ● 3  | 23 |
| ● 4  | 17 |
| ● 5  | 12 |
| ● 6–7  | 14 |
| ● 8 or more  | 8  |
| <b>Social capital and peer group variables</b>                           |    |
| Respondent knows someone who started up a business in the past two years | 71 |
| The number of entrepreneurs in one's environment                         |    |
| ● None   | 4  |
| ● Very few   | 17 |
| ● Few  | 26 |
| ● Average  | 35 |
| ● Many   | 16 |
| ● Very many  | 2  |

33. How many entrepreneurs are there in your environment (friends/acquaintances/family)?

None   Very few   Few   Normal   Many   Very many

### Attitudes

Various studies show that attitudes, such as risk attitude, locus of control, need for achievement, self-efficacy and self-esteem are intimately related to entrepreneurship choices and outcomes.

Risk aversion is usually negatively related to the choice for entrepreneurship. We measure risk attitude based on survey questions in two ways: the reservation price for a ticket in a hypothetical lottery (see Cramer et al., 2002)<sup>6</sup> and a measure based on

Table 4.5 *Sample averages (%) of background characteristics*

| Background characteristics                            |    |
|---|----|
| Percentage female (dummy)                             | 46 |
| Age (in years)  |    |
| ● 19 or younger                                       | 32 |
| ● 20–21   | 28 |
| ● 22–23   | 19 |
| ● 24–26   | 21 |
| Nationalities   |    |
| ● Respondent not Dutch                                | 7  |
| ● Mother not Dutch                                    | 15 |
| ● Father not Dutch                                    | 12 |
| Parental education levels                             |    |
| ● Mother has a (vocational) Bachelor or Master degree | 44 |
| ● Father has a (vocational) Bachelor or Master degree | 57 |
| Parental entrepreneurship experience                  |    |
| ● Mother  | 16 |
| ● Father  | 37 |

Dohmen et al. (2005) which is the answer to: ‘Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?’<sup>7</sup> Internal locus of control beliefs have been shown to relate positively to the choice for and performance in entrepreneurship. The first measure used here is similar to that in Grilo and Thurik (2005), whereas the second is a simplified Rotter (1966) test derived from Pettijohn (1999). The measure we use for need for achievement is based on the validated Ray–Lynn AO scale (Ray, 1979). Self-efficacy and self-esteem measures are based on the self-assessed expectancy of finding a job after graduation (see Oosterbeek and Van den Broek, 2008). Based on Boyd and Vozikis (1994), it is expected that self-efficacy and esteem are positively related to the development of entrepreneurial intentions and behavior.

### Background

Control variables, gender, age, nationality (of the respondent and her parents, see Fairlie, 2005), parental education levels and entrepreneurial experience are used in this study. Descriptive statistics are provided in Table 4.5.

We are interested not only in what determines entrepreneurial status, willingness and the perceived likelihood of becoming an entrepreneur, but also in the interrelations between the endogenous variables, i.e. whether the perceived entrepreneurial status is related to one’s willingness to become an entrepreneur and the likelihood of becoming an entrepreneur. Based on Malach-Pines et al. (2005), the relationships between perceived status, willingness and likelihood of becoming an entrepreneur are expected to be positive. Table 4.6 shows the correlations of the endogenous variables acknowledged in this study. They are significantly positive. The regression analysis in the next section will show whether and to what extent these correlations hold, conditional upon the inclusion of the independent and control variables.

Table 4.6 Correlations between the endogenous variables

|  | I    | II    | III   |
|--|------|-------|-------|
| I Status ranking of the entrepreneur among other professions | 1.00 | 0.206 | 0.235 |
| II Willingness to become an entrepreneur [dummy]             |      | 1.00  | 0.567 |
| III Perceived likelihood of becoming an entrepreneur [1-10]  |      |       | 1.00  |

Table 4.7 Occupation-related determinants of the status of occupations\*

| Determinant        | % agreeing that this determines occupational status |
|--------------------|---|
| Education required | 76  |
| Respect            | 63  |
| Income level       | 49  |
| Public importance  | 47  |
| Talent             | 42  |
| Power              | 32  |
| Hard work          | 32  |
| Rich history       | 15  |
| Leisure time       | 1   |
| Other              | 3   |

Note: \* These are the answers to the question:

20. What is occupational status dependent on, according to you? (multiple answers possible)  
 Income Required education/training Public importance Respect Talent Leisure time  
 Rich history of occupation Power Hard work Other . . .

## RESULTS

### Which Job Characteristics Determine the Status of Occupations?

It turns out that the job characteristic which, according to this sample, is the strongest determinant of the status of professions is the education level required; see Table 4.7. Seventy-six percent of the respondents rate this as the most relevant status criterion. This supports the views of Max Weber, as well as the more recent theoretical study by Parker and Van Praag (2009). The same holds for the income level that has been mentioned as a determinant of occupational status by almost half of the respondents. Respect and public importance are also important determinants of occupations, as suggested by the literature.

### Which Perceived Occupational Status Determinants are Important for the Status of Entrepreneurship?

As discussed, the status attached to the profession of the entrepreneur is measured in three ways, corresponding to the columns in Table 4.8. The individual answers (in

Table 4.8 *Perceived entrepreneur status and occupation-related determinants of status*

| Dependent variable:<br>entrepreneur status               | (i)                 | (ii)                 | (iii)                |
|--|---------------------|----------------------|----------------------|
|  | Rank (1–20)         | Ranked first         | Ranked top 3         |
| Regression   | OLS <sup>†</sup>    | Probit               | Probit               |
| <i>Occupational determinants of professional ranking</i> |                     |                      |                      |
| Education required                                       | –0.030<br>(0.019)   | –0.078***<br>(0.031) | –0.107***<br>(0.037) |
| Respect  | 0.005<br>(0.016)    | 0.024<br>(0.023)     | –0.009<br>(0.030)    |
| Income level   | 0.025<br>(0.016)    | 0.051**<br>(0.023)   | 0.049<br>(0.031)     |
| Public importance  | 0.011<br>(0.015)    | –0.023<br>(0.023)    | 0.033<br>(0.029)     |
| Talent   | 0.006<br>(0.015)    | –0.023<br>(0.025)    | –0.020<br>(0.029)    |
| Power  | –0.034**<br>(0.017) | –0.0035<br>(0.023)   | –0.062**<br>(0.029)  |
| Hard work  | 0.039**<br>(0.016)  | 0.039<br>(0.026)     | 0.042<br>(0.032)     |
| Rich history   | –0.0004<br>(0.022)  | 0.042<br>(0.037)     | 0.028<br>(0.044)     |
| Leisure time   | –0.021<br>(0.105)   | 0.222*<br>(0.161)    | 0.133<br>(0.160)     |
| Number of observations                                   | 818                 | 818                  | 818                  |
| (Pseudo) $R^2$   | 0.017               | 0.035                | 0.020                |

*Notes:*

Probit regressions report marginal effects. The results are based on robust standard errors shown in parentheses. \*/\*\*/\*\* indicates that the estimated coefficient is significant at the 10%/5%/1% confidence level.

<sup>†</sup> Equivalent results are obtained when estimated by ordered probit.

dummy form) to question 20 (see Table 4.7) are included as independent variables in these regressions. Table 4.8 shows that the more individuals perceive status to be determined by income levels or hard work, the higher they value the status of the entrepreneur. In addition, the more value one attaches to education or power for the determination of status, the lower the entrepreneur's status is valued. It thus seems that entrepreneurship is associated with hard work, high incomes, but little power and education.

#### **Does the Perceived Status of the Entrepreneur Profession Differ Systematically across Individuals? If so, which Individual Characteristics Determine an Individual's View on the Status of the Entrepreneurial Profession?**

In Table 4.9, the status of the entrepreneurial profession – according to the same three measures as in Table 4.8 – is estimated again. The independent variables included in the regressions are individual characteristics this time, rather than profession-related

Table 4.9 Perceived entrepreneur status determined by individual-specific characteristics

| Dependent variable:<br>entrepreneur status                               | (i)                  | (ii)                 | (iii)                |
|--|----------------------|----------------------|----------------------|
|  | Rank (1–20)          | Ranked first         | Ranked top 3         |
| Regression   | OLS <sup>†</sup>     | Probit               | Probit               |
| <i>Human capital</i>   |                      |                      |                      |
| Education level  |                      |                      |                      |
| Education stage (benchmark is first year)                                |                      |                      |                      |
| ● Bachelor   | -0.012<br>(0.018)    | 0.016<br>(0.026)     | -0.058*<br>(0.034)   |
| ● Master   | -0.039<br>(0.025)    | -0.035<br>(0.033)    | -0.093**<br>(0.040)  |
| Education field (benchmark is econ. and bus.)                            |                      |                      |                      |
| ● Social sciences  | 0.065***<br>(0.020)  | -0.090***<br>(0.021) | -0.151***<br>(0.028) |
| ● Health   | -0.085***<br>(0.025) | -0.080**<br>(0.026)  | -0.145***<br>(0.036) |
| Dummy for entrepreneurship experience                                    | 0.060**<br>(0.026)   | 0.022<br>(0.043)     | 0.044<br>(0.056)     |
| Number of different jobs ever held                                       |                      |                      |                      |
| <i>Social capital and peer group variables</i>                           |                      |                      |                      |
| Respondent knows someone who started up a business in the past two years |                      |                      |                      |
| The number of entrepreneurs in one's environment                         | 0.028***<br>(0.006)  | 0.032***<br>(0.010)  | 0.062***<br>(0.013)  |
| <i>Attitudes</i>   |                      |                      |                      |
| Risk aversion <sup>a</sup>   |                      |                      |                      |
| Internality of locus of control <sup>b</sup>                             | 0.034**<br>(0.015)   | 0.035<br>(0.019)     | 0.091***<br>(0.029)  |
| Need for achievement   |                      |                      |                      |
| Self-efficacy  |                      |                      |                      |
| Self-esteem  |                      |                      |                      |
| <i>Background characteristics</i>  |                      |                      |                      |
| Female (dummy)   | -0.037**<br>(0.016)  | -0.020<br>(0.022)    | -0.076***<br>(0.029) |
| Age (in years)   | 0.006**<br>(0.003)   | 0.004<br>(0.004)     | 0.010**<br>(0.005)   |
| Nationality  |                      |                      |                      |
| Parents' nationality   |                      |                      |                      |
| Parental education levels  |                      |                      |                      |
| Parental entrepreneurship experience                                     |                      |                      |                      |
| Number of observations   | 818                  | 818                  | 818                  |
| (Pseudo) $R^2$   | 0.096                | 0.074                | 0.116                |

Table 4.9 (continued)

*Notes:*

- <sup>a</sup> Two measures of risk aversion are found to be insignificantly related to the perceived status of the entrepreneur: the first based on a lottery (Cramer et al., 2001) and the second based on Dohmen et al. (2005).
- <sup>b</sup> As measured by Grilo and Thurik (2005). The other locus of control measure (measure 2) is insignificantly related to the perceived status of the entrepreneur. Probit regressions report marginal effects. The results are based on robust standard errors shown in parentheses. \*/\*\*/\*\*\*/ indicates that the estimated coefficient is significant at the 10%/5%/1% confidence level.
- <sup>†</sup> Ordinary least squares.

characteristics. Table 4.9 shows the results when the human capital, social capital, attitude and background characteristics as discussed in the previous section are included as potential determinants. The coefficients that were insignificantly different from zero in all of the three equations have been omitted. The reported results have been obtained while omitting these regressors from the equations.

There are, indeed, individual factors associated with the status of the entrepreneurship profession. We find weak support (significant at the 10 percent level only) for a decline in the perceived occupational status of the entrepreneur when individuals proceed further in their educational trajectories (from first year, to Bachelor to Master). Moreover, there is strong evidence for differences among students across fields. Whereas students in economics and business attach similar status to the entrepreneur as students in the fields of science, technical studies and humanities, students in health and social sciences attach lower value to the status of the entrepreneur. Students who have been entrepreneurs themselves attach a higher value to the status of the entrepreneur (although this effect is only significant in one of the four equations). Previous job variety is no determinant of the perceived status of the entrepreneur.

Variation across individuals in terms of their social capital and peer group is associated with systematic variation across these individuals in terms of the perceived occupational status of the entrepreneur. In particular and very significantly and consistently so, the more entrepreneurs the student has in her direct personal environment, the higher she perceives the status of the entrepreneur. However, causality is unattributable to this strong relationship.

Attitudes that the literature shows determining entrepreneurial spirit or performance are unrelated to the perceived status of the entrepreneurial profession. The only exception is one's locus of control beliefs (as measured in Grilo and Thurik, 2005). The more internal someone's locus of control beliefs, the higher is the perceived status of the entrepreneur.

Finally, individual background characteristics associated with the entrepreneur's perceived status ranking are gender and age. Male students hold entrepreneurs in higher esteem than female students, while older students are more positive about entrepreneurship status than younger students.

We conclude that the human and social capital determinants of the status of the entrepreneur are mainly (positively) related to knowledge of and familiarity with entrepreneurship. Entrepreneurship experience and presence of entrepreneurs in one's environment increase the perceived status (rank) of the entrepreneur. Moreover, students

in fields where the probability of becoming an entrepreneur is higher (economics and business; science and technical studies) perceive the status of the entrepreneur as higher.

### **Is the Perceived Entrepreneur Status Associated with the Willingness and Subjective Likelihood of becoming an Entrepreneur?**

Table 4.6 shows that the status ranking of the entrepreneur is positively correlated with the individual's willingness and likelihood of becoming an entrepreneur. The next question is: are the determinants of the perceived status of the entrepreneur also associated with an individual's willingness and subjectively assessed likelihood of becoming an entrepreneur within ten years' time? This question is addressed by including these individual determinants into regressions explaining an individual's measured willingness and likelihood of becoming an entrepreneur by means of a probit and OLS regression respectively. Table 4.10 shows the results.

There are several individual determinants of status determining an individual's stated likelihood of becoming and willingness to become an entrepreneur. Three observations stand out. First, the determinants of the status rank attached to entrepreneurship coincide to a large extent with determinants of the perceived likelihood of becoming an entrepreneur and to a somewhat lesser extent with the determinants of willingness. Second, these determinants explain almost 30 percent of the variance in the stated likelihood of becoming an entrepreneur (see the  $R^2$ , first column), which is quite high in such a cross-section. Third, the status ranking of the entrepreneur is significantly and strongly associated with likelihood and willingness, also when controlling for all these other relevant factors. This means that the unexplained variance across individuals in the status rank of the entrepreneurial profession, shown in Table 4.9, is significantly related to an individual's willingness and stated likelihood.

## **CONCLUSION**

'Traditional economics has been based on methodological individualism' (Akerlof, 1997, p. 1005). Since the early 2000s, economists have been demonstrating and acknowledging that individuals' utility depends on the utility or the action of other individuals: social interaction plays a determining role (Akerlof, 1997; Akerlof and Kranton, 2000). The group status of a profession is just one example. Status has only recently begun to play a part in economic models as a determinant of utility (see, e.g., Fershtman and Weiss, 1993; Weiss and Fershtman, 1998; Ederer and Pataconi, 2007). Empirical evidence shows that this avenue of search for the determinants of utility is fruitful (Clark et al., 2007; Kwon and Milgrom, 2007).

Parker and Van Praag (2009) develop a model along these lines where the occupational status of entrepreneurs plays a role in the occupational choice of individuals between wage employment and entrepreneurship. Since each individual's choice for entrepreneurship affects the social status of the group, an individual's choice for entrepreneurship has externalities and affects other people's choices.

The current study focuses on the determinants and consequences of the group status of a profession, entrepreneurship in particular. If the group status of entrepreneurship is

*Table 4.10 Are individual factors – determinants of status – associated with an individual's willingness to become and likelihood of becoming an entrepreneur?*

| Dependent variable  | Likelihood<br>(1–10) | Likelihood<br>(1–10) | Willingness          | Willingness          |
|---|----------------------|----------------------|----------------------|----------------------|
| Regression  | OLS                  | OLS†                 | Probit               | Probit               |
| Status included as a regressor  | No                   | Yes                  | No                   | Yes                  |
| <i>Status ranking of the entrepreneur</i>                                     | No                   | 1.127***<br>(0.386)  | No                   | 0.301***<br>(0.086)  |
| <i>Human capital</i>  |                      |                      |                      |                      |
| ● Bachelor  | -0.315<br>(0.196)    | -0.301<br>(0.195)    | -0.053<br>(0.046)    | -0.052<br>(0.046)    |
| ● Master  | -0.856***<br>(0.259) | -0.811***<br>(0.257) | -0.093<br>(0.062)    | -0.082<br>(0.062)    |
| Education field (benchmark is econ. and bus.)                                 |                      |                      |                      |                      |
| ● Social sciences   | -0.727***<br>(0.234) | -0.654***<br>(0.238) | -0.082<br>(0.053)    | -0.064<br>(0.053)    |
| ● Health  | -0.572<br>(0.366)    | -0.476<br>(0.368)    | -0.069<br>(0.069)    | -0.043<br>(0.070)    |
| Dummy for entrepreneurship experience   | 2.797***<br>(0.336)  | 2.729***<br>(0.340)  | 0.291***<br>(0.053)  | 0.284***<br>(0.055)  |
| <i>Social capital and peer group variables</i>                                |                      |                      |                      |                      |
| The number of entrepreneurs in one's environment                              | 0.695***<br>(0.074)  | 0.663***<br>(0.075)  | 0.117***<br>(0.016)  | 0.110***<br>(0.016)  |
| <i>Attitudes</i>  |                      |                      |                      |                      |
| Internality of locus of control beliefs (Grilo and Thurik, 2005) <sup>a</sup> | 0.428***<br>(0.161)  | 0.390**<br>(0.160)   | 0.010<br>(0.037)     | 0.001<br>(0.037)     |
| <i>Background characteristics</i>   |                      |                      |                      |                      |
| Female (dummy)  | -0.783***<br>(0.173) | -0.741***<br>(0.172) | -0.169***<br>(0.037) | -0.161***<br>(0.037) |
| Age (in years)  | 0.022<br>(0.029)     | 0.015<br>(0.029)     | -0.005<br>(0.007)    | -0.007<br>(0.007)    |
| Number of observations  | 818                  | 818                  | 817                  | 817                  |
| (Pseudo) $R^2$  | 0.291                | 0.295                | 0.115                | 0.126                |

*Notes:*

<sup>a</sup> The other locus of control measure (measure 2, based more directly on the measure proposed by Rotter) is found to be insignificantly related to the perceived status of the entrepreneur. Probit regressions report marginal effects. The results are based on robust standard errors shown in parentheses. \*\*\*/\*\* indicates that the estimated coefficient is significant at the 10%/5%/1% confidence level.

† Ordinary least squares.



related to individual choice behavior, it is policy relevant to better understand this relationship and the determinants of the status of the entrepreneur. For reasons discussed earlier, this study focuses on students in the Netherlands. Our measurement of status and its possible determinants are based on the existing theoretical and empirical literature, both within and outside the field of entrepreneurship and economics. The most important findings can be summarized and interpreted as follows.

First, the status of occupations as perceived by Dutch students is mostly determined by the required level of education, the income level to be expected, and respect. This is consistent with Max Weber (1978 [1922]) as well as with Fershtman and Weiss (1993, p. 948), who pinpoint education and income as the strongest determinants of occupational status. Given the assumed causality implied in this relationship, we can conclude that attracting people with higher levels of education to a profession will improve the status attached to that profession.

Second, the more individuals perceive status to be determined by income levels or hard work, the more they value the status of the entrepreneur. On the contrary, the more value one attaches to education or power for the determination of the status of an occupation, the lower the entrepreneur's status is valued. It thus seems that entrepreneurship is associated with hard work, high incomes, but not with power and education. Since education is one of the main drivers of the perceived status of occupations, it seems useful, if raising the status of entrepreneurs is deemed desirable, to communicate that entrepreneurial success is indeed associated with education. Thus people would realize that successful entrepreneurs have higher levels of education and this would, in turn, according to these results, lead to a higher perceived status of the entrepreneurial profession.

Third, our results indicate, in relation to the discussion in the literature as to whether individual characteristics – such as human capital, social capital, attitudes and background variables – vary systematically with the perceived status of occupations by individuals, that there is indeed such systematic variation. We find weak support for a decline in the perceived occupational status of the entrepreneur when individuals proceed further in their educational trajectories. The strongest human and social capital factors associated with the status of the entrepreneur are (positively) related to the knowledge and familiarity one has with entrepreneurship. Entrepreneurship experience and the presence of entrepreneurs in one's environment increase the perceived status (rank) of the entrepreneur. Moreover, students in fields where the probability of becoming an entrepreneur is higher (economics and business; science and technical studies) perceive the status of the entrepreneur more highly than students in other fields (such as social sciences and health).

Fourth, we find support for a strong association between the perceived status of the entrepreneur by any individual student and her estimated likelihood of becoming and willingness to become an entrepreneur. Both the variation in the systematic determinants of the status of the entrepreneur and the unexplained residual vary systematically with willingness and likelihood.

Given the relatively high private (Van Der Sluis et al., 2004, 2007; Parker and Van Praag, 2006) and presumably social returns to education (Versloot and Van Praag, 2007; Parker, 2004, 2009; Henrekson and Johansson, 2008; Van Der Sluis et al., 2008) for entrepreneurs relative to employees, it is important, from a policy perspective, to find instruments that motivate students to become entrepreneurs, and one such instrument

might be status. As the results suggest, although the causality of any of the relationships established is unclear, offering students more entrepreneurial environments, either within or outside their schools, will go together with a higher esteem of the entrepreneurial profession. This, in turn, may then lead to increased willingness to become and a higher likelihood of becoming an entrepreneur for the average student. This, then, would have a positive external effect (as in Parker and Van Praag, 2009): the more highly educated individuals opt for a certain profession, the higher will be its status (also caused indirectly by a higher average income level resulting from the returns to education) and the more desirable it becomes for other (highly educated) individuals. Thus a virtuous circle results. The clear implication of this study is to pay more (positive) attention to entrepreneurship in universities and colleges.<sup>8</sup>

This policy implication is obtained under some untested assumptions, and these form the main limitations of this study (besides the already discussed subjective nature of some of the key survey information). The first untested assumption is that education causes status (and higher income levels and thus even higher status) and not the other way around, albeit consistent with theory. Second, and more far-fetched, we implicitly assume that more entrepreneurs in one's environment (and more own experience as such) cause a higher status attached to the entrepreneur instead of the other way around. Third, and this so far also remains questionable, we assume that the perceived status of a profession causes the willingness to choose, and likelihood of choosing, this profession, instead of the other way around. If it were the other way around, the manipulation of the status of the entrepreneur would have few behavioral consequences (although its underlying determinants that co-determine willingness and likelihood would still be worthwhile to affect). Gaining more insight into the causalities of these relationships should probably be the subject of future studies in this seemingly fruitful area of entrepreneurship and status.

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## NOTES

1. Also, the wording 'high-tech' in the specification by Malach-Pines et al. (2005) might induce individuals to rate the entrepreneur as having higher social status.
2. Bertrand and Mullainathan (2001) discuss some of the problems attached to using subjective survey data. We have set up the questionnaire with extreme caution in order to minimize the problems they address.
3. Other occupations are randomly selected, varying from barber to university professor in accordance with the original NORC questionnaires
4. The descriptive results are presented in Table 4.7.
5. The correlations between the various measures of status range from 0.56 to 0.72. They will therefore not be inserted simultaneously as explanatory variables into regression equations.
6. A drawback of this measure is that it reflects the attitude towards upside risk only.
7. Dohmen et al. (2005) claim that this is the best predictor of risk-taking behavior in different contexts.

8. Especially in the Master phase, the willingness to become, and likelihood of becoming an entrepreneur as well as the perceived status attached to this profession seem to go stale.

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