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**Monograph:**

Brown, S. and Taylor, K. (2008) *Expectations, reservation wages and employment: Evidence from British panel data*. Working Paper. Department of Economics, University of Sheffield ISSN 1749-8368

Sheffield Economic Research Paper Series 2008007

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# Sheffield Economic Research Paper Series

**SERP Number: 2008007**

ISSN 1749-8368



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EXPECTATIONS, RESERVATION WAGES AND EMPLOYMENT:  
EVIDENCE FROM BRITISH PANEL DATA

**May 2008**

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## Abstract:

In this paper, we explore the relationship between expectations and reservation wages for a sample of unemployed individuals using panel data drawn from the *British Household Panel Survey*, 1996 to 2005. To be specific, we initially investigate the determinants of expectations relating to the individual's financial situation and employment prospects over the next 12 months. Our findings suggest that job search and education are positively associated with financial optimism and confidence regarding future employment prospects. Conversely, the length of time out of employment and age are associated with pessimistic expectations. Propensity score matching techniques enable us to adopt a quasi experimental approach to ascertain how an individual's expectations regarding their future financial situation as well as expectations regarding securing future employment influence the setting of reservation wages at the individual level. Optimism over future finances and future job prospects are associated with a higher reservation wage in both the matched and unmatched estimates. Furthermore, confidence over securing future employment is associated with a higher probability of actually gaining employment in the next period.

**Key Words:** Employment; Financial Expectations; and Reservation Wages

**JEL Classification:** J13; J24

**Acknowledgements:** We are grateful to the ESRC for financial support under grant number RES-000-22-2004 and to the Data Archive, University of Essex, for supplying the *British Household Panel Surveys*, 1996 to 2005. We would also like to thank Professors Andy Dickerson and Jennifer Roberts for valuable comments and Eirini Georgiadou for excellent research assistance. The normal disclaimer applies.

## **I. Introduction and Background**

The reservation wage, the lowest wage at which an individual is willing to work, plays a key role in labour market theory. In particular, the reservation wage plays an important role in theoretical models of job search, labour supply and labour market participation (see, for example, Mortensen, 1986, Mortensen and Pissarides, 1999, and Pissarides, 2000). Despite the important role played by the reservation wage in labour market theory, there is a scarcity of empirical research which explores reservation wages at the individual level, with much of the sparse existing literature focusing on how reservation wages affect the duration of unemployment, see, for example, Lancaster and Chesher (1983), Blackaby et al. (2007) and Addison et al. (2008). Consequently, economists know very little about what determines reservation wages at the individual level with the focus in the existing literature on its implications rather than its determinants.

In this paper, we focus on one particular influence on reservation wages – namely the expectations of individuals – which to our knowledge is an area that has attracted limited attention in the previous economics literature. To be specific, we explore the relationship between reservation wages and individuals' expectations regarding their future financial situation and the likelihood that they will secure employment in the future. It is interesting to explore how an individual's expectations influence his/her reservation wage in order to ascertain whether optimism or pessimism cause an individual to revise this pivotal level of wages.

In general, there is a surprising lack of empirical research in economics exploring the implications of individuals' expectations despite the central role played by expectations in economic models of individual and household decision-making. Theoretical models hypothesise that human capital investment, for example, is largely determined by expected increases in future income whilst life-cycle models exploring inter-temporal consumption and savings behaviour are also driven by expectations of future income. One reason behind the

shortage of research in this area may relate to the scarcity of data on individuals' expectations and, furthermore, such data tends to be from surveys with, as argued by Dominitz and Manski (1997) and Manski (2004), scepticism about the use of survey data still prevailing in economics. Analysis of the expectations of the unemployed regarding future finances and the likelihood of securing future employment is an important area as these individuals are arguably amongst the most financially vulnerable in society. Consequently, their expectations regarding the future yield an interesting insight into how they regard their future financial position.

Hence, in our paper we aim to bring together two areas of economics – expectations and reservation wages – which have both been the subject of limited empirical scrutiny. To be specific, we aim to explore how an unemployed individual's expectations about the future influences the setting of his/her reservation wage by applying propensity score matching techniques. Given that from a theoretical perspective, higher reservation wages are associated with reduced likelihood of securing future employment, the role of expectations in reservation wage setting is a particularly interesting avenue to research. It may be the case, for example, that if financial optimism serves to increase reservation wages, then this may actually lead to a decreased likelihood of finding employment and, hence, a lower probability of these expectations actually being realised.

## **II. Data**

Our empirical analysis is based on panel data drawn from the *British Household Panel Survey (BHPS)*. The *BHPS* is a random sample survey, carried out by the *Institute for Social and Economic Research*, of each adult member from a nationally representative sample of more than 5,000 private households (yielding approximately 10,000 individual interviews). For wave one, interviews were conducted during the autumn of 1991. The same individuals are re-interviewed in successive waves – the latest available being wave fifteen, collected in 2005. The defining feature of the *BHPS* for our empirical study is that it contains information

on both reservation wages and expectations at the individual level. To be specific, if the respondent ‘*is not currently working but has looked for work in last week or last four weeks or has not looked for work in last week or last four weeks but would like a job*’, he/she is asked to specify: ‘*what is the lowest weekly take home pay you would consider accepting for a job?*’ This series of questions is asked in all waves of the *BHPS*, i.e. 1991 to 2005.<sup>1</sup> The distribution of the natural logarithm of the reservation wage is presented in Figure 1, where the mean log reservation wage is 4.122, i.e. a net weekly wage of approximately £62 (in 1991 prices).<sup>2</sup>

Turning to expectations, in all waves of the *BHPS*, individuals were asked: ‘*Looking ahead, how do you think you will be financially a year from now, will you be: better off; worse off; or about the same?*’ We label individuals who expect their financial situation to improve as ‘financially optimistic’ (39% of the sample) and those who expect their financial situation to become worse off as ‘financially pessimistic’ (11% of the sample). Answers to this question implicitly incorporate a synthesis of a household member’s own financial outlook (e.g. income and job security) with their expectations about the general economic environment (e.g. future interest rates, tax changes, inflation and unemployment rates). This question from the *BHPS* has been used to analyse the determinants of financial expectations (see, for example, Brown and Taylor, 2006, and Mitchell and Weale, 2007) as well as the implications of financial expectations (see, for example, Brown et al. 2005, 2008) with the focus on all individuals regardless of employment status.

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<sup>1</sup> Given the reference to ‘take home pay’ in the question, it seems reasonable to assume that respondents would refer to the net (i.e. after tax) wage. It should be acknowledged that Hofler and Murphy (1994), who use stochastic frontier techniques to estimate reservation wages for a sample of employed individuals, argue that the reservation wage declared by individuals in surveys may be measured inaccurately. For example, individuals may not be well-informed enough to provide an accurate answer or it may be difficult to factor in non-wage characteristics of jobs, which may entice individuals into accepting job offers.

<sup>2</sup> In the sample, reservation wages are also given by individuals who would typically be classified as not being in the labour force including: carers; those on government training schemes; and the long-term sick or disabled. We include these individuals in our analysis and control for their inclusion with a dummy variable labelled ‘not in the labour force’.

In addition, between 1996 and 2005, unemployed individuals in the *BHPS* are asked: ‘*How likely do you think it is that you will begin paid work in the next twelve months?*’ We explore four categories of responses: those who think it is very likely (32%); those who think it is likely or very likely (58%); those who think it is unlikely or very unlikely (37%); and, finally, the most pessimistic, those who think it is very unlikely that they will begin paid work in the next 12 months (20%). The responses to this question allow us to analyse whether the respondent is optimistic or pessimistic about finding a job over the next 12 months for the time period 1996 to 2005. Summary statistics are shown in Table 1, where it is interesting to note that even amongst a sample of unemployed individuals, there appears to be a tendency to be optimistic about the future financial situation and the likelihood of securing future employment.<sup>3</sup>

### **III. Expectations at the Individual Level**

We analyse data over the period 1996 to 2005, which comprises 3,087 unemployed individuals and 7,849 observations, note prior to this period there is no information on future employment expectations and job search activity. The data is an unbalanced panel with an average of 3 observations per individual over the sample period. We initially explore the determinants of expectations,  $P$ , at the individual level,  $i$ , by specifying the following probit model across time  $t$ :<sup>4</sup>

$$P_i = X_i \beta_1' + \varepsilon_i \tag{1}$$

where  $X_i$  is a vector of individual characteristics (time varying and non time varying) and  $\varepsilon_i$  is a random error term,  $\varepsilon_i \sim \text{IN}(0, \sigma_1^2)$ . We explore six alternative binary dependent variables: being financially optimistic; being financial pessimistic; very optimistic about finding a job; optimistic or very optimistic about finding a job; pessimistic or very pessimistic about

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<sup>3</sup> As reported in Brown and Taylor (2006), in the sample as a whole (as compared to the unemployed only), approximately 29% are financially optimistic, whilst approximately 11% are financially pessimistic.

finding a job; and, finally, very pessimistic about finding a job. The vector of explanatory variables includes: age; ethnicity; marital status; gender; education;<sup>5</sup> number of children; the natural logarithm of savings; the natural logarithm of household income (labour and benefit income); the natural logarithm of a proxy for wealth (investment income and the estimated value of any residential property owned), where each of the three monetary values are converted into a monthly amount; a quadratic in years of current spell out of employment; a binary dummy variable denoting whether the individual has undertaken job search;<sup>6</sup> and year dummy variables. Table 1 presents summary statistics.<sup>7</sup>

Table 2 presents the results relating to the correlates of financial optimism and financial pessimism. It is apparent that younger individuals appear to be more financially optimistic and less financially pessimistic. To be specific, an individual in the youngest age category has a 25 percentage point higher probability of being financially optimistic rather than predicting no change, or a worsening in their financial situation, relative to the omitted category, being aged 51-65. Being male appears to be positively associated with financial pessimism, consistent with Brown and Taylor (2006), whilst being married or cohabiting is negatively correlated with financial pessimism as is the number of children in the household. Higher levels of education appear to be monotonically associated with being financially optimistic with mixed results pertaining to the relationship between education and financial pessimism, where only A levels and GCSE attainment below grade C are statistically significant. Whilst not being in the labour market is negatively (positively) associated with financial optimism (pessimism). For example, an individual who is not in the labour market

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<sup>4</sup> Throughout the results we pool waves of the *BHPS* over time and allow for clustering. Our findings are robust to adopting a random effects specification.

<sup>5</sup> We distinguish between seven categories of highest educational attainment: degree; further education; A level; GCSE (grades A to C); GCSEs (grades below C); other education; and no education.

<sup>6</sup> The job search control is equal to unity if over the last 12 months the individual has: applied directly to an employer; studied or replied to an advertisement; contacted a private employment agency or job centre; asked friends or contacts; or taken steps to set up a business.

<sup>7</sup> All monetary variables have been deflated to 1991 prices.



has a 12 percentage point lower probability of being financially optimistic relative to someone who is unemployed. Savings appear to be inversely associated with financial optimism, which may be suggestive of precautionary savings motives (see Souleles, 2004), whilst wealth is statistically insignificant throughout. Household income is positively (inversely) associated with financial optimism (pessimism), where a 1 per cent increase in income raises (reduces) the probability of optimism (pessimism) by 1.3 (0.6) percentage points over the period. The length of the current spell out of employment is negatively associated with financial optimism, and this effect increases with the duration of the event. Job search is positively (negatively) related to financial optimism (pessimism), increasing the probability of being financial optimistic by 17 percentage points. With respect to the year dummy variables, which control for aggregate macroeconomic effects, these covariates are generally statistically significant prior to 1999, the last UK recessionary period, decreasing the probability of an individual being financially optimistic, and are insignificant thereafter. In sum, the monetary household variables (i.e. income, wealth and savings) do not appear to be as highly correlated with financial expectations as age and job search. The high correlation found between job search and financial optimism might be because such individuals perceive that they have a higher chance of subsequent employment and hence potentially higher future income.

In Table 3, we focus upon the determinants of expectations regarding future employment prospects. With respect to expectations about future employment, younger individuals are more (less) optimistic (pessimistic) about finding future employment relative to the omitted category (aged above 50 years). In general, ethnicity (with the exception of being white) and marital status are not statistically significantly associated with labour market expectations. Males are found to have a higher probability of having pessimistic expectations about future employment than females. Unsurprisingly, not being in the labour force is negatively (positively) associated with confidence regarding securing (not securing)

future employment.<sup>8</sup> Educational attainment is positively correlated with optimism about securing future employment and negatively associated with pessimistic expectations about future employment, with particularly large effects associated with relatively high levels of education such as degree level. For example, an individual with a degree has a 21 (15) percentage point higher (lower) probability of stating that it is ‘very likely’ (‘very unlikely’) that he/she will secure employment during the next 12 months. Both savings and household income are statistically insignificant in all of the probit models, whilst wealth is positively associated with optimistic expectations with respect to securing future employment. The length of the current spell out of employment is inversely related to having optimistic expectations about finding future employment, and as found when analysing financial expectations, this effect influences employment expectations at an increasing rate. Individuals who have actively searched for jobs have around a 32 percentage point higher (lower) probability of stating that they are ‘likely’ (‘very unlikely’) to find employment during the next 12 months, which may explain why individuals who have engaged in active job search have optimistic expectations regarding their future financial situation. Turning to the year controls, in 1998 and 1999, individuals appear to be less likely to be optimistic about future job prospects.

In sum, there are some common findings in terms of the determinants of expectations about future finances and expectations about employment prospects. In particular, males are generally more pessimistic about their future than females, individuals with high educational attainment, i.e. degree and above, are more optimistic than those with no qualifications. In addition, the length of current spell out of employment serves to decrease the probability of being optimistic about the future. However, the largest effects upon expectations stem from

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<sup>8</sup> Note that whilst such individuals are not in the labour market the particular routing of the *BHPS* question does mean that these people, who report a reservation wage, have looked for work in either the last week or month, or respond that if they have not looked for work they would actually like a job.

job search. Specifically, those individuals who have actively undertaken job search are more optimistic about both future finances and employment and this effect outweighs that of any other covariate at the 1 per cent level.<sup>9</sup>

The panel nature of the *BHPS* enables us to ascertain whether financial and employment expectations are actually realized. Such an analysis requires that individuals are in the sample for at least two consecutive periods: thus, the number of observations is reduced to 6,232. Comparing expectations at time period  $t$  with the answer to the following question at  $t+1$ : ‘*Would you say that you are better-off or worse-off financially than you were a year ago?*’ we are able to consider the accuracy of financial expectations. For those individuals who were financially optimistic (pessimistic) at time  $t$ , the percentage that saw an improvement (worsening) in their financial situation over the next 12 months, i.e.  $t+1$ , is 23.8% (11.6%).<sup>10</sup> Similarly, the percentages of individuals that obtained subsequent employment at  $t+1$  across the categories of expectations at time  $t$  regarding securing a job are: ‘very likely’, 14.5%; ‘very likely or likely’, 21.1%; ‘very unlikely or unlikely’, 3.4%; and ‘very unlikely’, 1.3%. Thus, it would appear that the subjective measures of expectations do have a degree of validity as reliable indicators of future outcomes,<sup>11</sup> such as employment, which is one of the avenues investigated in further detail in the following section, after an initial examination of the influence of expectations upon the reservation wage.

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<sup>9</sup> We have also modeled financial expectations and employment prospects as ordered dependent variables. For financial expectations, we construct a three point index, i.e. ‘worse off’, ‘the same’, and ‘better off’. Similarly, for employment expectations, we construct a four point index, i.e. ‘very unlikely’, ‘unlikely’, ‘likely’, and ‘very likely’. Employing a generalized ordered probit model, the findings are consistent with those reported from the binary probit specifications. For example, the marginal effect associated with job search upon the probability of being ‘better off’ (‘worse off’) is 0.1685 (-0.2098), and statistically significant at the 1 per cent level. Similarly, for employment expectations, the marginal effect of job search upon the probability of responding ‘very likely’ (‘very unlikely’) to secure future employment is 0.3302 (-0.3119), and statistically significant at the 1 per cent level.

<sup>10</sup> Brown and Taylor (2006) explore the reliability of subjective measures of financial expectations across all individuals regardless of employment status comparing expectations to subjective realizations and actual income changes, and find that financial expectations tend to fall short of realizations over the period.

<sup>11</sup> This is consistent with the findings of Campbell et al. (2007).

#### IV. Expectations, Reservation Wages and Future Employment

In order to ascertain the effect of expectations on reservation wages, we use the method of propensity score matching (Rosenbaum and Rubin, 1983). Propensity score matching methods have only become popular in economics over the last decade or so, the most common application being the analysis of labour market programmes (e.g. Heckman et al., 1997, and Hotz et al., 1999). Similarly, Jalan and Ravallion (2003) analyse an anti-poverty programme in Argentina using propensity score matching methods, whilst Brown and Pudney (2005) apply propensity score matching techniques to ascertain the effect of under-employment on poverty.

Following Rosenbaum and Rubin (1983), the propensity score ( $ps$ ) is defined as the probability of receiving a treatment conditional on pre-treatment characteristics:

$$ps(X_i) = prob(P_i = 1 | X_i) = E(P_i | X_i) \quad (2)$$

where  $P$  is a binary dummy variable, which indicates exposure to the treatment, as defined in equation (1), and  $X$  is a vector of pre-treatment covariates. Rosenbaum and Rubin (1983) show that the average effect of the treatment on the treated ( $ATT$ ), given by  $\delta$ , can be estimated as follows:

$$\delta = E\{Y_{1i} - Y_{0i} | P_i = 1\} = E\left\{ \left[ E(Y_{1i} | P_i = 1, ps(X_i)) \right] - E\left[ Y_{0i} | P_i = 0, ps(X_i) \right] \right| P_i = 1 \} \quad (3)$$

where the outer expectation is over the distribution of  $\{ps(X_i) | P_i = 1\}$ , and  $Y_{1i}$  and  $Y_{0i}$  denote the potential outcomes in the two states of treatment (T) and no treatment, i.e. control (C), respectively, hence  $\delta = T - C$ .

In our application, treatment is defined as having a particular expectation (i.e. one of the six expectations defined in the previous section, i.e. either expectations about future financial situation or employment prospects) and the outcome we are interested in is the level of the natural logarithm of the reservation wage. Propensity score matching techniques allow

us to ascertain the average effect of treatment (i.e. having a particular expectation) on the reservation wage, i.e. the average effect of treatment on the treated (*ATT*). For example, we can ascertain whether the reservation wages of those with optimistic expectations are significantly higher than that of the matched control group members. We match each unemployed individual with a particular expectation (i.e. treatment) to unemployed individuals without the expectation and with similar values of the propensity score (i.e. controls). The main advantage of this approach over traditional sample selection approaches is that it is essentially non-parametric, i.e. this approach does not impose a particular functional form on the determinants of the reservation wage. In addition, a common support can be identified which may improve the quality of the matches which are used to estimate the *ATT* (see Becker and Ichino, 2002).

We use the Becker and Ichino (2002) and Becker and Caliendo (2007) implementation, which estimates the propensity score via a probit model. Many different matching methods are available, hence to explore the robustness of our findings, we use three alternative matching methods: kernel matching (using the Epanechnikov kernel with a bandwidth of 0.06); radius matching (with a radius of 0.1); and nearest neighbor matching, with a random draw used to resolve ties (see Cochran and Rubin, 1973; and Heckman et al., 1997 for further details of these methods).<sup>12</sup>

In Tables 4 and 5, we present the findings of the propensity score matching analysis: Table 4 presents the results relating to expectations regarding the future financial situation, whilst Table 5 presents results relating to expectations regarding future employment.<sup>13</sup> It is apparent from Table 4, that the *ATT* is statistically significant. Where the treatment is financial optimism (pessimism), the *ATT* has a positive (negative) influence upon the

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<sup>12</sup> Standard errors should be adjusted for the estimation error in the propensity score and any subsequent variation induced in the matching process, see Becker and Ichino (2002). Hence, throughout the propensity score matching analysis, the standard errors of the treatment are bootstrapped using 500 replications, which is consistent with Dehejia and Wahba (2002).

<sup>13</sup> We implement the routine ‘PSMATCH2’ in STATA developed by Leuven and Sianesi (2003).

reservation wage, see Panel A (B). Focusing upon financial optimism, in the context of log reservation wage outcomes, the *ATT* lies in the range of 0.0710 to 0.1116, meaning that the reservation wage is between 7 and 12 percentage points higher, when compared to the matched control group (approximately half the magnitude of the unmatched sample).<sup>14</sup> Conversely, financial pessimism has the opposite effect where the *ATT* relating to the logarithm of the net weekly reservation wage lies between -0.1698 to -0.206, i.e. 16 to 19 percentage points lower. These results suggest that those individuals with optimistic (pessimistic) financial expectations have a higher (lower) reservation wage than their matched counterparts.

Focusing upon how expectations regarding the likelihood of finding a job influence the reservation wage, it is apparent from the estimates presented in Table 5 that, as with financial expectations, the *ATT* is statistically significant with optimistic expectations about finding a job having a positive effect upon the reservation wage. For example, for those individuals who think that it is ‘very likely’ that they will secure a job within the next 12 months, the *ATT* is around 0.08, which suggests that the net weekly reservation wage is 8 percentage points higher in comparison to the matched control group (more than half the magnitude of the unmatched sample). Conversely, for those who think it is ‘very unlikely’ that they will find a job within the next 12 months, the *ATT* is approximately 0.04, i.e. suggestive of a reservation wage approximately 4 percentage points lower than the control group. Whilst expectations about the individuals’ future financial situation and employment prospects both have an influence upon the reservation wage, it is interesting to note that the effects of financial expectations appear to be larger.

The panel nature of the *BHPS* allows an exploration of how expectations regarding the likelihood of obtaining a job in the future are associated with the probability of

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<sup>14</sup> Size effects are calculated from:  $\exp(\hat{\delta}) - 1$ .

employment in the next period. This analysis requires that individuals are in the sample for at least two consecutive periods: thus, the number of observations is reduced to 6,232. Hence, we can investigate whether having optimistic expectations about future employment is actually associated with subsequent employment. The results of this analysis are presented in Table 6. It is apparent that those individuals who are optimistic about the likelihood of future employment are actually more likely to become employed at  $t+1$ , and the size of this effect is monotonically related to the ranking of employment expectations at time  $t$ . This is the case for the unmatched estimates and the *ATT*, where observable common factors have been taken into account. For example, focusing upon those individuals who respond that they are ‘very likely’ (‘very unlikely’) to secure a job in the next 12 months, the *ATT* is around 0.23 (-0.11) which implies a 23 (11) percentage point higher (lower) probability of subsequent employment in  $t+1$ .

Interesting, the results so far have suggested that optimistic expectations regarding future employment are associated with higher reservation wages as well as a higher probability of subsequent employment. A related question concerns whether the level of the reservation wage influences the probability of employment during the next period. To explore this relationship, we define a new binary dummy variable as follows:  $d_i = P_i \times g_i$  where  $P_i$  is the employment expectation of the individual (as defined above) and  $g_i = 1$  if  $\left[ \log(r)_i > \log(\tilde{r})^p \right]$ , where  $\log(r)_i$  is the log reservation wage and  $\log(\tilde{r})^p$  is the  $p$ th percentile value of the log reservation wage. Using  $d_i$  as a treatment in estimating the propensity score allows an investigation of whether the probability of finding a job in the next period (i.e. the outcome) is related to the size of the reservation wage and whether this is also influenced by the employment expectation – hence drawing the empirical analysis undertaken thus far together. The results are summarised in Figure 2 for those individuals who think that it is ‘very likely’ they will secure employment during the next 12 months,

where on the horizontal axis we plot the percentile range in which the log reservation wage falls and on the vertical axis the *ATT* is shown.<sup>15</sup> In Figure 3, a similar plot is shown for those individuals who think that it is ‘very unlikely’ they will find a job within the next twelve months. In both figures, all scatter points (i.e. the *ATT*) are statistically significant at the 5 per cent level and a quadratic line of best fit through the *ATT* along with the 95 per cent confidence interval are also shown. It is apparent that, for those individuals who think that it is ‘very likely’ (‘very unlikely’) they will find a job, the *ATT* is always positive (negative), i.e. optimistic (pessimistic) expectations are associated with a higher (lower) probability of employment. However, this effect is decreasing (increasing) in the level of the reservation wage relative to a particular percentile, which is consistent with labour market theory, in that a higher reservation wage is associated with a lower probability of future employment regardless of current expectations about securing a job.

## **V. Conclusion**

In this paper, we have investigated the determinants of expectations regarding an individual’s future financial situation and employment prospects for a sample of individuals who are out of employment. In general, the length of the current spell out of employment and an individuals’ age are found to be inversely related to optimism about future finances and employment prospects. Whilst, conversely, educational attainment and job search are found to be positively related to optimistic expectations. The findings of the propensity score matching analysis, where the treatment is defined as having a particular expectation, suggest that optimism over the future financial situation and optimism over employment prospects are both associated with a higher reservation wage. In addition, in the context of expectations regarding future employment, those individuals who think that it is ‘likely or very likely’ that they will find a job in the next 12 months, are characterised by a high probability of gaining

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<sup>15</sup> Note that the *ATT* is based upon nearest neighbour matching. Alternative matching criteria yielded similar results and are omitted for brevity.



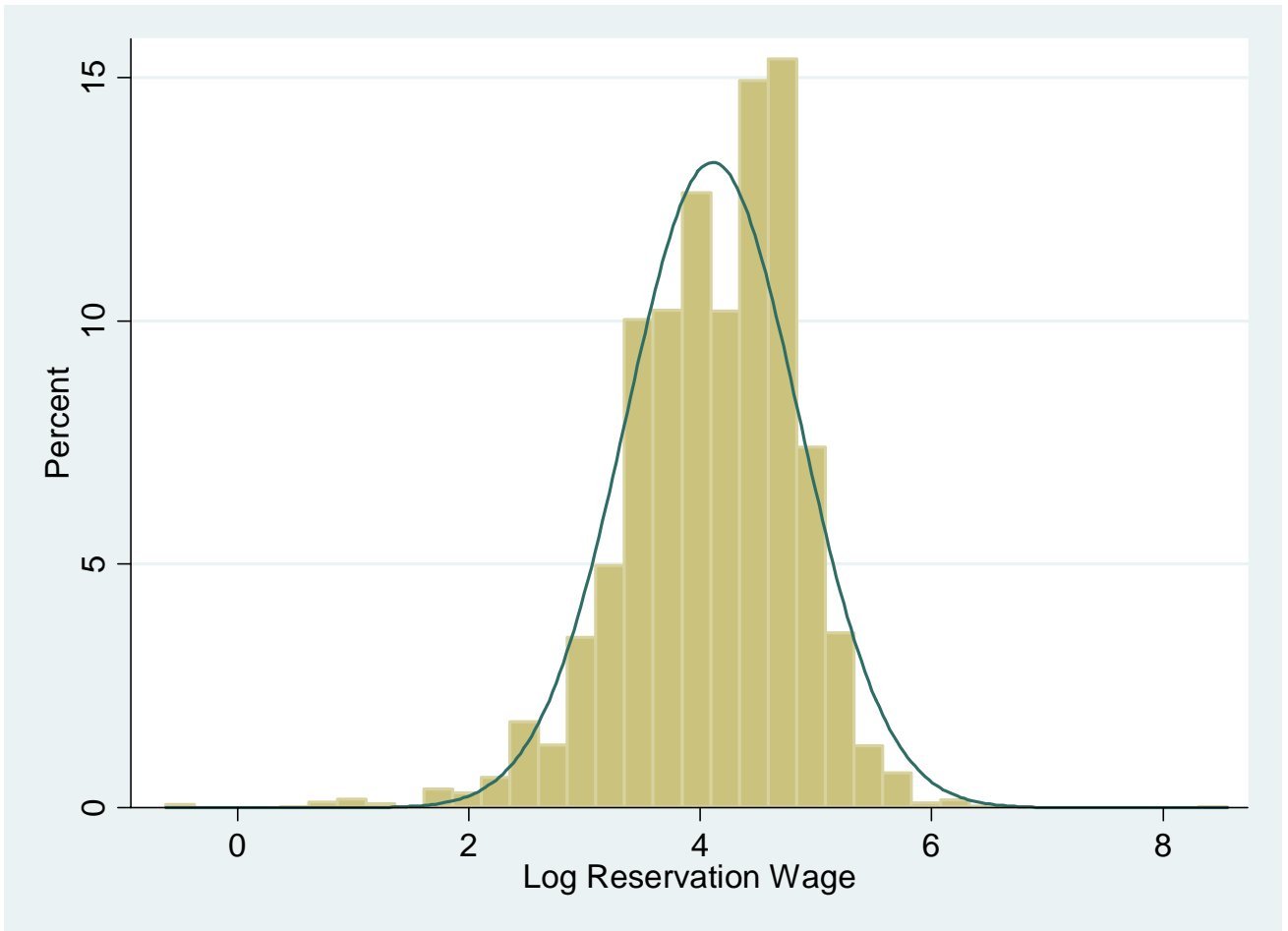
subsequent employment relative to those who do not harbour such optimistic expectations regarding future employment prospects. Hence, it is interesting to find that optimistic expectations regarding future employment are associated with higher reservation wages as well as a higher probability of subsequent employment.

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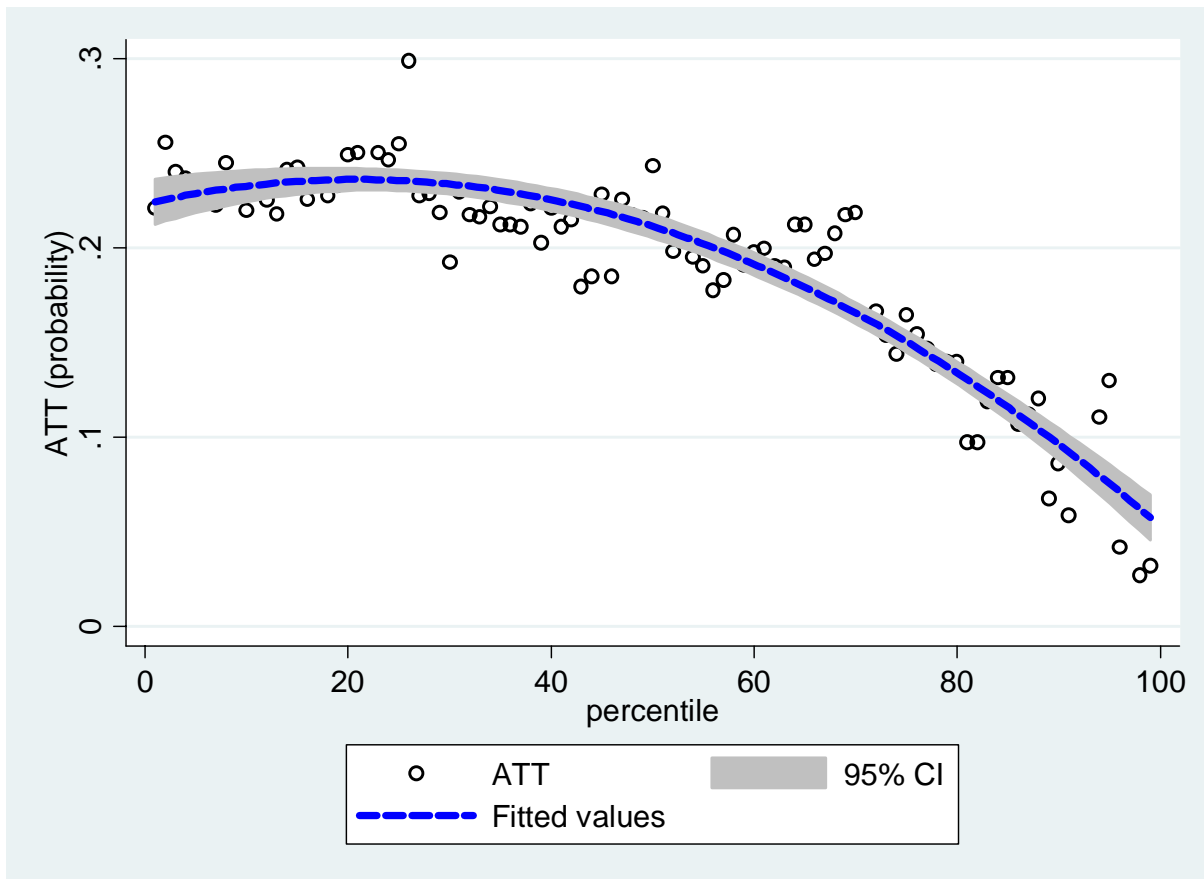
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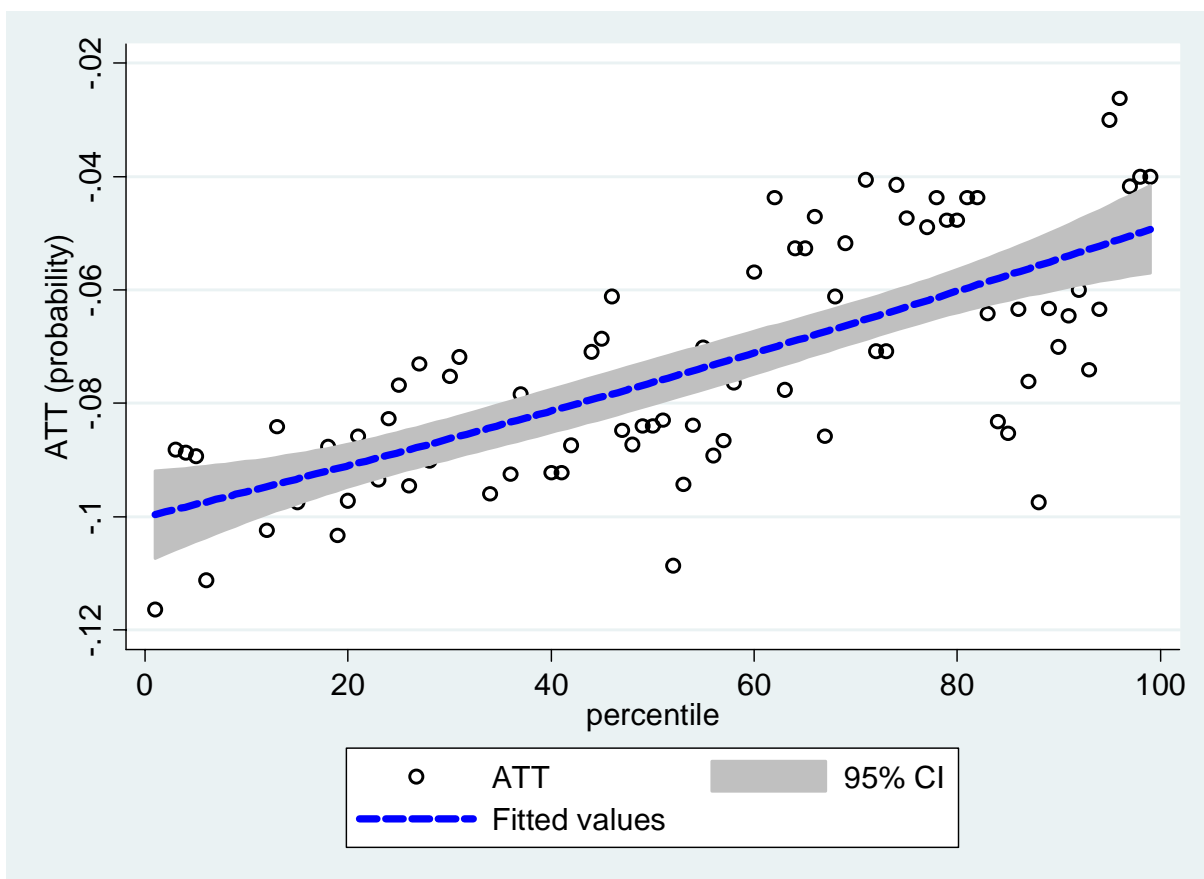
**Figure 1:** The Distribution of the Natural Logarithm of the Reservation Wage



**Figure 2:** Scatter Plot of the *ATT* against Log Reservation Wage Percentile – Very Likely to Secure a Job



**Figure 3:** Scatter Plot of the *ATT* against Log Reservation Wage Percentile – Very Unlikely to Secure a Job



**Table 1:** Summary Statistics, 1996-2005

VARIABLE	MEAN	STD. DEV.
Log Reservation Wage	4.122	0.739
Financial Situation Expected to Improve	0.427	0.494
Financial Situation Expected to Worsen	0.082	0.275
Very Likely or Likely to Begin Work in 12 Months	0.581	0.493
Very Unlikely or Unlikely to Begin Work in 12 Months	0.367	0.482
Very Likely to Begin Work in 12 Months	0.319	0.466
Not Very Likely to Begin Work in 12 Months	0.199	0.399
Actively Searched for a Job in 12 Months	0.405	0.491
Years of Current Spell out of Employment	5.131	8.874
Aged 18-30	0.395	0.489
Aged 31-40	0.261	0.439
Aged 41-50	0.193	0.395
Aged 51-65	0.207	0.405
Black	0.020	0.143
Asian	0.023	0.152
White	0.925	0.262
Other Ethnic Group	0.029	0.169
Male	0.439	0.496
Female	0.560	0.496
Single/Widowed/Divorced	0.318	0.465
Married/Cohabiting	0.545	0.497
Unemployed	0.393	0.488
Not in Labour Force	0.592	0.491
Degree	0.074	0.262
Further Education	0.182	0.386
A Level	0.149	0.356
GCSEs (Grades A to C)	0.210	0.407
GCSEs (Grades below C)	0.059	0.237
Other Education	0.050	0.218
No Qualifications	0.250	0.433
Number of Children	0.935	1.189
Log Savings	0.540	1.302
Log Income	6.423	1.135
Log Wealth	5.157	5.295
1996	0.086	0.280
1997	0.106	0.308
1998	0.085	0.279
1999	0.113	0.316
2000	0.110	0.313
2001	0.137	0.344
2002	0.101	0.31
2003	0.096	0.295
2004	0.078	0.269
2005	0.084	0.278
OBSERVATIONS	7,848	

**Table 2:** Determinants of Expectations Regarding Financial Situation over the Next 12 Months

	OPTIMISTIC		PESSIMISTIC	
	M.E.	TSTAT	M.E.	TSTAT
Aged 18-30	0.2492	(12.25)	-0.0393	(4.40)
Aged 31-40	0.1628	(7.90)	-0.0366	(4.11)
Aged 41-50	0.0671	(3.13)	-0.0193	(2.28)
Black	0.0946	(1.67)	0.0441	(1.42)
Asian	-0.0278	(0.45)	-0.0071	(0.25)
White	-0.0264	(0.64)	0.0121	(0.73)
Male	-0.0399	(2.67)	0.0242	(3.36)
Married/Cohabiting	0.0121	(0.79)	-0.0133	(1.88)
Not in Labour Force	-0.1168	(7.39)	0.0497	(6.59)
Degree	0.1836	(6.19)	0.0170	(1.22)
Further Education	0.1078	(4.86)	0.0034	(0.35)
A Level	0.0719	(2.98)	0.0438	(3.77)
GCSEs (Grades A to C)	0.0783	(3.73)	-0.0029	(0.29)
GCSEs (Grades below C)	0.0166	(0.56)	-0.0347	(2.48)
Other Education	0.0449	(1.20)	0.0118	(0.84)
Number of Children	-0.0033	(0.47)	-0.0102	(3.01)
Log Savings	-0.0095	(1.85)	0.0017	(0.75)
Log Income	0.0125	(2.09)	-0.0059	(2.21)
Log Wealth	-0.0013	(0.89)	0.0011	(1.70)
Years out of Employment	-0.0159	(6.45)	0.0004	(0.38)
Years out of Employment <sup>2</sup>	0.0003	(3.99)	-0.0001	(0.14)
Actively Searched for a Job	0.1705	(11.48)	-0.0182	(2.44)
1996	-0.0681	(2.47)	0.0367	(2.52)
1997	-0.0484	(1.82)	0.0215	(1.60)
1998	-0.0109	(0.38)	-0.0078	(0.60)
1999	-0.0761	(2.91)	0.0068	(0.53)
2000	-0.0054	(0.20)	-0.0009	(0.07)
2001	-0.0251	(1.01)	-0.0121	(1.01)
2002	-0.0075	(0.28)	-0.0118	(0.96)
2003	-0.0346	(1.31)	-0.0119	(0.97)
2004	-0.0106	(0.39)	-0.0190	(1.50)
Chi Squared (31)	997.56	$p=[0.000]$	264.01	$p=[0.000]$
OBSERVATIONS	7,848			

**Table 3:** Determinants of Expectations of Future Employment over Next 12 Months

	Very Likely		Very Likely or Likely		Very Unlikely or Unlikely		Very Unlikely	
	M.E.	TSTAT	M.E.	TSTAT	M.E.	TSTAT	M.E.	TSTAT
Aged 18-30	0.2301	(12.76)	0.3077	(14.71)	-0.1572	(11.70)	-0.2765	(13.85)
Aged 31-40	0.1260	(6.71)	0.1893	(9.00)	-0.0974	(7.86)	-0.1755	(8.72)
Aged 41-50	0.1027	(5.11)	0.1456	(7.05)	-0.0656	(5.70)	-0.1395	(7.21)
Black	0.0600	(0.97)	0.1031	(1.49)	-0.0089	(0.20)	-0.0341	(0.48)
Asian	-0.0180	(0.35)	-0.1129	(1.76)	0.0098	(0.24)	0.1032	(1.55)
White	0.0133	(0.35)	-0.0464	(1.03)	0.0450	(1.87)	0.0989	(2.16)
Male	-0.0207	(1.55)	-0.0840	(5.08)	0.0391	(3.73)	0.0632	(3.91)
Married/Cohabiting	-0.0179	(1.34)	-0.0262	(1.61)	0.0127	(1.23)	0.0437	(2.79)
Not in Labour Force	-0.0796	(5.45)	-0.0795	(4.78)	0.0578	(5.66)	0.0993	(6.29)
Degree	0.2120	(7.43)	0.1767	(5.31)	-0.0913	(5.19)	-0.1496	(4.89)
Further Education	0.1314	(6.37)	0.1180	(5.13)	-0.0439	(3.21)	-0.1095	(5.05)
A Level	0.1737	(7.79)	0.1507	(6.28)	-0.0415	(2.76)	-0.1318	(5.92)
GCSEs (Grades A to C)	0.0974	(4.97)	0.0932	(4.39)	-0.0483	(3.97)	-0.0851	(4.32)
GCSEs (Grades below C)	0.0211	(0.71)	0.0407	(1.30)	-0.0203	(1.03)	-0.0812	(2.83)
Other Education	0.0995	(2.82)	0.0503	(1.29)	-0.0263	(1.29)	-0.0482	(1.36)
Number of Children	-0.0098	(1.55)	-0.0079	(1.06)	0.0048	(1.07)	0.0117	(1.63)
Log Savings	0.0021	(0.45)	0.0055	(1.04)	0.0001	(0.01)	0.0019	(0.37)
Log Income	-0.0072	(1.43)	-0.0116	(1.80)	0.0054	(1.20)	0.0060	(0.98)
Log Wealth	0.0046	(3.52)	0.0091	(5.74)	-0.0058	(5.56)	-0.0073	(4.76)
Years out of Employment	-0.0240	(9.55)	-0.0259	(10.83)	0.0089	(6.66)	0.0215	(9.62)
Years out of employment <sup>2</sup>	0.0005	(7.87)	0.0005	(8.23)	-0.0001	(4.18)	-0.0004	(6.53)
Actively Searched for a Job	0.2545	(19.18)	0.3373	(23.28)	-0.1843	(17.82)	-0.3181	(22.45)
1996	-0.0330	(1.31)	-0.0196	(0.65)	0.0283	(1.36)	-0.0117	(0.41)
1997	-0.0020	(0.08)	-0.0304	(1.06)	0.0667	(3.27)	0.0040	(0.15)
1998	-0.0893	(3.64)	-0.0932	(3.09)	0.0372	(1.78)	0.0536	(1.86)
1999	-0.0548	(2.31)	-0.0866	(3.04)	0.0286	(1.48)	0.0246	(0.91)
2000	-0.0355	(1.47)	-0.0322	(1.13)	0.0040	(0.21)	-0.0035	(0.13)
2001	-0.0466	(2.04)	-0.0381	(1.42)	-0.0095	(0.54)	0.0168	(0.67)
2002	-0.0508	(2.19)	-0.0451	(1.61)	0.0458	(2.36)	0.0325	(1.23)
2003	-0.0328	(1.38)	0.0064	(0.23)	0.0168	(0.89)	-0.0254	(0.97)
2004	0.0274	(1.09)	0.0004	(0.01)	0.0199	(1.03)	-0.0214	(0.80)
Chi Squared (31)	1,418.01 $p=[0.000]$		1,571.13 $p=[0.000]$		1,017.66 $p=[0.000]$		1,546.85 $p=[0.000]$	
OBSERVATIONS	7,848							

**Table 4:** Propensity Score Matching Analysis: Financial Expectations (Treatment) and Log Reservation Wage (Outcome)

	SAMPLE	KERNEL		RADIUS		NEIGHBOUR	
		$\delta$	TSTAT	$\delta$	TSTAT	$\delta$	TSTAT
<b>PANEL A:</b> Financially Optimistic	Unmatched	0.2116	(13.36)	0.2116	(13.08)	0.2116	(13.36)
	ATT	0.0989	(5.86)	0.1116	(7.39)	0.0710	(2.83)
<b>PANEL B:</b> Financially Pessimistic	Unmatched	-0.2598	(7.95)	-0.2598	(7.70)	-0.2598	(8.11)
	ATT	-0.1698	(5.61)	-0.2047	(6.56)	-0.2060	(3.86)

**Table 5:** Propensity Score Matching Analysis: Expectations of Future Employment (Treatment) and Log Reservation Wage (Outcome)

	SAMPLE	KERNEL		RADIUS		NEIGHBOR	
		$\delta$	TSTAT	$\delta$	TSTAT	$\delta$	TSTAT
<b>PANEL A:</b> Very Likely to Secure a Job	Unmatched	0.2102	(11.67)	0.2102	(12.37)	0.2102	(11.87)
	ATT	0.0756	(4.19)	0.0765	(4.20)	0.0695	(2.92)
<b>PANEL B:</b> Likely or Very Likely to Secure a Job	Unmatched	0.1638	(9.95)	0.1638	(9.95)	0.1638	(9.95)
	ATT	0.0910	(5.37)	0.0986	(6.31)	0.0924	(3.80)
<b>PANEL C:</b> Unlikely or Very Unlikely to Secure a Job	Unmatched	-0.1901	(10.95)	-0.1901	(10.95)	-0.1901	(10.95)
	ATT	-0.0631	(3.26)	-0.0661	(3.46)	-0.0608	(2.30)
<b>PANEL D:</b> Very Unlikely to Secure a Job	Unmatched	-0.1501	(6.86)	-0.1501	(6.67)	-0.1501	(6.79)
	ATT	-0.0390	(1.73)	-0.0427	(1.96)	-0.0323	(1.00)



**Table 6:** Propensity Score Matching Analysis: Expectations of Future Employment (Treatment) and Employment in  $t+1$  (Outcome)

	SAMPLE	KERNEL		RADIUS		NEIGHBOR	
		$\delta$	TSTAT	$\delta$	TSTAT	$\delta$	TSTAT
<b>PANEL A:</b> Very Likely to Secure a Job	Unmatched	0.3254	(26.06)	0.3254	(25.29)	0.3254	(24.14)
	ATT	0.2263	(15.22)	0.2323	(14.15)	0.2343	(11.14)
<b>PANEL B:</b> Likely or Very Likely to Secure a Job	Unmatched	0.2756	(26.47)	0.2756	(27.70)	0.2756	(28.68)
	ATT	0.2028	(11.01)	0.2019	(11.90)	0.2133	(9.33)
<b>PANEL C:</b> Unlikely or Very Unlikely to Secure a Job	Unmatched	-0.2660	(27.67)	-0.2660	(27.97)	-0.2660	(28.64)
	ATT	-0.1365	(10.62)	-0.1412	(11.41)	-0.1311	(7.36)
<b>PANEL D:</b> Very Unlikely to Secure a Job	Unmatched	-0.2410	(25.83)	-0.2410	(26.30)	-0.2410	(24.77)
	ATT	-0.1073	(10.60)	-0.1151	(11.42)	-0.1208	(7.46)