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ENTREPRENEURIAL ASPIRATIONS

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ABSTRACT: In this paper we study the labour market behavior of employed individuals that have entrepreneurial aspirations in addition to aspirations to switch job, using the Finnish Quality of Work Life Survey from the year 1997. We analyze empirically these two search processes and, inspired by Lazear's (2002) recent jack-of-all-trades hypothesis, focus specifically on the effects of varied experience on them. We report three main findings. First, entrepreneurial aspirations on-the-job are not uncommon. Second, employed people with varied experience are more likely to have entrepreneurial aspirations than others. This finding supports the jack-of-all-trades hypothesis of entrepreneurship. Finally, we propose that the hypothesis is not unique to entrepreneurship, as labour market opportunities available to people with varied experience are likely to be richer than to others. The data support this idea, as the jacks-of-all-trades search on-the-job for a new job more frequently than others. We also briefly consider the policy implications of our findings.

JEL: J230, J640, L200.

KEYWORDS: entrepreneurship, job search, experience.

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TIIVISTELMÄ: Tarkastelemme tässä tutkimuksessa työssäkäyvien halukkuutta etsiä uutta työpaikkaa tai ryhtyä yrittäjäksi käyttäen Työolotiedustelun aineistoa vuodelta 1997. Tutkimme näitä kahta "etsintäprosessia" empiirisesti ja keskitymme Lazearin (2002) "jack-of-all-trades" -hypoteesin (eli "joka-alan-asiantuntija" -hypoteesin) innoittamana erityisesti siihen, kuinka monipuolinen kokemus vaikuttaa etsintään. Raportoimme kolme päätulosta. (i) Työssäkäyvien halukkuus ryhtyä yrittäjäksi ei ole harvinaista. (ii) Monipuolinen kokemus lisää yrittäjyyshalukkuutta, kuten "jack-of-all-trades" hypoteesi ennustaa. (iii) Väitämme, että monipuolinen kokemus lisää myös uuden työpaikan etsintää, koska se parantaa työmarkkina-asemaa. Empiiriset tuloksemme tukevat myös tätä näkemystä, sillä ne työssäkäyvät, joilla on monipuolista kokemusta, etsivät usein uutta työpaikkaa. Pohdimme lyhyesti myös löydöksiemme politiikkaimplikaatioita.

JEL: J230, J640, L200.

AVAINSANAT: yrittäjyys, työn etsintä, työkokemus.

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1 Introduction

The purpose of this paper is to contribute to the existing empirical analyses of labour market behavior of employed individuals by exploring the previously overlooked possibility that the individuals on-the-job may have entrepreneurial aspirations in addition to aspirations to switch job.[1] This extension is of current policy relevance, because many policy-makers trust that entrepreneurship is a key driver of the world's most dynamic economies.

The entrepreneurial origins and entrepreneurs' experiences prior to entrepreneurship have recently received a great deal of attention from academic researchers, too.[2] In an important new study contributing to this strand of the literature, Lazear (2002) directs our attention to a certain specific kind of experience by arguing that people with more varied experience are more likely to become entrepreneurs. According to this jack-of-all-trades view of entrepreneurship, varied experience matters, because entrepreneurs need to master a number of different skills and have more balanced talents than "specialists".

In this paper we present an empirical analysis of the jack-of-all-trades hypothesis and interpret the results using a framework that is familiar from the prior analyses of labour market behavior of the employed individuals. We do so, because we have two specific objectives in mind: The first objective is to test Lazear's jack-of-all-trades hypothesis using a new type of data. In contrast to the type of data that the prior studies have used (Lazear, 2002, and Wagner, 2002), we test the hypothesis using data on entrepreneurial aspirations of a random sample of individuals currently on-the-job. As we will argue, the aspirations data reflect a type of search for entrepreneurial opportunities that is not dramatically different from on-the-job search for a new job. The second objective of ours is to test whether Lazear's hypothesis is unique to entrepreneurship or whether it also explains other kinds of labour market switches.

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[1] Entrepreneurial intentions alone have been investigated by Blanchflower, Oswald, and Stutzer (2001), and on-the-job search alone by Blau (1992) and Pissarides and Wadsworth (1993), among others.

[2] The emphasis in the academic economics research on entrepreneurial origins has often been either on cross-sectional determinants of self-employment choice or on job-to-entrepreneurship and unemployment-to-entrepreneurship switches in longitudinal data. See, e.g., Blanchflower and Oswald (1998), Le (1999), Blanchflower (2000), Dunn and Holtz-Eakin (2000) and Audretsch (2002).

We can motivate our first objective in many ways, as we believe that there is a lot to learn from the data on entrepreneurial aspirations. First of all, if the jack-of-all-trades view is indeed universal, it should *also* show up in the aspirations data. Should it show up, this paper's analysis would provide a confirmation of the hypothesis independent of the existing evidence. Moreover, the aspirations data allow us to investigate a population of *potential* entrepreneurs. Studying this population complements the previous analyses that typically use either cross-sectional or longitudinal data: The former data cannot mirror any dynamics related with the self-employment choice, because they reflect the status quo that prevails at each point in time. A problem with the latter data is that *actual* transitions into entrepreneurship are relatively rare. Because having entrepreneurial aspirations is the logical step just prior to a transition, it is of interest to ask if the transitions are rare because entrepreneurial aspirations are rare. If that *is not* the case, something probably prevents the realization of the aspirations. If that *is* the case, the micro-economic determinants of potential entrepreneurship are of special interest, because it is then the *potential* supply of high-quality entrepreneurs "from-the-job" that is a binding constraint (unless, of course, entrepreneurial opportunities can be pursued instantly without search, which hardly is the case).[3] Whichever of these two cases holds, the jacks-of-all-trades have a role to play.

We pursue the second objective, because employees may also have other than entrepreneurial aspirations. Both the theory of on-the-job search and a large empirical literature suggest that these other aspirations relate most likely to on-the-job search for labour market opportunities, i.e., to aspirations to switch job (see, for example, Burdett, 1978, Blau, 1992, Pissarides and Wadsworth, 1994, Manning, 2003). The raw labour market data also support this view, because *job-to-job* switches account for a large part of labour market turnover (Farber, 1999). We propose that because labour market opportunities available to the jacks-of-all-trades may be richer than to others, Lazear's hypothesis need not be unique to

[3] In any event, wider use of aspirations data might be useful because some of the estimated effects in the previous literature seem to depend on whether cross-sectional and longitudinal data are used (for these differences, see Le, 1999). In social psychology oriented management research, there already exists a strand of literature studying entrepreneurial intentions (see, e.g., Krueger et al., 2000). The results from this literature suggest that models of intentions are useful in understanding and predicting entrepreneurial activity.

entrepreneurship. Our second objective is thus to test whether it can also explain job-to-job switches.

We examine these questions using the Finnish Quality of Work Life Survey from the year 1997. We report three main findings. First, entrepreneurial aspirations on-the-job are not uncommon. Second, employed people with varied experience are more likely to have entrepreneurial aspirations than others. This finding supports the jack-of-all-trades hypothesis of entrepreneurship. Finally, we propose that the hypothesis is not unique to the entrepreneurship, as labour market opportunities available to people with varied experience are likely to richer than to others. The data support this idea, as the jacks-of-all-trades search on-the-job for a new job more frequently than others.

The rest of the paper is organized as follows: In the next section we outline a theoretical framework for our empirical analysis. In section 3 we discuss the data and estimation issues. In section 4 we present the results of our empirical analysis. Section 5 contains a brief summary.

2 Theoretical preliminaries

2.1 Basic framework

Roughly put, our data can be characterized as follows: Some of the employed individuals have entrepreneurial aspirations; some search for a new job; and some search neither for a new job nor have entrepreneurial aspirations.[4] We are unfortunately unaware of a theory that would allow for these three options. The theory of on-the-job search explains, however, why some search for a new job on-the-job while others do not, with nonzero search costs providing a prominent explanation for the inactivity on-the-job (Burdett, 1978). On the other hand, the relative efficiencies of search as unemployed or on-the-job have an influence on how the search is conducted. The theory also predicts that for a given (nonzero) level of search costs, the distribution from which the job offers are drawn determines the search decision.

[4] The three activities are not all mutually exclusive, because individuals can be engaged in both search processes. For the purposes of this study, it is nevertheless convenient to think about each of them in isolation. This is because in our data, only few are engaged in both search processes.

Absent a theory of entrepreneurial aspirations, the search for entrepreneurial opportunities on-the-job can be thought to be determined in the same way as the search for a better job is. We believe that the two search processes are similarly determined, because the search for entrepreneurial opportunities parallels on-the-job search for a better job at least in two important ways. First, the basic structure of the two decision problems is the same: As suggested by the previous studies (see for example Evans and Jovanovic, 1989, and Holtz-Eakin, Joulfaian and Rosen, 1994), individuals considering entrepreneurship select a strategy to maximize their own discounted lifetime income or utility, are forward-looking and transit into entrepreneurship on the basis of a rational selection process. For the employed, the comparison of the options involves the wage lost if an entrepreneurial opportunity is pursued. If the employed individuals (that are potential entrepreneurs) behave in this manner, the determinants of the decision to search for entrepreneurial opportunities are not too different from those of the standard decision to search for a new job.

Second, there are search costs and randomly arriving opportunities in both cases. In the standard models of entrepreneurship (Evans and Jovanovic, 1989, and Holtz-Eakin et al., 1994), the search process is implicit, but were it explicitly modeled, it would be – not unlike in the search models – about acquiring market information and analyzing randomly arriving entrepreneurial opportunities (see also Krueger et al. 2000). The randomly arriving opportunities, in turn, might be related for example to the uncertainty regarding the mean of the distribution determining an individual's gross earnings as an entrepreneur. The data on entrepreneurial aspirations on-the-job should thus systematically reflect similar rational considerations, economic laws and constraints as those that govern the data on job search on-the-job.[5]

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[5] A potential criticism against using aspirations data is of course that an individual's aspirations may predict her actions poorly even if she is unconstrained to pursue them. We have three responses to this type of criticism. First, for our analysis to make sense it is required only that entrepreneurial aspirations are positively (but not perfectly) correlated with the actual transitions to entrepreneurship. Second, if this correlation is weak, something of a paradox emerges. The source of the paradox is that unless the transitions to entrepreneurship are preceded by some kind of evolution and systematic development of entrepreneurial ideas (i.e., "on-the job search for them") that the entrepreneurial aspirations reflect, "true" potential entrepreneurship on-the-job is next to random or unpredictable. Finally, psychological studies suggest that intentions indeed predict (planned) behavior, particularly when that behavior is rare or hard to observe (see Krueger et al. 2000 and the references therein).

We next look for potential determinants of entrepreneurial aspirations and aspirations to switch job from the literature on entrepreneurship and on job search, respectively. We believe that the potential determinants reflect both search costs and the distribution of job offers/entrepreneurial opportunities, allowing us thus to develop a framework that we can use to guide our empirics.

2.2 Determinants of entrepreneurial aspirations

The literature on entrepreneurship has during recent years grown rapidly if not exploded. Nice roadmaps to this increasingly diversified literature are Le (1999), Blanchflower (2000) and Audretsch (2002). There is, unfortunately, no unified theory of entrepreneurship. Instead, there are many theories, which vary a lot both in terms of their focus and generality.

Both cross-sectional studies and longitudinal data support the proposition that a large number of various economic, sociological, psychological, cultural and environmental factors impact the probability of becoming an entrepreneur. However, of these various factors some are economically (and empirically) more relevant than the others. On the basis of the recent literature, we consider the following factors: educational attainment (e.g., the level and field of education), occupational status (e.g., professional status and industry), individual and family background characteristics (e.g., gender, marital status, spouse's employment status, number of dependents), income from present occupation, and various characteristics of the economic environment (e.g., the area of residence).[6]

On and above the foregoing candidate determinants of entrepreneurial aspirations, we also include labour market experiences. We include them, because for example years worked, number of similar jobs held, and job tenure have been

[6] This is of course not a complete list. It does encompass, however, a non-negligible subset of the empirically most relevant determinants of entrepreneurship as identified in the received literature. Because our data are from Finland and about entrepreneurial aspirations of individuals currently on-the-job, we can to some extent limit the range of relevant variables: First, ethnic background and race that have been examined especially in the U.S. literature are not relevant in Finland because of the homogeneous population and small number of immigrants. Second, because our data refer to individuals currently on-the-job, certain specific determinants of unemployment-to-entrepreneurship switches are not of primary interest to us. Finally, there are relatively few published empirical studies of the determinants of transitions from salaried employment to self-employment that use Finnish data and that would suggest variables on and above the ones we consider here: Using data on test scores from a battery of ability and personality tests, Uusitalo (2001) finds that human capital and psychological factors influence the transitions. In Johansson's (2000) study, the focus is on the effects of financial variables on the transitions.

identified to affect switches to entrepreneurship in the previous studies.[7] It is a well-known fact that the rewards from entrepreneurship are so low that entrepreneurship can hardly be determined solely by a choice based on alternative incomes (e.g. Hamilton, 2000). Clearly, the non-wage attributes of jobs, like working conditions and general job satisfaction are likely to influence the discounted lifetime utility and hence aspirations to become an entrepreneur.[8] These types of variables are likely to be empirically important to us, because we are modeling on-the-job search for entrepreneurial opportunities.

Lazear's (2002) jack-of-all-trades view of entrepreneurship adds variation in an employee's experience to the list of factors impacting the probability of becoming an entrepreneur. The key prediction of his model is that individuals with more balanced skills are more likely than others to choose an entrepreneurial career. The primary reason for this is that establishing and running a new firm require skills in a variety of fields, such as human resource management (to hire high-quality employees), technology (to develop or understand the firm's product/service), marketing (to create a market for the product) and finance (to raise initial capital for the firm). If this jack-of-all-trades view is empirically relevant, it should also show up in our aspirations data.

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[7] Other kind of labour market experience may also matter. Gompers, Lerner and Scharfstein (2003) argue in their recent paper that entrepreneurial learning and network building that naturally happen in certain kind of established firms are important for the creation of new firms. Their analysis of venture capital -backed US firms support this Fairchild view of entrepreneurship and not the Xerox view, according to which employees are pushed from large bureaucratic firms into entrepreneurship because of the reluctance of such firms to develop innovative entrepreneurial ideas further. Hellmann (2002) also emphasizes the employees of established companies as a source of new entrepreneurs and shows theoretically that the unavailability of outside resources, such as venture capital, may inactivate these would-be entrepreneurs. Shane and Khurana (2003) test the hypothesis that prior firm-founding and firm-financing experience affect the willingness to found new firms.

[8] In a recent paper, Poutvaara and Tuomala (2003) estimate earnings functions for workers and entrepreneurs in Finland using an extensive panel of 350,000 individuals over 12 years. Consistent with the idea that non-wage attributes matter, they find that when compared to workers, entrepreneurship involves higher income risks. The finding is interesting from another perspective as well, because it is in line with what Uusitalo (2001) finds: according to his results, less risk-averse workers are more likely to become entrepreneurs.

2.3 Determinants of aspirations to switch job

Like the literature on entrepreneurship, the literature on job search and the dynamics of job change is both plentiful and growing (see e.g. Mortensen, 1986, and Farber, 1999).

From theoretical point of view, wages and tenure are probably the two most natural candidate determinants of job search. Many on-the-job search models imply a negative relation from wage to separations (search), because the higher the current wage of an employee, the less likely that the next (randomly arriving) wage offer is lucrative for the employee (Burdett, 1978, and Jovanovic, 1979a). The negative relation arises also in matching models, because workers are more likely to stay in jobs (matches) with high productivity and wages than in jobs with low productivity and wages (Jovanovic, 1979b). Predictions from efficiency wage theories echo the presence of a negative relation (Salop, 1979).

These models also typically imply that the probability that an individual switches a job decreases with tenure. The theory of on-the-job search suggests that the longer the tenure, the longer the implicit search process that has not led to a switch, and thus the less likely that the current job is not among the best available. The negative relation can also be thought to arise either because of worker heterogeneity (i.e., because of workers prone to search for a new job doing it early) or because of accumulation of employer-specific capital (Farber, 1999).

The foregoing suggests that we should control for tenure, wage and workers' propensity to switch job (i.e., heterogeneity). These variables are however by no means the only variables that affect job search. Empirical studies suggest for example that various other worker characteristics, such as age and socioeconomic status, have significant effects on job search (see for example Blau, 1992, and Pissarides and Wadsworth, 1994, Manning, 2003) and should therefore be controlled, too. Moreover, job satisfaction and various non-pecuniary attributes of the current job influence quits (e.g. Clark, Georgellis, and Sanfey, 1998) and should therefore also be related to job search.

How does Lazear's jack-of-all-trades hypothesis fit in the context of on-the-job search? We argue that it fits in nicely, because labour market opportunities available to the jacks-of-all-trades may be richer than to others. Individuals currently on the job that master a number of different skills and have a balanced set of talents may for example receive job offers simply more frequently. Or

alternatively, the offers to them may be drawn from a distribution either with a higher mean or higher variance, which both increase the returns to search (for a given reservation wage). A reason for this might for example be that many managerial positions call for a balanced set of talents. The basic intuition underlying our argument is not thus too different from the standard view that education enhances labour market opportunities: here we test the related hypothesis that for a given level of education, the jacks-of-all-trades search for a new job more frequently than others.

2.4 Summary

Summing up, the foregoing provides us with three starting points for our empirical analysis: First, the data on entrepreneurial aspiration reflect a type of search for entrepreneurial opportunities that is not dramatically different from on-the-job search for a new job. Second, many if not most of the determinants contributing to on-the-job search for a new job are deceptively similar to the determinants impacting the probability of becoming an entrepreneur. Of course, the relative importance of the variables for the two search processes need not be the same. We trust, however, that the determinants discussed above reflect search costs and the distribution of both job offers and entrepreneurial opportunities. Last but not least, if Lazear's jack-of-all-trades view is indeed a universal explanation of entrepreneurship, it should also show up in the data on entrepreneurial aspirations. However, if jacks-of-all-trades have richer labour market opportunities than others (and thus if Lazear's view is not unique to entrepreneurship), we should additionally find that the jack-of-all-trades search for a new job more frequently than others.

3 Data and empirical specification

3.1 Data sources

The data set that we are using is the Quality of Work Life Survey (QWLS) of Statistics Finland. It is conducted at irregular intervals, the latest being from 1997, which is the year we use. The initial sample for QWLS is derived from a monthly Labour Force Survey (LFS) of Statistics Finland, where a random sample of

working age population is selected to a telephone interview. The 1997 QWLS was based on LFS respondents in September and October who were 15-64 old wage and salary earners with normal weekly working time at least five hours. 3795 individuals were selected to the QWLS sample and invited to participate in a face-to-face interview. Out of this sample 2978 persons, or 79 percent, participated (see Lehto and Sutela, 1999).

QWLS includes questions on the personal characteristics and work experience of the respondents, and a large set of questions on perceived working conditions. Statistics Finland supplements QWLS with information from the LFS on e.g. working time and exact labour market status. Supplementary information on the industry and location of the employer, and on the level and field of education of the respondents is from various registers maintained by Statistics Finland.

3.2 Definition of variables

Dependent variables

The dependent variables used in this study are on-the-job search for entrepreneurial opportunities and on-the-job search for a better job. Unfortunately, the earlier literature has not been able to identify ideal measures for these types of behaviour. Absent the ideal measures, we have chosen to proxy them as follows: As for entrepreneurial aspirations on-the-job, QWLS includes a question "Have you ever thought about starting your own business or becoming self-employed?", with possible answers "no", "occasionally", "often", and "don't know". We use a binary indicator for the answer "often" as our primary dummy indicator for on-the-job search for entrepreneurial opportunities. We denote this first main dependent variable ENTREPOFTEN. As for search for a better job, there is a question "Have you been looking for another job in the last 6 months?". The responses to this question are used to construct a binary indicator for on-the-job search for a better job. We denote this second main dependent variable of ours JOBSEARCH. We present the exact definitions of these and all the other variables, as well as descriptive statistics, in the Appendix.

Although our measures for the two types of labour market behaviour are certainly imperfect, we have several reasons to trust in them. First, they reflect the same type of search in progress as the variables used to capture on-the-job-search

in the previous labour market analyses (see, for example, Blau, 1992 and Pissarides and Wadsworth, 1994) and analyses of latent entrepreneurship (Blanchflower, Oswald and Stutzer, 2001). Second, we can establish the robustness of our results with respect to alternative measures: When studying their robustness, we use a binary indicator for thinking about becoming an entrepreneur at least sometimes, which includes the categories "occasionally" and "often". We denote this variable ENTREPTHINK. We also use all three categories, "no", "occasionally", and "often" as variable ENTREP in an ordered probit analysis. As for job search, we try a binary indicator on whether the respondent has looked for a job during the last four weeks as an alternative to JOBSEARCH. We denote this indicator SEARCH4. Clearly, this variable is a more restricted measure of job switch aspirations. Third, if our measures completely failed to capture the two types of labour market behaviour, we should probably find no meaningful effects. Last but not least, our main measures have the merit of simplicity.

Measuring varied experience

To test the jack-of-all-trades hypothesis we need a measure for varied experience. The measure should be such that it simultaneously captures both the jack-of-all-trades view of entrepreneurship as well as the idea that people of that type may have richer labour market opportunities than others. To obtain a balanced measure, we construct an indicator that equals one if the employee has held more than three clearly *different* occupations (professions) during her working life. The indicator, which we denote OVER3PROFS, equals zero otherwise.

Our measure for varied experience is thus similar (but not identical) to Lazear's (2002) measure, which is the total number of roles that an individual has had in her jobs in the past. Our measure is, however, almost identical to a measure of Wagner (2002), which is the number of changes of profession. We are unfortunately unable to measure the number of different kinds of professional training, which could also mirror varied experience (Wagner, 2002). Should such effects be present in our data and should different kinds of professional training result in changes of occupations, OVER3PROFS is probably the most likely variable to capture them.

Unlike the previous tests of the jack-of-all-trades hypothesis, we are, however, able to include a rich set of control variables to account for the other

potential determinants of both search costs as well as of the distributions of job offers and entrepreneurial opportunities identified in the previous literature. We can, for example, control for certain specific types of labour market experiences, such as the number of job changes. We can also control for the possibility that an individual is currently gaining experience as a part-time entrepreneur or farmer in a second job, which may be a stepping-stone to full time entrepreneurship. These and other control variables are described next.

Control variables

We consider four sets of control variables (models) that we include sequentially into our empirical specification. In the first model we include several personal characteristics. These include age (age group dummies AGE1 to AGE3), gender (FEMALE dummy), education (education levels EDU1 to EDU4), fields of education (technical EDUTECH, business EDUBUS, health care, teaching etc. EDUHUMCARE), family (MARRIED dummy, CHILDREN for number of children), as well as indicators for the type of the current employment relationship (PARTTIME, TEMPORARY).

In the second model, we add four new controls. The first three of them reflect the kind of characteristics in an individual's current job that are useful if the person starts her own business (see also Gompers, Lerner, and Scharfstein, 2003). MANAGER is an indicator for managerial tasks in current job, OVERTIME indicates that the persons very often works unpaid overtime, and FRESH indicates that the persons can experiment with new things in the current job. Since prior entrepreneurial experiences may also matter, we include SIDEENTREP, which indicates that the individual is presently gaining experience as entrepreneur or farmer in a second job. Obviously, the same controls may explain why an individual is looking for a new job.

In the third model we include log of monthly pay (LOGWAGE) and years of firm-specific experience (TENURE). We acknowledge that these may be endogenous. If the firm uses wage as a means of lowering the quit rates, turnover and wage should be simultaneously determined. On the other hand, if employees with high propensity of changing jobs leave early, quit intentions and tenure are jointly determined. For the time being we use these two variables without instrumenting them. The relationship between tenure and quit intentions (either to

entrepreneurship or another job) may be negative because of employee heterogeneity even when there is no true negative state dependence in turnover. We can control the heterogeneity by including a variable that measures the number of job changes in the last five years, SWITCHES. Employees who have switched jobs often in the past, are likely to do it also in the future.

In the fourth model we also include characteristics of the firm for which the interviewed employees are working. These include indicators for public or foreign ownership (PUBLIC, FOREIGN), plant size (size groups PSIZE1 to PSIZE4), and industry (industry dummies IND_i, i=1,…12).

4 Results

4.1 Univariate analysis

We present first some descriptive evidence on entrepreneurial and job search intentions. In Table 1 we cross-tabulate ENTREPOFTEN and JOBSEARCH. The figures show that almost 80% of the respondents are neither looking for a job nor thinking (often) about entrepreneurship. Almost 13% are searching for a new job, but not interested in becoming an entrepreneur, and 5% can be classified as latent entrepreneurs that are not actively engaged in on-the-job search for a new job. There are relatively few, less than 3%, who are both potential entrepreneurs and job switchers.

Table 1 suggests that entrepreneurial aspirations on-the-job are not rare, as almost every tenth employee (8% of the employed) has thought often about starting her own business. Entrepreneurial aspirations seem to be less common than aspirations to switch job (15% of the employed). This difference is, however, driven by the definition of the variables. Had we used ENTREPTHINK, the mean would be much higher (37% of the employed). Because of this ambiguity and the difference in the way the questions are asked, we cannot probably say much about which of the two types of aspirations on-the-job is more common. The table also shows that the two processes are not independent. The dependence is confirmed by a Pearson's chi-square test, which rejects the hypothesis that entrepreneurial aspirations and job search are independent at the 1% level. This unconditional result is of course driven to a large extent by the large number of non-searchers.

[INSERT TABLE 1 ABOUT HERE]

Table 2 reports the distributions of ENTREPOFTEN and JOBSEARCH, conditional on OVER3PROFS. The table shows that varied experience increases both the probability of observing ENTREPOFTEN = 1 and the probability of observing JOBSEARCH = 1. The two Pearson's chi-square tests confirm these observations, as they reject the independence at better than the 1% significance level. The univariate tests thus support Lazear' jack-of-all-trades hypothesis of entrepreneurship as well as the idea put forward in this paper that people with varied experience may have richer labour market opportunities than others.

[INSERT TABLE 2 ABOUT HERE]

4.2 Basic regression results

Tables 3 and 4 report the results of our basic regressions. In Table 3, we report marginal effects from maximum likelihood estimation of probit models for ENTREOFTEN for the four basic models of ours, and in Table 4 we report them for JOBSEARCH. The marginal effects are evaluated at the means of the variables and measure the impacts of infinitesimal changes in the continuous variables and discrete changes in the dummy variables. The standard errors are based on the robust Huber-White variance-covariance estimator.

Table 3 shows that in the probit models for entrepreneurial aspirations, OVER3PROFS obtains - irrespectively of the model considered - a positive coefficient that is significant at the 5% level. The finding shows that varied experience matters for entrepreneurial choices and thus supports the view that potential entrepreneurs are indeed those that master a number of different skills and have more balanced talents than "specialists". Table 4 shows that in the probit models for job search, OVER3PROFS also obtains a positive coefficient that is significant at the 5% level, irrespectively of the model considered. The result implies that holding other things equal, the jacks-of-all-trades search on-the-job for a new job more frequently than others. This suggests that Lazear's jack-of-all-trades hypothesis is not unique to entrepreneurship. Both of these findings echo our univariate results.

[INSERT TABLE 3 ABOUT HERE]
[INSERT TABLE 4 ABOUT HERE]

Table 3 also shows that the economic effect of OVER3PROFS on the two dependent variables is of considerable magnitude: The estimates of model 4 suggest, for example, that the probability of an individual having entrepreneurial aspirations is 4% greater for an employee with varied experience than for an employee without the experience. Comparing this figure to the average probability of ENTREOFTEN, 8%, shows that the effect is not at all negligible. The probability of an individual searching for a better job is 5% greater for an employee with varied experience than for an employee without the experience. Comparing this figure, in turn, to the average probability of JOBSEARCH, 15%, shows that the effect is relatively large.

Are there any other variables besides OVER3PROFS that have consistently a significant impact both on ENTREPOFTEN and on JOBSEARCH? The answer is clear-cut: The only other variable that is systematically related to the two search processes is tenure, which has a negative and statistically significant coefficient in all the models. If the effect were exogenous[9] and, in addition, SWITCH and the other controls capture heterogeneity in an employee's propensity to leave their jobs (see discussion below), we can interpret the tenure effect as state dependence. It would speak for accumulation of employer-specific capital.

Due to the nonlinearity of the probit model, the marginal effects are a function of all the independent variables. This implies that the effects of tenure and varied experience on the probabilities of entrepreneurial aspirations and on-the-job search are associated. The effects are associated although the model does not include an explicit interaction term (see for example Ai and Norton, 2003). We show this association in Figure 1, where the (predicted) probabilities are plotted against tenure separately for OVER3PROFS = 1 and OVER3PROFS = 0. We have evaluated the probabilities at the means of all the other variables and using the parameter estimates of model 4 in Tables 3 and 4. The figure shows that the probabilities fall with tenure, but the fall is much steeper in the case of job search. Tenure dampens the effect of varied experience, as the probabilities of entrepreneurial aspirations of those with and those without varied experience

[9] This is indeed what we find; see the robustness tests in section 4.3.

approach each other as tenure increases. The gap between the two probabilities of job switch aspirations narrows even faster. The difference in the rate at which the gap narrows suggests that the impact of the jack-of-all-trades effect is more persistent for entrepreneurship.

[INSERT FIGURE 1 ABOUT HERE]

The other side of the results is that the two search processes are in other respects different: The models for ENTREPOFTEN suggest that females and married employees are less interested in entrepreneurship; that second job as entrepreneurs has a big impact on the probability of thinking about becoming full time entrepreneur[10]; and finally that the opportunity to experiment with new things in current work and working unpaid overtime have relatively large marginal effects on ENTREPOFTEN. A completely different set of variables is related to JOBSEARCH. Most interestingly, the number of job switches in the past obtains a significant coefficient in the job search equation. This can be interpreted to indicate that there is indeed heterogeneity in the employees' inclination to leave their job. The age group dummies are also significant, implying that the oldest employees (control group) engage less in on-the-job search. The employment relationship also clearly affects job search, as both part time work and temporary contract dummies get highly significant coefficients.

As to the remaining control variables in models 1-4, their effects on ENTREPOFTEN and on JOBSEARCH are less systematic and not exceedingly robust. Years of education, for example, have no systematic impact on either dependent variable.[11] Similarly, field of education is significant only in the models for entrepreneurship, where employees with technical or natural science education think about entrepreneurship less often. Even this effect disappears once the industry for which the employees are working for is controlled for. Temporary work has a significant impact on entrepreneurial intentions in models 1 and 2, but the effect is not robust to including the additional controls. Wage

[10] The impact is big, because this kind of experience increases the probability of entrepreneurial aspirations by over 30 percent.

[11] To be sure, the dummy for the lowest educated group has a significantly negative coefficient in model 1 for ENTREPOFTEN. The coefficient loses, however, its statistical significance in the remaining three models.

does not affect ENTREPOFTEN, but has a weakly negative effect on the probability of job search. If taken at face value, the estimate suggests that a 10 percent increase in wage decreases the probability of job search by 0.2-0.3 percent. Plant size and ownership variables are insignificant in both equations. Lastly, some weak industry effects can be found.[12]

As the foregoing suggests, the two search processes are in many respects different from each other. Wald-tests for the additional controls support this view. In the models for ENTEPOFTEN in Table 3, the *p*-values of the joint tests are <0.01, 0.02 and 0.05 in models 2, 3, and 4, respectively. The pattern of statistical significance is different in the models for JOBSEARCH in Table 4, as there the corresponding values are 0.96, <0.01 and 0.44. To further consider whether the determinants of the two processes differ we run a fifth unreported model. For this model, we take the entrepreneurial aspirations and job search models of columns 4 of Tables 3 and 4, and estimate them as a bivariate probit model. A Wald-test for the bivariate model indicates, unsurprisingly, that the coefficients of the entire control vectors, including OVER3PROFS, are not identical in the two Probit equations ($\chi^2(37)$ statistic is 169.70, with a *p*-value <0.01). A test of the equality of the coefficients of OVER3PROFS shows, however, that the coefficients are not significantly different from each other ($\chi^2(1)$ statistic is 0.09).

The bivariate Probit confirms yet another earlier finding of ours, as it shows that the two search processes are related even after conditioning on the observables. The correlation coefficient of the error terms of the two probit models is 0.293 with a standard error of 0.051. This result implies that the conditional independence of the two processes can be rejected at the 1% significance level. It is useful to remember, however, that the large number of non-searchers probably drives this result, as there are only few who are both potential entrepreneurs and job switchers.

[12] Thinking about becoming an entrepreneur is more common in agriculture and forestry (industry AB) and in transportation and communications (industry I). As for job search, it is more common in public administration (L), education (M), and health and social services (N). This finding is interesting, because we are already controlling for TEMPORARY and PARTTIME. If these controls do their job, the industry effects should not be related to the large share of temporary employment relationships in these public sector fields.

4.3 Robustness tests

In the following we explore and try to rule out a number of alternative explanations for our empirical findings. To this end, we perform a number of robustness tests. We do not report these tests in detail to save space, as we run several new regressions both for on-the-job search for entrepreneurial opportunities and for on-the-job search for a better job. Anticipating the outcome of these tests, each of them illustrates that our data support Lazear' jack-of-all-trades hypothesis of entrepreneurship. They also provide additional support for the idea put forward in this paper that people with varied experience may have richer labour market opportunities than others.

Robustness test 1: The aim of this first robustness test is to show that certain prominent omitted variables are not biasing our empirical findings. We start by first controlling for the total work experience of the survey respondents. The survey has information on the years of experience, but the distribution of the answers has peaks at five-year intervals, i.e. the respondents have typically approximated their experience to the nearest five years. We therefore use dummy variables for experience categories, EXP1-EXP4, instead of the continuous variable. This kind of work experience is of course correlated with AGE, but as we are not interested in the age effects per se, the correlation is not a source of concern to us. Controlling for the total work experience does not affect the conclusions on our main variable of interest. When EXP1-EXP4 were included in the models 1-4, OVER3PROFS still obtained a positive coefficient that was statistically significant at better than the 1 % level in all ENTREPOFTEN and JOBSEARCH regressions. What's more, the inclusion of some job satisfaction variables (i.e., general satisfaction with current work, SATISFIED; dissatisfaction with superior, BOSSNOSAT; and the opinion that the contents of work are definitely the most important in work, compared to pay, CONTENT) and of an indicator on whether the person is a labour union member (UNION) did not change our basic results.[13]

[13] Capital constraints are yet another prominent omitted variable. Not having perfect controls for capital constraints should not, however, be of great concern to us for two reasons. First, capital constraints have apparently had only a minor effect on transitions from salaried employment to self-employment in Finland in the 1990s (Uusitalo 2001). Johansson's (2000) probit estimations echo this view, as he finds that the quantitative impact of a wealth variable on the transitions is not very large. Second, our regressions include both LOGWAGE and age group dummies that control

Robustness test 2: Is a mis-specified distributional assumption driving our findings? To address this question, we re-run our basic models as linear probability models, which may be more robust to the underlying assumptions about the model specification than the probit model (see for example Wooldridge 2002). The coefficient of OVER3PROFS was again significant in all the models for ENTREPOFTEN and JOBSEARCH. Moreover, the coefficients of the variable were fairly close to the marginal effects that we obtained from the probit estimations. This is natural, since most of our explanatory variables are dichotomous.

Robustness test 3: One possible concern is the endogeneity of OVER3PROFS. The possibility can be examined using the test suggested by Rivers and Vuong (1988). This test amounts to regressing the possibly endogenous variable on a set of exogenous variables that include the exogenous variables in the model and additional instruments. The residuals from these regressions were then inserted in the original models. A test of the significance of the coefficient is an endogeneity test.

To implement the test, we need to consider the determinants of OVER3PROFS. Finding good instruments is, however, known to be difficult and our study is no exception in this respect. Since OVER3PROFS refers to past labor market experiences, we cannot use as instruments such variables that relate to the present employment. The instruments with which we ended up working are as follows. First, we have all the exogenous variables that are included in Model 1. Here we include also the indicators for part-time and temporary employment, PARTTIME and TEMPORARY. They relate to the present job, but may more generally indicate persons who are inclined to work in part-time occupations or in chains of temporary jobs. Second, as additional instruments we include unemployment months during the past five years (UMONTHS), an indicator for long-term illness (LONGTERMILL), and regional dummies. Unemployment and illness can be regarded as exogenous shocks that may force the individuals to change occupation. On the other hand, the regional indicators can control for differences in labor market opportunities that may explain occupational switches.

for the effects of financial capital to some extent. Including these controls is important, because they are also important determinants of home ownership and because Johansson (2000) has found that home ownership is positively associated with the probability of becoming self-employed.

These variables turn out not to be direct determinants of ENTREPOFTEN: when included directly in the models for entrepreneurial intentions, they are never significant.

Performing the endogeneity test showed that in the probit models for ENTREPOFTEN the coefficient of the residual was not significant in any of the models. In the probit estimations for JOBSEARCH the coefficient of the residual was not significant, either.[14] We also tested for the endogeneity of LOGWAGE and TENURE. The results of these tests indicate that the variables are clearly not endogenous.[15]

Robustness test 4: Are mis-measured dependent variables driving our findings? To address this question, we re-run our basic regressions using alternative measures for the two dependent variables. Instead of ENTREPOFTEN we try ENTREPTHINK. We also use ordered probit to explain ENTREP that has three ordered categories. Finally, instead of JOBSEARCH we explain SEARCH4.

The results of this robustness test echo our previous findings. OVER3PROFS was significant at the 1% level in all the probit models for ENTREPTHINK and the marginal effects were higher than when ENTREPOFTEN was the dependent variable. In an ordered probit analysis for ENTREP, the variable OVER3PROFS was highly significant in all the models.[16] In a probit analysis of SEARCH4, the variable for wide experience was somewhat less important. This is what we would expect, since SEARCH4 is a more restricted measure of search for a new job than JOBSEARCH. The coefficient of OVER3PROFS was significant at the 5% level in models 1 and 2, but the marginal effects were lower than for JOBSEARCH. The coefficient was positive

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[14] Had the dichotomous variable turned out to be endogenous, we could have estimated the system with bivariate probit, since the system is recursive (cf. Greene, 2003), i.e. present entrepreneurial aspirations do not affect past changes of occupation.

[15] In addition to the exogenous variables in the entrepreneurship models we used as instruments for LOGWAGE and TENURE also an indicator for high socioeconomic position (SOSECHIGH); dummies for different pay systems (fixed pay, FIXEDPAY; piece rate or commission pay, PIECERATE; or combination of them, FIXANDBONUS); unemployment months in past five years, UMONTHS; and regional dummies, REG_i, i=1,…,20.

[16] Interestingly, some of the control variables gained significance when we used these alternative variables for entrepreneurial intentions. This is natural, since ENTREPOFTEN is the strictest definition. Those variables that were significant in the models for ENTREPOFTEN remained significant when ENTREPTHINK was the dependent variable. Among the new variables that gained significance were the youngest age group AGE1 (+), CHILDREN (+), MANAGER (+) and LOGWAGE (+), where the sign in the parenthesis indicates the direction of the effect. In an ordered probit model for ENTREP the results were fairly similar.

but insignificant in models 3 and 4, as the *p*-values of the coefficient were in these models 0.14 and 0.11, respectively. However, when the more efficient bivariate probit was run (with ENTREPOFTEN and SEARCH4 as the dependent variables and with the control variables of model 4), the coefficient of OVER3PROFS was again significant at the 10% level in the job search equation.

5 Conclusions

The purpose of this paper is to contribute to the existing empirical analyses of labour market behavior of employed individuals by exploring the previously overlooked possibility that the individuals on-the-job may have entrepreneurial aspirations in addition to aspirations to switch job. We analyze empirically these two "search processes" and, inspired by Lazear's (2002) recent jack-of-all-trades hypothesis, focus specifically on the effects of varied experience on them.

To study the processes and to test the hypothesis, we use Finnish data on the entrepreneurial and job search aspirations of a random sample of individuals currently on-the-job. We report three main findings:

- Entrepreneurial aspirations on-the-job are not uncommon. Almost every tenth employee has thought often about starting her own business.
- Employed people with varied experience are more likely to have entrepreneurial aspirations than the others. This finding supports Lazear's (2002) jack-of-all-trades hypothesis of entrepreneurship.
- We propose that the hypothesis is not unique to entrepreneurship, as labour market opportunities available to people with varied experience are likely to be richer. The data support this idea, as the jacks-of-all-trades search on-the-job for a new job more frequently than others.

At first sight, our findings suggest that public policy can only have a limited role in creating entrepreneurship. The reason for this is, obviously, that "varied experience" does not sound like a policy variable. But this first sight is not necessarily correct: education that is not oriented to narrowly defined professions, but rather supports general skills and flexibility to adopt new things is likely to be useful for supporting entrepreneurship. Our results suggest, in particular, that programs that aim at educating for example engineers in design and business administration, and artisans in marketing, finance and logistics may help create

dynamic working careers where individuals switch between distinctly different occupations.

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Data Appendix

In this appendix we report the definitions of our variables in detail and present descriptive statistics.

Entrepreneurship and job search variables

ENTREPOFTEN	= 1 if has thought about starting own business or becoming self-employed "often", = 0 if "occasionally", "not", don't know" or missing answer.
ENTREPTHINK	= 1 if has about of entrepreneurship or self-employment "often" or "occasionally", = 0 if "not", don't know" or missing.
ENTREP	= 1 if has not thought of entrepreneurship, = 2 if occasionally, = 3 if often. Don't know and missing are excluded.
JOBSEARCH	= 1 if has been looking for another job in the last 6 months (while in present job), = 0 if not or missing answer.
SEARCH4	= 1 if has looked for a job in the last 4 weeks, = 0 if not or missing.

Work experience and employment relationship variables

OVER3PROFS	= 1 if has been in over three distinctly different kinds of occupations during his/her life, = 0 otherwise
MANAGER	= 1 if tasks involve supervision of others or delegation of tasks to other employees, = 0 otherwise
SIDEENTREP	= 1 if has second job as farmer of entrepreneur, = 0 otherwise
OVERTIME	= 1 if does almost daily overtime for which receives no compensation, = 0 otherwise
FRESH	= 1 if experiments with new things in work continuously or very frequently, = 0 otherwise
SWITCHES	number of job changes in last 5 years
UMONTHS	unemployment months in last 5 years

TENURE	= years in current workplace in continuous employment relationship
EXP1	= 1 if total work experience under 3 years, = 0 otherwise
EXP2	= 1 if total work experience is 3-12 years, = 0 otherwise
EXP3	= 1 if total work experience is 13-27 years, = 0 otherwise
EXP4	= 1 if total work experience is over 27 years, = 0 otherwise
PARTTIME	= 1 if works part time, = 0 otherwise
TEMPORARY	= 1 if currently fixed-term employment relationship, = 0 otherwise

Personal characteristics variables

AGE1	= 1 if age 15 – 24, = 0 otherwise
AGE2	= 1 if age 25 – 44, = 0 otherwise
AGE3	= 1 if age 45 – 64, = 0 otherwise
FEMALE	= 1 if female, = 0 if male
MARRIED	= 1 if married or cohabiting, = 0 otherwise
CHILDREN	number of children under 18 years living at home
EDU1	= 1 if comprehensive education, = 0 otherwise
EDU2	= 1 if upper secondary or vocational education, = 0 otherwise
EDU3	= 1 if polytechnic or lower university degree, = 0 otherwise
EDU4	=1 if higher university degree, = 0 otherwise
EDUTECH	= 1 if education in technology, natural science or computer science, = 0 otherwise
EDUBUS	= 1, if education in business, law or social sciences, = 0 otherwise
EDUHUMCARE	= 1 if education in health care, teaching, or humanities, = 0 otherwise
EDUOTHER	= 1 if education in agriculture and forestry or unspecified field, = 0 otherwise (reference group)
SOSECHIGH	= 1 if social economic position high (higher white collar employee, management position etc.), = 0 otherwise
UNION	= 1 if member of labour union, = 0 otherwise
LONGTERMILL	= 1 if suffers from any medically diagnosed chronic illness, = 0 otherwise

Work attitude variables

SATISFIED	= 1 if "very satisfied" with current job, = 0 otherwise
BOSSNOSAT	= 1 if very dissatisfied with superior's leadership, = 0 otherwise
CONTENT	= 1 if contents are definitely the most important in work, = 0 otherwise (pay definitely the most important, pay slightly more important than contents, contents slightly more important than pay)

Income variables

LOGWAGE	= ln(MIDWAGE), where MIDWAGE is the mid point of monthly income category. Categories are under FIM 3000, then increases by 1000 from 3000 to 16000, by 2000 from 18000 to 2000, by 5000 from 20000 to 30000, and the final category is over 30000. For the last and first category, MIDWAGE is the category limit. Income is gross income, including shift work and bonuses, but excluding overtime pay.
FIXEDPAY	= 1 if fixed monthly or hourly pay (including shift work supplement), = 0 otherwise
PIECERATE	= 1 if only piece-work or commission pay, = 0 otherwise
FIXEDANDBONUS	= 1 if pay consists of fixed basic pay plus piece work bonus, productivity bonus or commission, = 0 otherwise

Firm characteristics variables

PUBLIC	= current employer is state or municipality, = 0 otherwise
FOREIGN	= current employer is private, mainly foreign-owned enterprise, = 0 otherwise
PSIZE1	= 1 if number of persons working in same establishment is under 10, = 0 otherwise
PSIZE2	= 1 if number of persons working in same establishment is 10-49, = 0 otherwise
PSIZE3	= 1 if number of persons working in same establishment is 50-499, = 0 otherwise

PSIZE4	= 1 if number of persons working in same establishment is 500 or more, = 0 otherwise
IND_i	dummies for industries i = AB (agriculture, forestry, fishing), CDE (mining, manufacturing, energy), F (construction), G (trade), H (hotels and restaurants), I (transportation and communications), J (finance), K (real estate and business services, L (public administration), M (education), N (health and social services), OPX (other public and private services, households, industry unknown)
REG_i	dummies for i = 1,…,21 NUTS3 regions

Table A1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ENTREPOFTEN	2978	0.080	0.271	0	1
ENTREPTHINK	2978	0.372	0.483	0	1
ENTREP	2971	1.453	0.638	1	3
JOBSEARCH	2978	0.151	0.359	0	1
SEARCH4	2978	0.064	0.244	0	1
OVER3PROFS	2978	0.130	0.336	0	1
MANAGER	2978	0.317	0.466	0	1
SIDEENTREP	2978	0.011	0.103	0	1
OVERTIME	2978	0.061	0.239	0	1
FRESH	2978	0.117	0.321	0	1
SWITCHES	2975	0.742	1.645	0	30
UMONTHS	2968	3.931	8.857	0	60
TENURE	2970	9.558	9.317	0	47
EXP1	2968	0.055	0.227	0	1
EXP2	2968	0.259	0.438	0	1
EXP3	2968	0.434	0.496	0	1
EXP4	2968	0.253	0.435	0	1
PARTTIME	2974	0.102	0.303	0	1
TEMPORARY	2978	0.180	0.385	0	1
AGE1	2978	0.084	0.278	0	1
AGE2	2978	0.554	0.497	0	1
AGE3	2978	0.361	0.480	0	1
FEMALE	2978	0.531	0.499	0	1
MARRIED	2978	0.735	0.442	0	1
CHILDREN	2978	0.856	1.362	0	18
EDU1	2978	0.238	0.426	0	1
EDU2	2978	0.560	0.496	0	1
EDU3	2978	0.115	0.319	0	1
EDU4	2978	0.087	0.282	0	1
EDUHUMCARE	2978	0.163	0.369	0	1
EDUBUS	2978	0.165	0.371	0	1
EDUTECH	2978	0.269	0.444	0	1
EDUOTHER	2978	0.404	0.491	0	1
SOSECHIGH	2973	0.242	0.428	0	1
UNION	2978	0.791	0.407	0	1
LONGTERMILL	2975	0.254	0.435	0	1
SATISFIED	2978	0.306	0.461	0	1
BOSSNOSAT	2978	0.035	0.183	0	1
CONTENT	2978	0.137	0.344	0	1

LOGWAGE	2947	9.096	0.426	8.006	10.309
FIXEDPAY	2978	0.838	0.368	0	1
PIECERATE	2978	0.025	0.157	0	1
FIXANDBONUS	2978	0.119	0.324	0	1
PUBLIC	2968	0.343	0.475	0	1
FOREIGN	2927	0.071	0.258	0	1
PSIZE1	2951	0.276	0.447	0	1
PSIZE2	2951	0.363	0.481	0	1
PSIZE3	2951	0.280	0.449	0	1
PSIZE4	2951	0.081	0.273	0	1
IND_AB	2978	0.014	0.119	0	1
IND_CDE	2978	0.233	0.423	0	1
IND_F	2978	0.058	0.235	0	1
IND_G	2978	0.105	0.306	0	1
IND_H	2978	0.028	0.166	0	1
IND_I	2978	0.084	0.277	0	1
IND_J	2978	0.026	0.158	0	1
IND_K	2978	0.082	0.274	0	1
IND_L	2978	0.063	0.243	0	1
IND_M	2978	0.091	0.288	0	1
IND_N	2978	0.166	0.372	0	1
IND_OPX	2978	0.050	0.219	0	1
REG1	2978	0.267	0.442	0	1
REG2	2978	0.096	0.295	0	1
REG3	2978	0.048	0.214	0	1
REG4	2978	0.035	0.184	0	1
REG5	2978	0.090	0.286	0	1
REG6	2978	0.034	0.181	0	1
REG7	2978	0.033	0.179	0	1
REG8	2978	0.025	0.157	0	1
REG9	2978	0.029	0.167	0	1
REG10	2978	0.046	0.210	0	1
REG11	2978	0.032	0.177	0	1
REG12	2978	0.049	0.217	0	1
REG13	2978	0.033	0.178	0	1
REG14	2978	0.027	0.162	0	1
REG15	2978	0.012	0.111	0	1
REG16	2978	0.063	0.243	0	1
REG17	2978	0.017	0.129	0	1
REG18	2978	0.033	0.178	0	1
REG19	2978	0.017	0.129	0	1
REG20	2978	0.014	0.117	0	1

Table 1: Cross tabulation of entrepreneurial aspirations with job search

ENTREPOFTEN	JOBSEARCH		Total
	0	1	
0	2366	375	2741
	(0.794)	(0.126)	(0.920)
1	161	76	237
	(0.054)	(0.026)	(0.080)
Total	2527	451	2978
	(0.849)	(0.151)	
Pearson $\chi^2(1)$			57.384
p-value			0.000

Note: shares of grand total in parentheses.

Table 2: Cross tabulation of entrepreneurial aspirations and job search with wide experience

ENTREPOFTEN	OVER3PROFS		Total	JOBSEARCH	OVER3PROFS		Total
	0	1			0	1	
0	2403	338	2741	0	2235	292	2527
	(0.807)	(0.113)	(0.920)		(0.751)	(0.098)	(0.849)
1	189	48	237	1	357	94	451
	(0.063)	(0.016)	(0.080)		(0.120)	(0.032)	(0.151)
Total	2592	386	2978	Total	2592	386	2978
	(0.870)	(0.130)			(0.870)	(0.130)	
Pearson $\chi^2(1)$			12.134	Pearson $\chi^2(1)$			29.256
p-value			0.000				0.000

Note: shares of grand total in parentheses.

Table 3: Probit marginal effects for entrepreneurial aspirations

	(1) ENTREPOFTEN	(2) ENTREPOFTEN	(3) ENTREPOFTEN	(4) ENTREPOFTEN
OVER3PROFS	0.044	0.037	0.033	0.042
	(0.017)***	(0.016)**	(0.016)**	(0.017)**
AGE1	0.006	0.011	-0.011	-0.013
	(0.021)	(0.021)	(0.018)	(0.018)
AGE2	0.005	0.004	-0.010	-0.012
	(0.011)	(0.011)	(0.012)	(0.012)
EDU1	-0.040	-0.011	-0.007	0.009
	(0.018)**	(0.022)	(0.024)	(0.028)
EDU2	-0.014	0.009	0.013	0.022
	(0.018)	(0.018)	(0.019)	(0.020)
EDU3	-0.005	0.005	0.005	0.010
	(0.021)	(0.022)	(0.022)	(0.023)
EDUHUMCARE	-0.026	-0.019	-0.018	0.004
	(0.015)*	(0.015)	(0.015)	(0.020)
EDUBUS	-0.014	-0.010	-0.011	-0.008
	(0.015)	(0.015)	(0.015)	(0.015)
EDUTECH	-0.035	-0.030	-0.031	-0.019
	(0.013)***	(0.013)**	(0.013)**	(0.014)
FEMALE	-0.048	-0.040	-0.039	-0.032
	(0.011)***	(0.011)***	(0.012)***	(0.012)***
MARRIED	-0.025	-0.028	-0.028	-0.028
	(0.013)*	(0.013)**	(0.013)**	(0.013)**
CHILDREN	0.004	0.004	0.004	0.002
	(0.003)	(0.003)	(0.003)	(0.003)
PARTTIME	0.015	0.016	0.011	0.001
	(0.018)	(0.018)	(0.020)	(0.019)
TEMPORARY	0.024	0.025	0.009	0.015
	(0.014)*	(0.014)*	(0.014)	(0.015)
MANAGER		0.015	0.014	0.013
		(0.011)	(0.011)	(0.011)
FRESH		0.068	0.059	0.060
		(0.019)***	(0.018)***	(0.019)***
SIDEENTREP		0.306	0.325	0.324
		(0.085)***	(0.085)***	(0.086)***
UNPAYOVER		0.064	0.054	0.041
		(0.027)**	(0.025)**	(0.023)*
SWITCHES			0.003	0.002
			(0.002)	(0.002)
TENURE			-0.002	-0.002
			(0.001)***	(0.001)**
LOGWAGE			0.011	0.019
			(0.016)	(0.017)
PSIZE1				0.017
				(0.022)
PSIZE2				0.004
				(0.020)
PSIZE3				-0.006
				(0.019)
PUBLIC				-0.017
				(0.016)
FOREIGN				0.005
				(0.018)
IND_ABC				0.163
				(0.087)*
IND_CDE				0.029
				(0.033)
IND_F				0.018
				(0.037)
IND_G				0.058

				(0.042)
IND_H				0.121
				(0.069)*
IND_I				0.074
				(0.047)
IND_J				0.017
				(0.048)
IND_K				0.056
				(0.042)
IND_L				0.092
				(0.058)
IND_M				0.074
				(0.051)
IND_N				0.026
				(0.036)
Observations	2974	2974	2933	2853
Pseudo R^2	0.028	0.062	0.068	0.082

Note: Robust standard errors in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%; AGE3, EDU4, EDUOTHER, PSIZE4, and IND_OPX are used as reference groups

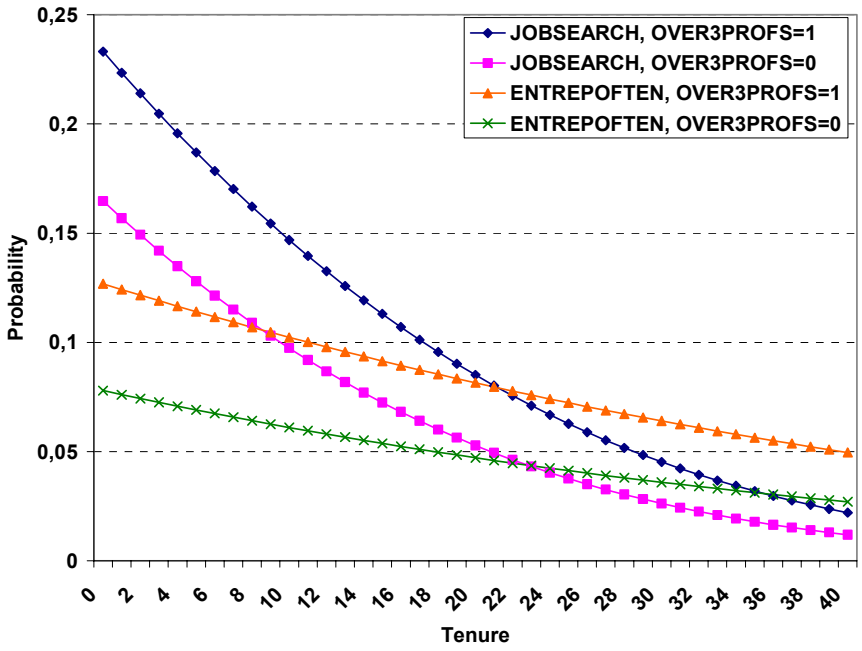
Table 4: Probit marginal effects for job search

	(1) JOBSEARCH	(2) JOBSEARCH	(3) JOBSEARCH	(4) JOBSEARCH
OVER3PROFS	0.075	0.074	0.043	0.050
	(0.021)***	(0.021)***	(0.020)**	(0.020)**
AGE1	0.219	0.219	0.088	0.089
	(0.041)***	(0.041)***	(0.034)***	(0.035)**
AGE2	0.110	0.110	0.062	0.064
	(0.014)***	(0.014)***	(0.015)***	(0.015)***
EDU1	-0.034	-0.032	-0.034	-0.034
	(0.027)	(0.028)	(0.026)	(0.028)
EDU2	-0.010	-0.009	-0.020	-0.022
	(0.023)	(0.024)	(0.024)	(0.025)
EDU3	0.041	0.042	0.029	0.027
	(0.031)	(0.031)	(0.029)	(0.029)
EDUHUMCARE	0.025	0.025	0.026	0.021
	(0.024)	(0.024)	(0.023)	(0.025)
EDUBUS	0.026	0.027	0.024	0.025
	(0.023)	(0.023)	(0.022)	(0.023)
EDUTECH	0.008	0.008	0.009	0.014
	(0.021)	(0.021)	(0.019)	(0.021)
FEMALE	-0.021	-0.020	-0.015	-0.018
	(0.014)	(0.014)	(0.014)	(0.015)
MARRIED	-0.014	-0.014	-0.010	-0.008
	(0.015)	(0.015)	(0.014)	(0.014)
CHILDREN	-0.003	-0.003	-0.000	-0.003
	(0.005)	(0.005)	(0.004)	(0.005)
PARTTIME	0.114	0.114	0.060	0.056
	(0.026)***	(0.026)***	(0.024)**	(0.025)**
TEMPORARY	0.191	0.190	0.090	0.096
	(0.022)***	(0.022)***	(0.020)***	(0.021)***
MANAGER		-0.004	0.006	0.002
		(0.014)	(0.014)	(0.014)
FRESH		0.003	-0.006	-0.008
		(0.019)	(0.017)	(0.017)
SIDEENTREP		0.042	0.074	0.070
		(0.071)	(0.075)	(0.075)
UNPAYOVER		0.008	0.008	0.003
		(0.027)	(0.025)	(0.024)
SWITCHES			0.013	0.012
			(0.004)***	(0.004)***
TENURE			-0.006	-0.006
			(0.001)***	(0.001)***
LOGWAGE			-0.031	-0.023
			(0.018)*	(0.020)
PSIZE1				0.000
				(0.026)
PSIZE2				-0.004
				(0.025)
PSIZE3				-0.005
				(0.025)
PUBLIC				-0.015
				(0.020)
FOREIGN				-0.013
				(0.023)
IND_ABC				0.088
				(0.086)
IND_CDE				0.041
				(0.040)
IND_F				0.074
				(0.054)
IND_G				0.057

				(0.045)
IND_H				0.111
				(0.069)
IND_I				0.039
				(0.046)
IND_J				0.065
				(0.071)
IND_K				0.124
				(0.056)**
IND_L				0.098
				(0.059)*
IND_M				0.060
				(0.050)
IND_N				0.104
				(0.051)**
Observations	2974	2974	2933	2853
Pseudo R^2	0.136	0.136	0.163	0.168

Note: Robust standard errors in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%; AGE3, EDU4, EDUOTHER, PSIZE4, and IND_OPX are used as reference groups

Figure 1: Probabilities of entrepreneurial aspirations and job search as functions of tenure and varied experience



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