

Entrepreneurial Women and Men: Two Different Species?

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ABSTRACT. The ability of the self-employed to create additional job opportunities is a fundamental concern given the huge increases in public resources targeted at new venture creation in the U.K. and other countries since 1979. This study initially concentrates on identifying differences in the personal and demographic characteristics of women and men in four potential labour market states, namely; unemployment; waged employment; single self-employment, and; job creating self-employment. It then goes on to consider labour market transitions over a four year period between 1991 and 1995. The key findings are firstly that women entrepreneurs are better educated than their male counterparts and secondly that flows into self-employment were considerably higher for men than women. Furthermore, proportionately, three times as many male self-employed in 1991 had gone on to become job creating self-employed by 1995.

1. Introduction

The attributed job creating prowess of small businesses has received considerable attention in the media and political circles stimulating a plethora of academic papers on the subject (see for example Westhead and Cowling, 1995; Davidsson et al., 1998; Davis et al., 1996). Yet as Carroll et al. (1996, p. 1) explicitly point out, "there is little research on the factors that determine entrepreneurs hiring decisions". To date, this issue has only been addressed by Carroll et al. for the U.S.

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and Cowling, Taylor and Mitchell (1997) for the U.K. Broadly speaking, both studies have separated the self-employed into individuals, hitherto referred to as ISEs, and the self-employed with employees or job creators, JCs, and investigated those characteristics which distinguish between the two groups. Running alongside this debate is the issue of gender and its impact on the performance of small business (Kalleberg and Leicht, 1991). Many studies, for example, have pointed to female under-performance (Brusch, 1992; Rosa et al., 1996), although a more recent study by Du Rietz and Henrekson (2000) provides evidence to the contrary.

This paper, in the light of a considerable volume of research on gender differences in the determination of labour market status and participation, albeit not in a self-employed framework, will examine the nature of the labour market status decision for women and men. The paper is set out as follows; in the next section we discuss the literature. This review covers a number of key issues relevant to this study, notably discrimination, participation, employment opportunity and wage determination. Section 3 describes that data on personal and job characteristics for individuals in four labour market states, namely; unemployment; waged employment; individual self-employment, and job creating self-employment. Prior to presenting these statistics we initially discuss the origin of the data to be used. The last data section reports on labour market transitions over a four year period between 1991 and 1995. Conclusions are then drawn.

2. Literature review

On the nature of labour market discrimination, Coate and Tennyson (1992, p. 272) argue that such discrimination can spill over into "markets



relevant to self-employment". This contrasts with earlier literature (Moore, 1983; Sowell, 1981) which suggests that self-employment is likely to be a favoured option for those facing discrimination in the waged sector (Cowling and Mitchell, 1997). The basis of the former's assumptions is that the key market for potential entrepreneurs is the credit market. Given unobservable entrepreneurial ability, they argue that discriminated groups are also more likely to face higher borrowing costs (Hisrich and O'Brien, 1981; Colerette and Aubrey, 1990). Furthermore, this may be magnified if entrepreneurial ability is in part a function of earlier investments in human capital (Cressy, 1996).

Datcher (1983) adds some important insights into the role of informal networks in enhancing the flow of job opportunities. Here uncertainty over next best alternatives can be reduced either by direct experience gained through on-the-job tenure or via information from informal contacts. For our purposes, and using this framework, we can envisage that a potential entrepreneur without relevant labour market experience might be more likely to become aware of entrepreneurial opportunities, sources of supply and customers if she has an informal network of contacts in relevant markets. Without such contacts, the longer one is unemployed, or outside the formal labour force, the less likely you are to be aware of either waged employment opportunities, or more importantly gaps in markets providing entrepreneurial opportunities. This is evidenced by the expansion in high-technology academic "spin-off" ventures on science parks in the U.S. and U.K. (Roberts, 1991; Westhead and Storey, 1994).

Conversely, once an individual is self-employed the flow of information from informal networks of contacts *vis a vis* waged employment opportunities might be correspondingly higher, *ceteris paribus*, than in unemployment. In addition, we might also expect the flow of self-employed into waged employment is correspondingly higher than that from unemployment. Very recent evidence from a U.K. based study of unemployment to self-employment programmes found that shifts into self-employment were often a precursor to shifts into waged employment for the previously unemployed (Cowling and Hayward, 2000). Conversely, Reimers (1983, p. 574) found that individuals with

"unusually high waged opportunities, given their observed characteristics, have even better opportunities outside the wage and salary sector". Thus the empirical evidence for marginalised and high human capital workers suggests a fundamental split in terms of desired employment status and relative opportunity in self-employment.

Gill (1988), replicating the U.K. based work of Rees and Shah (1986) finds a selective bias for paid employees, implying that the wage distribution is higher for this group than comparable self-employed workers. On this basis he concludes that unmeasured characteristics which affect the choice of work activity must also impact on employee wages. Despite this conclusion, Gill finds little evidence of a conventional human capital effect, with the exception of years of completed schooling, for self-employed incomes. However, education was found to be positively associated with the probability of self-employment over waged employment. The original findings of Rees and Shah (1986, p. 98) were that "education serves as a filter such that the educated are more likely to be uniform in their abilities". This implies a lower dispersion of income in self-employment, thus increasing the incentives for choosing this form of work organisation. The human capital theory also finds empirical support from Borjas and Bronars (1989) who found that the self-employed were more likely to be college educated than salaried workers.

Focusing on the role of gender, marital status and children, Dolton and Makepeace (1987, p. 897) argue that the "key effect of family role specialisation is on the allocation of time between home and market production". This, they point out, is due to the greater time allocation of women to child care supervision to the extent that women actively seek out employment which complements this role. This is consistent with Hill (1979) who suggests that number of children is a far better indicator of human capital misspecification than marital status. Here, aspirations, occupational choice and job commitment are fundamentally related to child rearing plans. In earlier work, Dolton and Makepeace (1986) found that for graduates, male earnings increase for married men, but for females no such effect was apparent.

Holtz-Eakin et al. (1994) argue that age may be correlated with attitudes to risk and with other

non-pecuniary aspects of entrepreneurship. Yet Blau (1987) finds no age effect, and further that age had no effect on the self-employed/waged earnings differential. Holtz-Eakin et al. also point out that if both partners work then the family can expect a regular income even if the entrepreneurial venture performs poorly. Further, the findings of Cowling and Hayward (2000) indicate that women tend to move from unemployment to self-employment when labour market conditions tighten, suggesting a desire to maintain a family income when men are losing their jobs. Rees and Shah (1986) also found age, education, being married and having children positively influenced the probability of self-employment, as did the more recent empirical work of Taylor (1996).

3. The data

This paper uses the 5th wave of the British Household Panel Survey (BHPS), a nationally representative dataset of around 5,500 households and 9,000 individuals residing in Britain. Wave 5 of the survey was carried out in the Autumn/Winter of 1995, and is the most recent available wave. It is noted that all numbers have been weighted to control for non-random attrition and non-response (see Taylor et al., 1996, for further details concerning weighting issues).

Confining our interest to those individuals active in the labour market at the time of interview, and discarding observations with missing data for any of the relevant variables, results in a sample of some 5,380 observations of which 2,842 (52.9%) are male, and 2,506 (47.1%) are female. For men, 500 (17.7%) are self-employed, 182 (6.4%) are unemployed and the remaining 2,142 (75.8%) in waged employment. For women, 176 (7.0%) are self-employed, 154 (6.1%) are unemployed and the remaining 2,176 (86.8%) are in waged employment. For women, 176 (7.0%) are self-employed, 154 (6.1%) are unemployed and the remaining 2,176 (86.8%) are in waged employment. Of the self-employed, 353 (70.6%) of men are ISEs compared to 123 (79.9%) of females.

It is immediately evident that self-employment is more prevalent amongst males than females. Yet for those in self-employment, females were at least as likely as males to be job creators. This aspect of self-employment merits further

attention amongst the policy community, particularly those concerned with the nature and extent of job generation amongst new and smaller firms. To date, with a few notable exceptions (Gavron et al., 1998), policy-making has been gender blind with respect to encouraging new firm formation and facilitating job growth in smaller businesses.

4. Labour market status

From Table I, which deals with males, a number of potentially important differences are apparent between our four identifiable labour market states. In short, JCs were marginally less likely to have postgraduate degrees than was the case for those in all other labour market states. However, they were equally likely to have first degrees. Including higher level vocational qualifications, we find that the unemployed were significantly less likely to have high level formal or job related qualifications. For lower order qualifications no differences were apparent between states. To summarise, the evidence on formal and vocational qualifications shows that the human capital distributions for JCs, ISEs and waged employed males are virtually identical. This contrasts with the male unemployed whose distribution is to the left (i.e. less qualified), implying lower levels of human capital.

Table II shows the equivalent statistics for women, once again delineated into four labour market states. The data is extremely interesting in that clear and identifiable differences are apparent on an intra-labour market status level and also across the gender divide. By comparing the distribution of qualifications for male and female ISEs, we observe that women are twice as likely to have postgraduate degrees, and one and a half times more likely to hold first degrees than their male counterparts. This also holds for high level vocational qualifications, although the differences are less marked.

For JCs, and comparing across gender, the evidence is reversed. Here men were twice as likely to hold any form of degree qualification. Interestingly, women tend to favour vocational qualifications, implying a more job-related perspective on education. For waged employees, women were found to be slightly less qualified than men, particularly at the top end of the

TABLE I
Sample statistics: Men

Variable	ISE		JC		W		U	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<i>Highest qualification</i>								
Higher degree	0.03	0.17	0.01	0.08	0.03	0.17	0.03	0.16
First degree	0.09	0.29	0.11	0.31	0.11	0.32	0.10	0.30
Other higher qualifications	0.24	0.43	0.26	0.44	0.26	0.44	0.12	0.33
A Levels or equivalent	0.12	0.33	0.12	0.33	0.14	0.35	0.15	0.35
O Levels or equivalent	0.22	0.41	0.22	0.41	0.21	0.40	0.27	0.45
Other qualification	0.09	0.28	0.08	0.27	0.09	0.28	0.09	0.28
<i>Demographics</i>								
Age	44.11	13.72	46.71	10.90	37.80	12.80	33.14	14.15
Age ² /100	21.34	12.76	22.99	10.20	15.93	10.35	12.97	10.75
Non-white	0.05	0.22	0.04	0.20	0.05	0.21	0.08	0.27
Born outside GB	0.08	0.28	0.06	0.24	0.06	0.23	0.09	0.28
Health limits work	0.08	0.28	0.07	0.25	0.06	0.24	0.18	0.38
Has a mortgage	0.58	0.49	0.63	0.48	0.66	0.47	0.39	0.49
Lives in London	0.18	0.38	0.11	0.31	0.11	0.32	0.14	0.34
Lives in South East	0.25	0.43	0.33	0.47	0.22	0.41	0.18	0.39
<i>Family</i>								
Married	0.68	0.47	0.81	0.39	0.59	0.49	0.41	0.49
Spouse employed	0.60	0.49	0.63	0.48	0.51	0.50	0.25	0.44
Number of children	0.66	1.03	0.72	1.14	0.65	0.97	0.95	1.26
Has child under 5 years	0.17	0.37	0.14	0.35	0.15	0.36	0.16	0.37
<i>Wealth measures</i>								
Assets (£10,000)	7.67	7.99	11.25	9.25	6.04	5.43	3.76	5.15
Interest/divs > £100 p.a.	0.31	0.47	0.47	0.50	0.27	0.44	0.10	0.30
<i>Occupation measures</i>								
Professional/manager	0.36	0.48	0.59	0.49	0.39	0.49		
Other non-manual	0.05	0.22	0.09	0.28	0.14	0.35		
Skilled manual	0.43	0.50	0.24	0.43	0.28	0.45		
<i>N</i>	353		147		2142		182	

educational spectrum. Amongst the unemployed there were marginally fewer female graduates and postgraduates, but significantly more women with high level vocational qualifications.

Looking at women in isolation, and distinguishing across labour market states, we observe quite different educational distributions. For example, taking all types of degrees and higher vocational qualifications together, exactly 50% of ISEs possessed this level of qualification. This contrasts with figures of 38% of JCs, 33% for waged employed and only 28% for the unemployed. Importantly, JCs although less likely to hold high formal qualifications, were marginally more likely to hold high level vocational quali-

cations. This evidence is extremely important for the debate surrounding the impact on human capital on entrepreneurship, and also in terms of the distinction between formal and informal (job related) measures of human capital. In short, the data imply that self-employed females, in particular ISEs, are better educated than their male counterparts, although for JCs this is only true for vocational qualifications.

On demographics, and starting with age, we find that JCs are on average older (approaching 50 for men and women) than all other groups of workers. Next are ISEs, then waged employees, and the youngest were the unemployed. Remarkably, the age distributions by gender across

TABLE II
Sample statistics: Women

Variable	ISE		JC		W		U	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<i>Highest qualification</i>								
Higher degree	0.06	0.23	0.00	0.00	0.02	0.13	0.01	0.12
First degree	0.16	0.36	0.06	0.24	0.09	0.29	0.07	0.26
Other higher qualifications	0.28	0.45	0.32	0.47	0.22	0.41	0.20	0.40
A Levels or equivalent	0.11	0.31	0.10	0.30	0.12	0.32	0.11	0.32
O Levels or equivalent	0.14	0.35	0.23	0.42	0.26	0.44	0.28	0.45
Other qualification	0.08	0.27	0.13	0.34	0.10	0.30	0.10	0.30
<i>Demographics</i>								
Age	42.09	12.49	49.10	10.82	38.20	12.71	32.18	12.77
Age ² /100	19.26	11.07	25.26	10.76	16.21	10.17	11.98	8.95
Non-white	0.04	0.19	0.01	0.11	0.03	0.18	0.09	0.29
Born outside GB	0.15	0.36	0.04	0.19	0.06	0.24	0.12	0.32
Health limits work	0.14	0.35	0.09	0.29	0.08	0.27	0.17	0.37
Has a mortgage	0.62	0.49	0.57	0.50	0.64	0.48	0.44	0.50
Lives in London	0.18	0.38	0.04	0.20	0.13	0.33	0.12	0.33
Lives in South East	0.24	0.43	0.23	0.42	0.23	0.42	0.25	0.43
<i>Family</i>								
Married	0.68	0.47	0.89	0.31	0.59	0.49	0.34	0.48
Spouse employed	0.62	0.49	0.74	0.44	0.60	0.49	0.30	0.46
Number of children	0.78	1.06	0.45	0.91	0.61	0.91	0.90	1.09
Has child under 5 years	0.20	0.40	0.06	0.24	0.12	0.33	0.18	0.39
<i>Wealth measures</i>								
Assets (£10,000)	7.68	7.75	11.59	9.98	5.86	5.40	4.24	5.70
Interest/divs > £100 p.a.	0.25	0.43	0.47	0.50	0.21	0.40	0.10	0.30
<i>Occupation measures</i>								
Professional/manager	0.39	0.49	0.61	0.49	0.30	0.46		
Other non-manual	0.17	0.38	0.24	0.43	0.38	0.49		
Skilled manual	0.12	0.32	0.05	0.21	0.08	0.28		
<i>N</i>	123		53		2176		154	

labour market states were virtually identical. Implicitly, this might be an important proxy for human capital in the sense that we might expect that progressively higher hurdles for entry into self-employment between ISEs and JCs. Here age is a proxy for life experience and embodied human capital.

Regarding ethnicity and country of origin, the data show a low probability of non-white females being JCs. This holds across gender and for women between labour market states. In terms of country of origin, defined here as non-U.K., we find that foreigners, be they male or female, are over-represented amongst ISEs and the unemployed. However, the data show that this effect is

much stronger for women than men. This could be interpreted as evidence of discrimination in the waged sector against foreigners in general, but women in particular.

On health, we not surprisingly find that having an illness that limits the type or amount of work possible increases ones probability of being self-employed. There is also strong evidence to support the choice of ISE for such women, and marginal evidence of a similar effect for men. Regarding house ownership, roughly equal proportions of men and women held mortgages. This was true for JCs, ISEs and waged employees, 60% of who held mortgages. By contrast, only 40% of the unemployed were buying a property. This may be a

constraint on the ability of the unemployed to finance the transition into self-employment.

Concerning geographical location, male self-employed were likely to be located in London and the South East of England, the more prosperous areas. This held true for female ISEs but not JCs. This, at least for women, offers support for the urban-rural shift identified by Keeble et al. (1992) and the renaissance of high quality entrepreneurship and new firm formation in less populated regions of the U.K.

Turning our attention to family demographics, we find that 9 out of 10 female JCs are married which is significantly higher than that for male JCs. Whilst fewer ISEs and waged employees were married, the respective proportions of males and females were identical. Much lower proportions of the unemployed were married and this was more so for women.

For those individuals that were married, around 4 in 10 of the male self-employed had a non-waged wife. For female ISEs this proportion was similar to that of males, but for female JCs only one in four husbands were unwaged. Thus for our high quality female entrepreneurs, the likelihood was that they formed a dual income household. For the unemployed the figures are disturbing in that around 7 in 10 households had no earned income.

As to the absolute size of families and the presence of young children, significant differences were apparent amongst the self-employed by type and gender. For males, JCs had larger families on average than ISEs. The reverse was true for females. Here ISEs had significantly larger families. Further to this, whilst few differences were apparent amongst males on the presence of younger children (defined as under 5 years old) across all labour market states, the opposite was true for females. For example, female ISEs were more than three times more likely to have a pre-school child than female JCs, and nearly twice as likely as waged females. This suggests in the first instance that the rigidity of waged employment in terms of fixed hours and contractual obligations is less suited to mothers of young children than the flexibility of self-employment. Yet for JCs, the additional burdens of running a micro enterprise and managing a workforce may mitigate against childcare.

In terms of occupational status, the distribution in self-employment status for men and women in professional/managerial occupations were identical. In waged employment, however, males were significantly more likely to have a professional/managerial status. Women, by contrast, were significantly more likely to be in other, non-manual, occupations than men, particularly in the waged sector. Conversely, the male self-employed were five times more likely to be in skilled manual occupations than women, compared to only three times in the waged sector. This suggests an occupational split along gender lines. In the waged sector, women are more heavily concentrated in non-manual occupations and far less likely to be in manual jobs. Yet fewer women tend to reach the top tiers of management or the professions in waged employment which hints at the presence of a "glass ceiling", which prevents some women from entry to high level, waged jobs. This is given some credence by the increased likelihood of female ISEs being in these types of occupations. Thus, for certain categories of women, self-employment might be viewed as a means of realising their potential and circumventing discrimination for top jobs in the waged sector.

The data on wealth shows identical distributions of assets for men and women. Ranking assets in order of magnitude, JCs had by far the largest asset base, with ISEs, waged and unemployed in descending order. On our alternative wealth measure, defined as dividend/interest income in excess of £100 per annum, the same ranking was apparent although the differences between ISEs and waged employees were smaller. Here female JCs were more than twice as likely to derive income from these sources, compared to a ratio of 1.6 for men.

5. Labour Market Transitions, 1991–1995

Having presented and discussed the sample statistics relating to labour market status, we now turn our attention to labour market transitions. Tables III and IV show the actual proportion of "movers" from their initial labour market states in 1991.

Perhaps the most prominent feature for men is the lack of transitions into self-employment from other labour market states. For example, only

TABLE III
Transitions between labour market states – Men: BHPS Waves 1 to 5 (1991 to 1995)

1991	1995					
	ISE	JC	W	U	Inactive	Total
ISE	58.1	10.0	14.4	3.0	14.4	270
JC	24.4	56.7	11.8	1.6	5.5	127
W	3.7	1.3	81.9	3.4	9.8	1875
U	9.3	0.9	44.2	18.6	27.0	226
Inactive	1.0	0.4	9.9	2.5	86.3	730
Total	8.8	4.0	54.6	4.1	28.5	3228

Note: Table refers to labour market status of men at Waves 1 and 5 of the BHPS. It takes no account of any transitions that may have occurred in between.

TABLE IV
Transitions between labour market states – Women: BHPS Waves 1 to 5 (1991 to 1995)

1991	1995					
	ISE	JC	W	U	Inactive	Total
ISE	38.7	3.6	25.2	3.6	28.8	111
JC	7.3	56.4	21.8	1.8	12.7	55
W	1.6	0.8	80.1	2.0	15.5	2038
U	5.2	0.6	48.6	13.3	32.4	173
Inactive	1.4	0.3	12.7	2.4	83.2	1578
Total	2.8	1.5	49.5	2.7	43.6	3955

Note: See Table III.

9.3% of the 1991 unemployed had become ISEs by 1995. This was a far greater proportion than that recorded by those in waged employment in 1991. Of this group, only 3.7% had become ISEs by 1995. There was a fairly substantial cohort of 1991 JCs who had also downsized by 1995 into ISEs. Focusing on job creating self-employment, the respective proportions of “movers” into our JC category were vastly smaller than that into our ISE category. Here, only 10% of ISEs had become job creators by 1995. Yet this dwarfs the “movers” from waged employment and unemployment, which offers strong support for the theory that there are progressively higher, hurdles for entry into self-employment as we move from ISE to JC. On this evidence, it is difficult enough for ISEs to create jobs and become JCs even with the experience of self-employment. In terms of turbulence across labour market states, it is apparent that there is much less volatility amongst the male

waged employed than either type of male self-employment.

For women the picture is quite different. Here, only 3.6% of ISEs went on to become job creators. By contrast, substantial numbers sought out waged employment. This latter feature also held true for female JCs, many of whom entered waged employment by 1995.

As to female “movers” into ISE, like males, the majority came from downsized JCs. Further, proportionately three times as many previously unemployed compared to waged employed had made the transition to ISE over the period. For females making the transition into JCs, negligible proportions came from either waged employment, unemployment or inactivity. For female starters, or re-starters, in the formal labour market, around nine times more women entered into waged employment than ISE. The equivalent ratio for JC was 42 times. For previously unemployed women,

the proportions were comparably higher into all other labour market states.

For men the figures were identical to the U.S. data reported by Carroll et al. (1996), although our sample covers one more year and relates to a more recent time period. What our data do show is that a much higher proportion of male ISEs successfully make the transition to job creating self-employment. However, even for men the figures are relatively low. Importantly, between 70% (1991 ISEs) and 80% (1991 JCs) of men who began the period as self-employed remained in this state in 1995 in whatever form. Yet for women only 42% of 1991 ISEs and 64% of 1991 JCs still retained self-employment status. This suggests that female self-employment is more transitory than male self-employment.

6. Conclusions

The aim of this paper was to consider differences within and across gender in the determination of labour market status, with particular reference to self-employment. A specific point of focus was on the role that formal and informal human capital plays in the decision choice. The evidence presented here shows that there are clear, and identifiable, differences between male and female self-employed in terms of their respective endowments of human capital compared to their counterparts in other labour market states.

For women, ISEs were found to be better educated than their waged and unemployed counterparts. This was less true for job creating women, although a formal education effect was still apparent. By contrast male ISEs were found to be no different from waged employees on formal measures of education. Further, male JCs were less well qualified, on formal measures, than waged employees and more importantly ISEs. Where differences were apparent was on age, which we identify as a proxy for life experience and informal or embodied human capital. Here, male JCs were older than all other groups of male workers. Importantly, this human capital effect was not evident for women.

For our male self-employed, the interpretation is fairly intuitive. Here the decision to take on employees is related to informal or job related measures of human capital. Thus we conclude that

the true measure of entrepreneurial ability, defined here as creating jobs, is weighted in favour of job specific, rather than academic skills. Our interpretation is that more mature males, with greater experience of life, can be seen to have accumulated a valuable store of human capital, which is essential for business survival and subsequent growth.

As regards the female self-employed, the interpretation is less clear. The key may lie in what can loosely be termed credibility and legitimacy. Here, highly educated women may be in a stronger position *vis a vis* leveraging bank finance and developing supplier and customer relationships than less well educated women. This implicitly assumes that some form of gender discrimination exists in factor and retail markets, as has been reported in some of the literature discussed earlier. Another potential factor may be that better educated women simply feel more confident about starting up an entrepreneurial venture, although the two may be related.

To summarise, the evidence is consistent with the notion of progressively higher hurdles as we first enter self-employment, normally as an ISE, and then seek to expand by hiring additional employees. The ability to overcome these barriers is related to one's endowment of human capital, although the nature of this is different for men and women. More specifically, our findings do suggest that there are considerable barriers to entry, growth and job creation within self-employment, as evidenced by the relatively low rates of transition. By far the most likely route to becoming a job creator for men and women is by first entering self-employment on one's own account. This is consistent with human capital models of self-employment (see for example, Jovanovic, 1981) with respect to the role of experience and revealed ability.

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