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**Do Women Earn Less Even as Social Entrepreneurs?**

**Saul Estrin, Ute Stephan and Sunčica Vujić**

## **Abstract**

Based upon unique survey data collected using respondent driven sampling methods, we investigate whether there is a gender pay gap among social entrepreneurs in the UK. We find that women as social entrepreneurs earn 29% less than their male colleagues, above the average UK gender pay gap of 19%. We estimate the adjusted pay gap to be about 23% after controlling for a range of demographic, human capital and job characteristics, as well as personal preferences and values. These differences are hard to explain by discrimination since these CEOs set their own pay. Income may not be the only aim in an entrepreneurial career, so we also look at job satisfaction to proxy for non-monetary returns. We find female social entrepreneurs to be more satisfied with their job as a CEO of a social enterprise than their male counterparts. This result holds even when we control for the salary generated through the social enterprise. Our results extend research in labour economics on the gender pay gap as well as entrepreneurship research on women's entrepreneurship to the novel context of social enterprise. It provides the first evidence for a "contented female social entrepreneur" paradox.

Keywords: Social entrepreneur, gender pay gap, social enterprise, earnings, job satisfaction  
JEL codes: J28; J31; J71; L32

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Saul Estrin, Department of Management, London School of Economics, associate of Centre for Economic Performance, London School of Economics. Ute Stephan, Aston Business School, Global Entrepreneurship Monitor UK, Aston Triangle, Birmingham. Sunčica Vujić, Department of Economics, University of Antwerp.

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## **1. Introduction: The Gender Pay Gap in Social Enterprises**

Gender differences in pay are ubiquitous at all organisational levels including at the top (Arulampalam et al., 2007; Albrecht et al. 2003; Bertrand and Hallock, 2001; Jurajda and Paligorova, 2009; Lalanne and Seabright, 2011; Pande and Ford, 2011; Palomino and Payrache, 2010). However, there is recent US evidence that male-female wage gaps have been declining, see for example Beaudry and Lewis (2014). Entrepreneurship is hailed as one way for women to circumvent organizational norms and discrimination, because as CEOs of their own organizations, entrepreneurs largely determine their own pay. Moreover, social entrepreneurship may be a particularly gender-blind occupational choice; preliminary evidence indicates that women are more likely to start a social enterprise (e.g., Estrin et al., 2013). This opens the question of whether social entrepreneurship might be one occupation in which there is little or no gender pay gap.

Entrepreneurship is widely understood as playing an important role in job creation and economic growth (Blanchflower and Oswald, 1998; Parker, 2009). Recently, socially motivated forms of entrepreneurship, social entrepreneurship, have come to prominence because of their promise of alleviating social problems such as poverty, discrimination or exclusion. Practitioners and researchers increasingly acknowledge the potential of entrepreneurship to create “social wealth” (Mair and Marti, 2006; Zahra et al., 2009). Commercial and social entrepreneurs have much in common, such as the central role of individual risk bearing and organisational formation but are distinguished by their objectives; profits and social wealth respectively. However, the literature as yet is largely descriptive (Teasdale et al., 2011; Terjersen et al., 2012) and there have

been few studies which analyse economic decisions in social enterprises, such as the determinants of the gender wage gap.

Indeed few studies have explored gender differences in earnings amongst entrepreneurs in general. Evidence from the US, Canada, Hungary and Norway (Berglann et al., 2011; Co et al., 2005; Hundley, 2001; Karahan, 2013; Leung, 2006; Roche, 2013) points to a significant gender pay gap, which may be even greater amongst entrepreneurs compared to wage employment. There is also a literature suggesting that income might not be the only outcome of an entrepreneurial career (Gorgievski et al., 2011; Van Praag and Versloot, 2008). Entrepreneurship and especially social entrepreneurship might permit people to make occupational choices which take account of non-monetary phenomena such as their desire for job flexibility. In particular, social entrepreneurs may reap benefits in terms of higher satisfaction from helping others through their enterprises (for related evidence see Cadsby et al., 2013; Grant, 2013; Grant and Sonnentag, 2010). Thus, we also investigate whether there is a gender gap in job satisfaction.

If income and job satisfaction both enter individual utility functions positively, then one might expect a trade-off between the two in situations where individuals control the allocation of firm specific rents, such as in the leadership of entrepreneurial firms. Research about commercial entrepreneurs has identified the paradox of the “contented female business owner”, whereby female business owners are willing to trade-off pay for job satisfaction driven by different preferences for monetary versus non-monetary returns (Powell and Eddleston, 2008). But does this effect generalize to social entrepreneurship? Although non-monetary preferences play a significant role for social entrepreneurs, the social enterprise has a hybrid nature, addressing social concerns through revenue-generating activities and thereby combining profit and social objectives (Battilana and Lee, 2014; Mair and Marti, 2006). Thus there may be a gender pay gap

because men and women are attracted to social enterprises for different reasons (Günther et al., 2010). Evidence from related research on not-for-profit organizations supports this possibility; De Cooman et al. (2011) find that men and women working in not-for-profits demonstrate different motivational profiles.

This is the first paper to look at the gender pay gap among social entrepreneurs. Our work is made possible by the collection of a unique dataset using respondent driven sampling methods to address the problem that there is as yet no information on the underlying population of social entrepreneurs (see also Bloom and Van Reenan, 2007). We use this dataset to identify whether gender pay and preference gaps exists, their scale and their determinants.

The remainder of the paper is organised as follows. Section 2 provides background and literature overview. Section 3 describes the data and empirical methodology of the paper. Section 4 gives estimation results and robustness checks. Section 5 contains the discussion and conclusions.

## **2. Background and Literature**

We first discuss the literature on the gender pay gap for wage employment, top-level jobs and across different sectors before reviewing the scanty literature on the gender pay gap in commercial entrepreneurship. Finally we outline the main explanations of the gender pay gap and how they can be extended to social entrepreneurship.

### **2.1 Evidence on the Gender Wage Gap**

The gender wage gap had remained more or less constant until the 1980s (based on mainly US data) but has since been narrowing. Explanations have concentrated on improved

matching, positive selection and increased returns to education (Blau and Kahn, 1997, 2006; Lalanne and Seabright, 2011). For example, Goldin et al. (2010) explore the homecoming of American college women and the catch-up and reversal in the gender gap in college attendance and graduation in the period 1960-1980, which radically changed young women's expectations of their future labour force participation. Despite these recent improvements in the labour market position of women the gender pay gap remains large, so women continue to earn considerably less than men on average; by 23% in the US (World Economic Forum, 2013); 19.1% in the UK; and 16% in the EU27 (European Union, 2014). According to Baudry and Lewis (2014), the average adjusted college-high school male-female wage gap has remained around 40% since 1990, though the gender wage gap adjusted for education, experience, and ethnicity has declined from around 27 to 20% over the same period.

The gender pay gap at the top of organisations (i.e. among top corporate positions) is even more pronounced than for employees as a whole (e.g., Pande and Ford, 2011). According to Bertrand and Hallock (2001) women represented about 2.5% of their sample of high-level US executives and earned about 45% less than men.<sup>3</sup> Elkinawy and Stater (2011) find that the salaries of US female executives are about 5% lower than those of male executives, controlling for executive, firm, and board characteristics.<sup>4</sup> There are similar findings for Europe. Arulampalam et al. (2007) analysed gender pay gaps across the earnings distribution in eleven EU member countries, 1995-2001 and found that it widened at the top end of the distribution in all countries (the "glass ceiling" effect). Avlijaš et al. (2013) and Barón and Cobb-Clark (2008) report similar findings for the Western Balkans and Australia, respectively. Albrecht et al. (2003)

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<sup>3</sup> Around 75% of this gap can be explained by the fact that women managed smaller companies and were less likely to be a CEO, a Chair, or a company President.

<sup>4</sup> The gender difference in salary is larger in firms with more male-dominated boards. Oaxaca wage decomposition suggests that greater female representation in the executive profession actually increases the gender differences caused by unobserved factors, possibly due in part to governance structures that remain male-dominated.

show that the gender pay gap in Sweden is much higher at the top end of the wage distribution than at the bottom.

Given the hybrid nature of social enterprise, research on the gender pay gap in not-for-profits may also inform our study. It provides evidence for a significant gender pay gap including at the top of not-for-profit organisations. Deitrick et al. (2007) find that working in the not-for-profit sector in the US contributes 1.9% to the overall gender pay gap of 27%. Decomposing the industry effect and comparing to all other industries suggests that not-for-profits contribute 6.3% (versus 2.3% of all other industries) to the 23.7% of the explained part of the gap. Analysing a sample of 114 directors of Small Business Development Centres (SBDCs),<sup>5</sup> Gray and Benson (2003) find that when education, tenure, size, performance, and affiliation are held constant, female executives in not-for-profits are compensated significantly less than male executives. Similarly, Ban and Towers (2003) found a significant gender gap in wages of both executives and employees in not-for-profits in the Pittsburgh region.

## **2.2 The Gender Wage Gap and Entrepreneurship**

There is almost no direct evidence about the gender wage gap at the top of entrepreneurial firms. The entrepreneurship literature primarily considers differences in the performance and earnings of new firms founded by males as against females, as well as differences in attitudes to risk (Charness and Gneezy, 2012). In their review, Jennings and Brush (2013) find that female-led enterprises tend to be smaller (as measured by employment, revenues, or asset base); grow less quickly; and generate lower levels of profit. However, they highlight that there is “some evidence to suggest that female-led firms perform similarly (or even better) than male-led firms

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<sup>5</sup> The SBDCs are similar to non-profit organizations in that they are partially funded through various government grant programs and they must rely on matching funds and client fees for over half of their operating budgets.

on certain financial ratios and risk-adjusted measures” (Jennings and Brush, 2013). Using self-employment as an indicator of entrepreneurship, they also conclude that women tend to earn less income than men.<sup>6</sup> Studies by Hundley (2000, 2001) suggest that the gender gap in the earnings of the self-employed can be attributed to the specialisation of the genders in housework vs. market work. “.... self-employed women’s earnings declined with marriage, family size, and hours of housework, whereas self-employed men’s earnings increased with marriage and family size.” (Hundley, 2000). Hundley (2001) also finds that personal characteristics (with the exception of tenure in the business) and business capital (assets) play only a small role in explaining the gender wage gap. Business characteristics, especially sector, explain a significant share of the gender wage gap, as does the distribution of labour between household and market work. Finally, Roche (2013) studies different returns to education for self-employed men vs. women with respect to earnings from self-employment. She reports the returns to be large for men but heterogeneous for women (e.g., dependent on industry) – a finding mirrored in Karahan’s (2013) analysis of educated Americans in the 1990’s.<sup>7</sup>

### **2.3 Potential drivers of the gender pay gap among social entrepreneurs**

Four possible explanations for the gender pay gap amongst entrepreneurs have been proposed (Parker, 2009): human capital, preferences, social capital, and start-up capital. In this paper we concentrate on the former two explanations. We follow the literature in distinguishing between differences due to observable characteristics, such as human capital and preferences, (*explained*

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<sup>6</sup> Haber et al. (1987) found that the ratio of income of fully self-employed females relative to males in the US was only 0.3, even lower than the ratio in employment of 0.6. Hundley (2001) notes that women often engage in part-time self-employment; hence the gender pay/earnings gap is significantly smaller (a ratio of 1.16 vs. 2.33) for hourly as opposed to annual earnings. Roche (2013) based on 2008/2009 US data estimates the mean gender earnings gap in self-employment to be 55% for annual earnings (compared to a gender gap of 75% for wage employment) and 72% for hourly earnings (similar to the gender gap in wage employment).

<sup>7</sup> Van der Sluis et al. (2008) conduct a statistical review (meta-analyses) of the empirical evidence (in developed economies) on returns to education for entrepreneurs. Although gender differences are not the focus of their analysis they report a generally higher link between education and performance for female as opposed to male entrepreneurs.

part of the wage gap) and differences due to labour market discrimination (*unexplained* or *adjusted* part of the wage gap).<sup>8</sup>

The *human capital approach* explains the gender wage gap by differences in observable characteristics and personal endowments or constraints proxied by variables such as age, years of education, work experience and number of working hours. Blau and Kahn (2007) show that there has been a substantial increase in women's relative earnings since the 1970s. This gain was initially concentrated on younger women, but now women of all ages have narrowed the pay gap. Black and Spitz-Oener (2010) analysis suggests that a substantial fraction of the closing of the gender wage gap can be explained by changes in the nature of jobs for women. Using data from West Germany, they find that women have witnessed relative increases in non-routine analytic and interactive tasks driven, at least in part, by technological change. In their life-cycle theory of the gender wage gap, Manning and Swaffield (2008) suggest that male-female wage differences will become amplified within a cohort over time because women may drop out of the labour force for a period to raise children and because more women work part-time. Therefore labour market experience accumulates more slowly for women than men. Even so, the authors show that a substantial unexplained gap remains: women who have continuous full-time employment, have had no children and have expressed no desire to have children still earn about 8 log points less than equivalent men after 10 years in the labour market.

In the entrepreneurship context, these arguments suggest that female entrepreneurs may not experience the same returns from their ventures as men, because they may not put in the same level of effort or because they have accumulated less human capital (e.g. Greene et al.,

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<sup>8</sup> The economic theory of discrimination goes back to Becker (1957), where he distinguished three types of discrimination: (1) employer discrimination; (2) customer discrimination; and (3) co-worker discrimination.

2003). The entrepreneurship studies reviewed above point to the relevance of effort-based explanations, especially that women's housework and childcare responsibilities constrain their pay (e.g., Hundley, 2001), as well as human capital explanations (e.g. Co et al., 2005). They also suggest that experience and tenure in the business help to explain the gender gap (e.g., Co et al., 2005; Powell and Eddleston, 2008). Thus we may find a gender pay gap in social enterprises because male and female social entrepreneurs differ in terms of their human capital and labour input constraints. We therefore include human capital variables such as age, education and effort-based variables such as hours worked on the social enterprise per week in our estimations.

*Differences in preferences* may also be relevant in explaining a social enterprise gender pay gap. According to Carter et al. (2003), financial motives are more important for male than female entrepreneurs. Buttner and Moore (1997) found that the achievement of personal goals (e.g., autonomy, flexibility) and self-fulfilment are more important objectives for female entrepreneurs than profits for male entrepreneurs. Buchan et al. (2008) find differences in trust between the genders in the Investment Game. In their review, Jennings and Brush (2013) underscore that differences in preferences about monetary and non-monetary goals between male and female entrepreneurs need to be acknowledged. These are consistent with research on gender differences in preferences more generally. For example, Schwartz and Rubel-Lifschitz (2009) find that men show stronger self-interest preferences, including the importance attributed to money, than women. Similarly, economic experiments reveal gender preferences in self- vs. other-interest (Croson and Gneezy, 2009).

The degree of risk aversion may be another area where preferences differ by gender (Charness and Gneezy, 2012). Bearing risk and uncertainty is a key element of entrepreneurship because of the need to experiment and innovate to keep up with and outperform the market.

Evidence suggests that women entrepreneurs are more risk averse than men, as for instance indicated by the higher variability in earnings for male as opposed to female entrepreneurs. For instance, Parrotta and Smith (2013) find evidence of greater risk aversion among female CEOs in Denmark. Croson and Gneezy (2009) identify striking general gender difference in risk preferences with women being more risk averse than men. Indeed, Gneezy et al. (2003) explain the gender wage gap by arguing that women behave differently in competitive environments, including the labour market, and earn less than men as a result.

Thus, a gender pay gap may arise in part because male and female social entrepreneurs have different preferences for money, pay and risk. This possibility leads us to control for personal preferences for risk and innovation, as well as for self-interest (self-enhancement values) in our explanation of earning differences.

#### **2.4 A Gender Gap in Job Satisfaction?**

Despite their lower pay, women are not necessarily dissatisfied with their jobs; the so-called “contented female worker paradox” (e.g., Davison, 2014). Entrepreneurs’ job satisfaction has been found to be higher than that of wage employees (e.g., Bradley and Roberts, 2004), but there has been little attention to gender differences. However, Powell and Eddleston, (2008) investigate entrepreneurs’ firm performance (rather than their personal income) using a broad measure of satisfaction with business success; they conclude that there is a “paradox of the contented female business owner”. This is not due to differential effort or human capital, but rather that female business owners valued business success less. Indeed their satisfaction with business success was independent of their business’ actual level of sales. (More about personal values theory and empirics can be found in Appendix 1 of this paper.)

It is not clear how gender differences in preferences will play out for social entrepreneurs. Although monetary preferences may be less central for some social entrepreneurs, the hybrid nature of the social enterprise allows for both to be fulfilled simultaneously. This raises the possibility that women and men are attracted to social enterprise for different reasons; “doing good” or “doing well and doing good”. Evidence from related research on not-for-profit organizations supports this possibility; De Cooman et al. (2011) find that men and women working in not-for-profits demonstrate different motivational profiles.

In sum, the relevant literature points to explaining both earnings and job satisfaction by indicators of the CEOs human capital (education), demographic characteristics (gender and age), personal preferences for risk, innovation, and self-enhancement values, as well as job and social enterprise characteristics. The latter include effort-based variables such as hours worked, whether the CEO is the founder of the social enterprise; whether social entrepreneurship is the only job; and the sector of the firm. Our model is summarised in Figure 1.

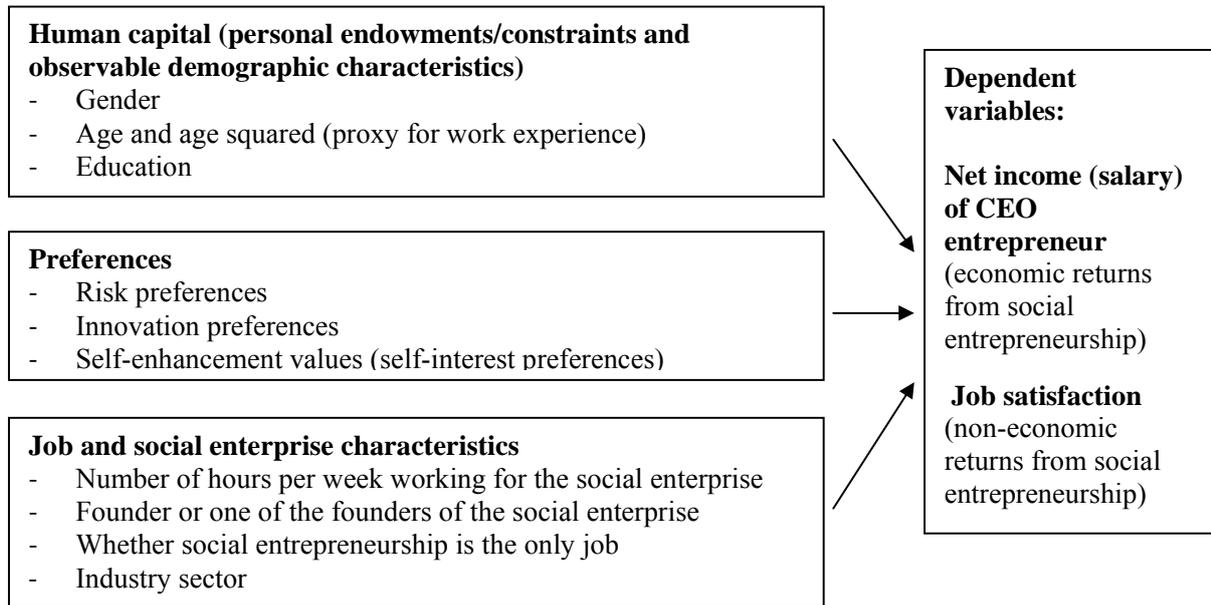


Figure 1 Model of the determinants of income and job satisfaction by gender

### 3. Data Description and Methodology

#### 3.1 SELUSI Data

This is the first study to use a relatively large random sample survey about social entrepreneurs; comprising 159 social entrepreneurs in the United Kingdom in 2011. From the second wave of the SELUSI data<sup>9</sup>. Information on the social enterprises and their CEOs was collected by combining a structured phone interview with an online survey. Social enterprise CEOs were defined as those leading an organization with a social mission (*social criterion*) which generated a minimum of 5% of its revenues by selling products or services in the market (*entrepreneurial criterion*). The organization also had to employ at least one (full-time equivalent) employee to exclude self-employment and volunteer-only organisations. In line with the literature that social

<sup>9</sup> The full dataset is a two-period unbalanced panel of over 500 social enterprises in Hungary, Romania, Spain, and the UK.

enterprise is a hybrid form of organization (Mair and Marti, 2006), our sample includes ‘entrepreneurial’, revenue-generating not-for-profits, as well as for-profit enterprises with a social mission. To circumvent self-reporting bias, social mission characteristics were rated by interviewers based on a set of questions eliciting the entrepreneur’s description of their enterprise mission.<sup>10</sup>

There were two challenges in identifying our sample of social entrepreneurs. First, there is no exhaustive list or registry of social enterprises in any European country to provide a population as a basis for random sampling, and second, relative to a country’s adult population, social entrepreneurs are rare. For instance, a cross-country population-representative survey focussed on entrepreneurship, the Global Entrepreneurship Monitor ([www.gemconsortium.org/](http://www.gemconsortium.org/)), found that on average only 2.8% of adults were social entrepreneurs across 49 countries (Terjesen et al., 2012). These constraints led us to the use of Respondent Driven Sampling (RDS) (Heckathorn, 1997, 2002; Salganik and Heckathorn, 2004). The RDS combines “snowball” or “network-based” sampling (respondents refer those they know, who in turn refer those they know, and so on) with a model of the sample recruitment process which allocates weights to compensate for the fact that the sample was collected in a non-random way. Using this method, statistically representative samples of relatively small and groups for which no reliable list of population members is available can be generated. The RDS has been applied to other hard-to-

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<sup>10</sup> In assessing the social mission we followed validated interview and coding protocols established in economics (van Reenen and Bloom, 2007), psychology (Baum, Locke and Kirckpatrick, 1998) and management (Palmer and Short, 2008). In our study, extensively trained interviewers coded the enterprise mission. In particular, during the phone interviews, interviewers posed an open-ended question to social entrepreneurs “How would you summarize the rationale or purpose of being of your organization, i.e. its mission?”, they were instructed to note down the answer to this question verbatim and the entire interview was also recorded. Interviewers were trained to apply a number of follow-up questions to ensure that the mission was probed in sufficient depth. With regard to coding the social mission in our study, we used a five-point coding scale from none to high social mission where both the extremes and the middle-points were defined (as in van Reenen and Bloom, 2007, Baum et al., 1998). Interviewers were extensively trained in how to employ the question and coding scale using a range of different organisational missions. The training also included in-depth discussions of examples of social enterprises whose mission represented the different scale points.

reach populations such as: drug injectors, prostitutes, gay men, street youth, homeless people, as well as jazz musicians and other artists. Studies show that the RDS leads to representative samples equivalent to large poll surveys (Heckathorn, 2002).

In order to identify a nationally representative sample of social entrepreneurs, we therefore first identified a set of so-called *seed* social entrepreneurs, diversified across industry sector, geographical distribution, age of organisation, company size, source of information from which the contact of the seed enterprise was obtained. Each interviewed seed social entrepreneur was then asked to nominate three peers from their network, whom we subsequently contacted and asked for three further referrals. The peer recruitment represents the network-based sampling approach. Heckathorn (1997, 2002) shows that if referral chains are long enough (4-5 waves), the characteristics of the seeds have no significant impact on ultimate sample composition.

### 3.2 Estimation strategy

Our estimation strategy involved several steps. First, to implement our model (see Figure 1), we estimate a human capital earnings function (Mincer, 1974) which relates the log of net annual salary (income) from a social enterprise to gender, age, observed measures of schooling, and other labour market characteristics, with a specification that is linear in education and quadratic in age to proxy for the diminishing role of work experience:

$$y_i = \ln(Y_i) = \alpha + \beta G_i + \gamma_1 S_i + \gamma_2 Age_i + \gamma_3 Age_i^2 + \mathbf{X}'_i \boldsymbol{\gamma}_k + \varepsilon_i, \quad (1)$$

where

$Y_i$  = individual net annual salary (income) from a social enterprise;  $y_i$  = log transformation.

$G_i$  = gender dummy variable (= 1 if female; = 0 otherwise).

$S_i$  = education level, categorized into four levels (0 = other; 1 = high school; 2 =

professional/vocational degree; 3 = bachelor's degree).

$Age_i =$  age in years.

$Age_i^2 =$  age in years, squared.

$X'_i =$  vector of other labour market characteristics, such as job and social enterprise characteristics, preferences, and values (see Figure 1).

$\beta < 0$  the average difference in log individual net annual salary (income) from a social enterprise between females and males, *given* the same labour market characteristics (and the same error term  $\varepsilon_i$ ); measures the change in wages when comparing, *ceteris paribus*, an average female to an average male; if  $\beta < 0$ , then for the same level of other factors, women earn less than men on average; expressed in percentages, women earn  $100 * [\exp(\beta) - 1]$  less than men.

$\gamma_1 > 0$  the movement from one educational level to another produces  $100 * [\exp(\gamma_1) - 1]$  percent change in  $\ln(Y_i)$ ; *rate of return to schooling*.

$\gamma_2 > 0$  estimates the rate of growth in earnings resulting from one additional year

$\gamma_3 < 0$  of labour market experience; *rate of return to experience*.

$\gamma_k =$  measures the effect of other labour market characteristics in the model.

$i, k$   $i$  is index for a sample size ( $i = 1, \dots, N$ );  $k$  ( $k = 1, \dots, K$ ); is index for a total number of explanatory variables included in the Mincer regression model.

Second, in order to test whether the coefficients on samples of male and female social entrepreneurs are equal, we estimated a model where the intercept and all slopes in the final earnings regression specification were allowed to differ across the two groups (the Chow test; Chow, 1960), and subsequently estimate equation (1) separately for male and female social entrepreneurs in order to capture the differences in the coefficients across the two groups. Third, we go on to estimate the probit regressions using job satisfaction as a dependent variable, with the vector of independent variables as outlined in Figure 1, and with and without net annual salary from a social enterprise included in the list of covariates. Fourth, in order to test whether

log salary and job satisfaction regression models are jointly determined, we further estimate seemingly unrelated regression (SUR), which assumes that the error terms are correlated across the two equations.

Finally, we perform a set of *robustness checks* including using imputed salary from a social enterprise as a dependent variable, where the missing observations are imputed by the variable mean and by observed values from the first wave of SELUSI data. We also perform robustness checks by using the log of the current (in 2010-2011) revenues instead of social entrepreneur annual income as a dependent variable.

## **4. Empirical Results**

### **4.1 Descriptive Analysis**

The definitions of all the variables included in the final earnings regression specification of equation 1 is given in Table 1, with summary statistics reported in Table 2, correlation coefficients in Table 3, and mean male-female comparisons in Table 4. The *unadjusted* gender pay gap (GPG) is the difference between the average income earned by women and men, i.e., a difference between the income of an ‘average’ working woman and an ‘average’ working man in a given population. The data in Table 4 show the *unadjusted* gender pay gap in net annual salary (income) from the social enterprise to be 29%. This does not take into account the differences in labour market characteristics between male and female social entrepreneurs which we establish below. Table 4 reveals no significant gender differences in social entrepreneurs’ job satisfaction. In terms of revenues, there is 88% gender difference in social enterprises, to the disadvantage of females. Men set up their social enterprise more often in the sector of business activities and

business services (14% higher frequency), whereas women in the sample set up their social enterprise more often in the social services sector (including education, health and social work and other community and social services). There are no other statistically significant differences between male and female social entrepreneurs.

#### **4.2 Regression Analysis – Dependent Variable: Log-Salary**

Table 5 reports the results from estimating equation (1), where the dependent variable is log of net annual salary. It contains seven specifications: in column (1) only gender is included as an explanatory variable; in column (2) the specification is extended with variables accounting for work experience (age and age squared) and education (human capital); in column (3) effort is added, proxied by the log of the number of hours per week; in column (4) the specification is extended to include managerial job characteristics (whether a CEO was a founder or one of the founders of a social enterprise and whether this was his/her only paid for job); in column (5) controls for industry are added; in column (6) the regression is extended with an indicator for personal preferences (risk and innovation); in column (7) self-enhancement values are added to the regression, capturing individualistic preferences, such as preferences for pay.<sup>11</sup>

The coefficient of gender in Table 5, column (1) measures the *unadjusted* gender pay gap, representing 29% lower net annual salary for female social entrepreneurs. When we include

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<sup>11</sup> Controlling for job satisfaction did not produce significant results in any of the specifications; hence it was dropped from the regression. Being the owner of a social enterprise is highly correlated with whether a CEO was a founder or one of the founders of a social enterprise (correlation coefficient of 0.53); the joint inclusion of the two variables did not add additional explanatory power to the regression. The number of years that a person was a director or a CEO of a social organization (tenure) was also not significant. Only industry sector of the *main* organisation activity (e.g., activity which earns most revenue; for which most people are employed; which creates biggest social impact) is kept in the regression, due to a small sample size on other industry-sector related variables. Age of the organization, current revenues, and number of employees are all highly correlated with each other and with the net annual salary from a social enterprise (correlation coefficients between 0.60 and 0.90; all proxy the size of the organisation); they were not included in a regression due to the potential multicollinearity problems.

the proxies for work experience and human capital, the estimated gender pay gap is reduced to 25%. Adding the remaining explanatory variables (Table 5, specifications (3) to (7)), reduces the *adjusted (unexplained)* gender pay gap to 23%. We can conclude that taking into account the differences in labour market characteristics and personal preferences and values between male and female social entrepreneurs explains about 6% of the observed gender difference in net annual salary; the remaining 23% of the pay gap is unexplained. This exists because of either (i) labour market discrimination against women (“labour market frictions”), or (ii) heterogeneity of social entrepreneurs’ characteristics, which we were not able to capture through variables such as age, education, hours of work, other job and social enterprise characteristics, personal preferences and values.

Since working in the business activities and business services sectors significantly contributes to higher pay, yet more men than women set up their social enterprise in this sector (14% higher frequency), it might be argued that women self-select into lower-paid sectors of the economy. It has been documented that female-dominated sectors (and occupations) offer lower salary irrespective of skill-requirements and other wage-relevant factors, (Bayard and Hellerstein, 2003; Boraas and Rodgers III, 2003; Petersen and Saporta, 2004). We therefore segment the sample by gender to explore this issue.

#### **4.2.1. Splitting the Sample across Gender (Chow Test)**

We estimate a model where the intercept and all slopes in specification (7) in Table 5 were allowed to differ across the two groups; male and female social entrepreneurs (Wooldridge, 2009, Chapter 7). The Chow  $F$ -test of joint significance of gender plus all gender-interactions is significant at 1% level (the Chow test statistic is  $F(13, 87) = 2.56$ ;  $p$ -value = 0.005), see Table 6. Based on this, we continue under the premise that male and female social entrepreneurs are

described by different wage offer models. Separate estimates of equation (1) for male and female social entrepreneurs are reported in Table 7.

Regression results in Table 7 show that the main factors explaining the net annual salary of male social entrepreneurs (positive effect) are education level, number of hours per week working for a social enterprise, and working in the sector of business activities and business services. For female social entrepreneurs, the main factor explaining the net annual salary from a social enterprise (positive effect) is the personal preference for innovation. This finding appears to be consistent with prior findings in so far as returns to education for women are less consistent than for men (e.g., Roche, 2013), and that men tend to work in higher-paying sectors. The previous effects together with the positive effect of innovation preferences for female social entrepreneurs may reflect the fact that women and men chose to engage in social entrepreneurship for different reasons. Women out of a desire to ‘do good’ which is arguably possible in a more innovative manner in social enterprises as compared to more traditional social sector work (in public services or traditional not-for-profits); and men out of a desire to combine ‘doing good and doing well’.

#### **4.3 Regression Analysis – Dependent Variable: Job Satisfaction**

With regard to our second dependent variable, job satisfaction, we estimate probit regressions using as explanatory variables the vector of variables specified in Table 5, column (7), with and without net annual salary included in the list of covariates. In Tables 8, columns (1) and (2) refer to specifications without and with salary respectively. The effect of gender on job satisfaction is positive and significant in both specifications. When salary is included into the regression, the effect of gender on job satisfaction is even larger, though the coefficient of salary itself is not

significant. Female social entrepreneurs are between 14% and 17% (columns (1) versus (2)) more likely to be satisfied with their job as a CEO of a social enterprise than male social entrepreneurs. Other factors that contribute significantly to job satisfaction of social entrepreneurs are age and whether a social entrepreneur is a founder or one of the founders of a social enterprise. The age effect is consistent with the wider literature on workers' attitudes, where older workers are consistently found to be more satisfied with their jobs as they become more focussed on the positive aspects of their jobs (e.g., Ng and Feldman, 2010). The effect of being the founder may be due to a similar mechanism, where the level of personal investment in the enterprise (greater if one is the founder) leads to a positive bias emphasizing the positive aspects of the job.

#### **4.3.1 Seemingly Unrelated Regressions (SUR)**

In order to test whether the salary and job satisfaction regression models are jointly determined, we estimated seemingly unrelated regression (SUR) system, which assumes that the error terms are correlated across the two equations. Since the SUR model assumes that the two regressions are linear, we estimate the linear probability model (LPM) of job satisfaction instead of a probit regression. Estimation results are shown in Table 9. Columns (1) and (2) show joint estimation of the two regressions, whereas columns (3) to (5) estimate separate regressions. Column (3) is identical to our log-salary estimation results (Table 5, column (7)), whereas columns (4) and (5) estimate the LPM regressions of job satisfaction, without and with salary from a social enterprise included in a regression. Joint estimation of log salary and job satisfaction regressions (SUR) does not show significantly different regression coefficients, standard errors, *R*-squared measures, etc., from those in the separate regressions. Therefore, we conclude that the error terms are *not* correlated across the two equations. The findings in this

section seem to confirm the “paradox of the contented female (social) business owner,” whereby the female social entrepreneur job satisfaction is independent of the salary generated through the social business, whilst female social entrepreneurs job satisfaction is simultaneously higher and pay lower compared to male social entrepreneurs.

#### **4.4 Robustness Checks**

##### **4.4.1 Estimation Results with Imputed Salary**

Reported in Appendix 2 are robustness checks of the base estimation presented in Table 5 this time using net annual salary with missing observations imputed with the sample variable mean (19 observations imputed; Table A5a) and imputed with the values from the first wave of the SELUSI data (2009-2010) and the sample variable mean (19 observations imputed; Table A5b). These estimation results corroborate our findings in Table 5: including the full set of explanatory variables on the right-hand side (RHS) of the regression (Tables A5a and A5b, specifications (2) to (7)) reduces the estimated gender pay gap from 27% (unadjusted income gap) to 21% (adjusted or unexplained income gap).

##### **4.4.2 Estimation Results with Log-Revenues as a Dependent Variable**

We further perform robustness checks using the log of the current (in 2010-2011) revenues instead of social entrepreneur annual income as the dependent variable. For six companies in the sample, missing observations are imputed with information from official company reports in 2009 and 2010 taken from the ORBIS database (<https://orbis.bvdinfo.com/>). Estimation results are presented in Appendix 2 Table A5c. Including the full set of explanatory variables keeps the estimated gender gap in organization revenues (proxy for the size of organisation) at the level of

the unadjusted revenue gap (88%). Our analysis suggests that male social entrepreneurs run larger businesses than female social entrepreneurs, even when we control for measurable characteristics such as age, education, hours of work, other job and social enterprise characteristics, personal preferences and values. This corroborates findings from the commercial entrepreneurship literature whereby female-led firms tend to be smaller in size than male-led enterprises, measured by employment, revenues or asset base (Jennings and Brush, 2013). Other factors which significantly contribute to higher organization revenues are number of hours per week working for the social enterprise and whether social entrepreneurship is the entrepreneurs' only paid job.

Although we cannot show this directly in our analysis due to the high correlation between net annual income and organisation revenues (0.68), the size of a social enterprise might be the main explanatory variable for the unexplained gender pay gap in our sample (23%), since by and large entrepreneurs set their own pay. We can therefore rule out labour market frictions as an explanation of the unexplained gender pay gap, as it does not seem very likely that female social entrepreneurs would discriminate against themselves by reducing their own income. The equations suggest that female social entrepreneurs may pay themselves a salary depending on their firm's characteristics and performance.

## **5 Discussion and Conclusions**

Using unique and novel survey data on social enterprises, we investigate whether there is a gender pay gap among social entrepreneurs in the UK. We show that even as social entrepreneurs, women earn 29% less than their male colleagues; a greater unadjusted gap than

the UK average of 19%. Controlling for demographic, human capital, job, social business, personal preference and values characteristics, we estimate an adjusted pay gap of about 23%.

We suggest that the size and performance of the social enterprise is probably the main explanatory variable for this adjusted (unexplained) gender pay gap, although we cannot show this directly because of the high correlation between net annual income and organisation revenues (0.68). The mechanism that we propose is the following: female social entrepreneurs set up their own social enterprise and pay themselves a salary determined by its characteristics and performance, for example size, growth, and profit. The characteristics of the enterprise are determined by their personal traits and preferences for risk, innovation, and preference for self- as opposed to other-interest. For example, if women are more risk averse, have less access to sources of finances, set up their enterprise in lower-paid sectors of the economy, and are more innovative and prosocial, these traits and preferences will determine the size and the performance of the social enterprise that they run, and subsequently determine the salary that they can pay themselves.

We have noted that job satisfaction might also be an important variable, capturing non-monetary returns to a career in social entrepreneurship. Our data suggest that female social entrepreneurs are more satisfied with their job than their male counterparts, even when we control for their lower salary. Our findings therefore are consistent with the “paradox of the contented female (social) business owner,” whereby the female social entrepreneur job satisfaction is independent of the salary generated through the social business.

Our findings have interesting implications for policy makers. There are numerous reasons to support social entrepreneurship, including the promise of social enterprise as a vehicle to

address pressing social issues which governments no longer have the resources to deal with. There are also the documented positive spill-over effects of social on commercial entrepreneurship. Social enterprise appears to be a route into commercial entrepreneurship attracting those who are typically less likely to engage in commercial entrepreneurship and who through the social enterprise experience build skills and confidence that they subsequently leverage for commercial entrepreneurship (Estrin et al. 2013). However, the results of this study contribute to a more rounded perspective, highlighting that although social enterprise is a highly satisfying occupational choice, it also perpetuates gender pay inequalities. What is not clear is whether this should be of concern to policy makers, if the pay gap is not driven by discrimination but rather by choices of the social entrepreneurs themselves. Since society in general will likely always be concerned by income inequalities, whether explicable by social and economic factors or not, policy makers might wish to engage business support and communication campaigns to mitigate the pay gap while stressing personal fulfilment.

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**Table 1. Variable Definitions**

<b>Variable</b>	<b>Variable description</b>
<i>Dependent variable (log salary)</i>	
salarownGBP	Net annual salary/income from a social enterprise (in GBP)
lsalarownGBP	Log net annual salary/income from a social enterprise (in GBP)
lsalarownGBP1	Log net annual salary/income from a social enterprise (in GBP); missing observations imputed by the variable mean (19 observations imputed)
lsalarownGBP2	Log net annual salary/income from a social enterprise (in GBP); missing observations imputed by the values from the first wave of SELUSI data (5 observations imputed)
lsalarownGBP3	Log net annual salary/income from a social enterprise (in GBP); missing observations imputed by the values from the first wave of SELUSI data and the variable mean (19 observations imputed)
<i>Dependent variable (job satisfaction)</i>	
jsatisfn1	Job satisfaction on a scale from 1 to 4 (original scale 1-7, recoded as 4=1 5=2 6=3 7=4, because there was no respondents who provided answers from 1 to 3; reference data from World Value Survey (WVS) or European Social Survey (ESS))
jsatisfn2	Job satisfaction on a scale from 0 to 1 0 = satisfied (answers 4 and 5 on jsatisfn1) 1 = very satisfied (answers 6 and 7 on jsatisfn1)
ljsatisfn1	Log job satisfaction on a scale from 1 to 4
<i>Personal characteristics and human capital</i>	
gender	0 = male 1 = female
age_er	Age of the social entrepreneur (in years)
age_er2	Age squared
educorr	Education level 0 = other 1 = High school 2 = Professional/vocational degree 3 = Bachelor's degree 4 = MBA + Master degree 5 = Doctorate

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<i>Managerial job characteristics</i>	
lhorealn	Number of hours per week working for a social enterprise; Variable is coded in intervals, e.g. 76-80 hours; we take the middle of the interval and then create log
founderr_dum	Are you a founder or one of the founders of a social enterprise? 0 = No 1 = Yes
jobonlyn	Is this your only paid for job? 0 = No 1 = Yes
<hr/>	
<i>Social business characteristics</i>	
act1nace2i1	Industry sector, broad categories; for 2 companies, missing observations imputed by information from ORBIS 1 = Industry + agriculture 2 = Trade, gastronomy, transport and telecommunication 3 = Business activities and business services 4 = Education + Health and social work + Other community and social services
revnow	What are the current (2010-2011) revenues for your organization (in GBP)? Proxy for the size of the organisation
lrevnow	Log of the current revenues
revnowi1	What are the current (2010-2011) revenues for your organization (in GBP)? Proxy for the size of the organisation. For six companies in the sample, missing observations are imputed with information from ORBIS in 2009 & 2010.
lrevnowi1	Log of the current revenues (imputed variable)
<hr/>	
<i>Personality traits measures</i>	
risk	Measured on a scale from 0 to 4, where 4 means more risk prone.
innovative	Measured on a scale from 1 to 5: 1 = Not at all true 3 = Neither/nor 5 = Absolutely true
<hr/>	
<i>Values measures</i>	
SEhan_lo	Self-enhancement: measure of self-interest preferences (see Appendix 1 for details)

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**Table 2. Summary Statistics**

<b>Variable</b>	<b>Observations</b>	<b>Mean</b>	<b>Std. Deviation</b>
salarownGBP	140	40,988.930	20,201.560
lsalarownGBP	140	10.485	0.571
lsalarownGBP1	159	10.485	0.536
lsalarownGBP2	145	10.486	0.584
lsalarownGBP3	159	10.486	0.558
jsatisfn1	131	3.038	0.854
jsatisfn2	131	0.733	0.444
ljsatisfn1	131	1.063	0.334
gender	133	0.361	0.482
age_er	133	49.406	9.607
age_er2	133	2,532.549	935.284
educorr	133	3.008	1.145
lhrsrealn	134	3.711	0.500
founderr_dum	134	0.575	0.496
jobonlyn	133	0.744	0.438
actlnace2i1 (category 1)	154	0.156	0.364
actlnace2i1 (category 2)	154	0.123	0.330
actlnace2i1 (category 3)	154	0.351	0.479
actlnace2i1 (category 4)	154	0.370	0.484
revnow	149	2,476,775.000	7,141,769.000
lrevnow	149	13.176	1.680
revnowi1	155	2,394,937.000	7,013,368.000
lrevnowi1	155	13.149	1.662
risk	131	2.053	1.152
innovative	131	4.234	0.596
SEnhan lo	131	3.528	0.872

*Note:* For variable description, see Table 1.

The actual sample size in any particular regression depends on the maximum number of observed data points of the variables included in that regression. The final specification includes 113 observations.

**Table 3. Correlation Coefficients**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
gender (1)	1.00																
lsalarownGBP (2)	-0.27	1.00															
jsatisfn2 (3)	0.16	0.12	1.00														
age_er (4)	-0.13	0.35	0.25	1.00													
age_er2 (5)	-0.13	0.32	0.22	0.99	1.00												
educorr (6)	-0.09	0.21	0.02	-0.01	-0.01	1.00											
lhrsrealn (7)	-0.13	0.25	0.04	0.06	0.05	0.10	1.00										
founderr_dum (8)	0.18	-0.25	0.15	0.08	0.10	-0.14	-0.03	1.00									
jobonlyn (9)	0.02	0.25	0.17	0.14	0.12	-0.21	0.40	-0.23	1.00								
act1nace2i1 (cat 1) (10)	0.02	-0.14	0.12	0.13	0.13	-0.21	0.00	0.05	0.10	1.00							
act1nace2i1 (cat 2) (11)	-0.10	-0.24	-0.18	-0.21	-0.18	0.11	0.03	-0.02	-0.20	-0.16	1.00						
act1nace2i1 (cat 3) (12)	-0.11	0.24	-0.02	0.03	0.03	-0.01	0.15	0.01	0.00	-0.29	-0.22	1.00					
act1nace2i1 (cat 4) (13)	0.15	0.04	0.04	0.01	-0.01	0.11	-0.15	-0.04	0.05	-0.40	-0.30	-0.56	1.00				
lrevnowi1 (14)	-0.34	0.68	0.06	0.25	0.23	0.07	0.27	-0.19	0.19	-0.10	-0.17	0.13	0.06	1.00			
risk-taking (15)	-0.03	0.11	0.10	0.01	0.02	0.18	-0.07	0.02	-0.06	0.15	0.03	-0.17	0.03	0.09	1.00		
innovative (16)	0.08	0.15	0.06	0.04	0.03	0.20	0.02	0.11	-0.17	-0.06	-0.02	-0.11	0.15	0.08	0.10	1.00	
SEnhan_lo (17)	-0.06	0.11	-0.02	-0.15	-0.15	0.23	0.06	0.12	-0.16	-0.09	-0.13	-0.02	0.16	0.08	0.23	0.22	1.00

**Table 4. Statistical differences of means of earnings and life satisfaction across gender**

	<i>Male</i>		<i>Female</i>		Difference	<i>Significance</i>		
	Obs.	Mean	Obs.	Mean		<i>t</i> -test	<i>p</i> -value	
<b>salarownGBP</b>	71	47,000.00	46	35,000.00	12,000.00	3.093	0.002	***
<b>lsalarownGBP</b>	71	10.61	46	10.32	0.29	2.694	0.008	***
jsatisfn1	83	2.95	48	3.19	-0.24	-1.53	0.129	
jsatisfn2	83	0.69	48	0.81	-0.13	-1.57	0.119	
ljsatisfn1	83	1.03	48	1.11	-0.08	-1.33	0.186	
age_er	85	50.18	48	48.04	2.13	1.233	0.220	
age_er2	85	2,609.00	48	2,397.17	211.83	1.257	0.211	
educorr	85	3.06	48	2.92	0.14	0.686	0.494	
lhrsrealn	85	3.72	48	3.72	0.00	-0.037	0.971	
founderr_dum	85	0.54	48	0.63	-0.08	-0.934	0.352	
jobonlyn	85	0.72	48	0.79	-0.07	-0.936	0.351	
act1nace2i1 (category 1)	83	0.16	48	0.17	-0.01	-0.150	0.881	
act1nace2i1 (category 2)	83	0.13	48	0.08	0.05	0.848	0.398	
<b>act1nace2i1 (category 3)</b>	83	0.37	48	0.23	0.14	1.711	0.089	*
<b>act1nace2i1 (category 4)</b>	83	0.34	48	0.52	-0.18	-2.080	0.040	**
revnowi1	85	3,400,000.00	45	1,300,000.00	2,100,000.00	1.466	0.145	
<b>lrevnowi1</b>	85	13.48	45	12.60	0.88	2.766	0.007	***
risk-taking	83	2.04	48	2.08	-0.05	-0.225	0.822	
innovative	83	4.22	48	4.26	-0.04	-0.421	0.675	
SEnhan_lo	83	3.59	48	3.43	0.16	0.98	0.328	

*Note:* The mean difference statistically significant at \*\*\* (p<0.01), \*\* (p<0.05), \* (p<0.1) significance level.

**Table 5. Dependent variable log salary: Specifications 1-7**

VARIABLES	(1) OLS1	(2) OLS2	(3) OLS3	(4) OLS4	(5) OLS5	(6) OLS6	(7) OLS7
gender	-0.293*** (0.109)	-0.246** (0.098)	-0.219** (0.097)	-0.211** (0.096)	-0.226** (0.094)	-0.235** (0.094)	-0.225** (0.094)
age_er		0.159*** (0.044)	0.155*** (0.043)	0.124*** (0.044)	0.110** (0.045)	0.109** (0.044)	0.110** (0.044)
age_er2		-0.001*** (0.000)	-0.001*** (0.000)	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)
educorr		0.098** (0.041)	0.089** (0.041)	0.098** (0.042)	0.099** (0.043)	0.065 (0.043)	0.058 (0.044)
lhrsrealn			0.282** (0.125)	0.186 (0.137)	0.175 (0.135)	0.183 (0.134)	0.167 (0.135)
founderr_dum				-0.177* (0.099)	-0.166* (0.097)	-0.192* (0.097)	-0.204** (0.098)
jobonlyn				0.225 (0.142)	0.189 (0.143)	0.207 (0.144)	0.221 (0.145)
indum2					-0.034 (0.181)	-0.026 (0.181)	-0.005 (0.183)
indum3					0.327** (0.140)	0.399*** (0.140)	0.395*** (0.141)
indum4					0.186 (0.133)	0.217 (0.133)	0.203 (0.134)
risk						0.079* (0.040)	0.070* (0.041)
innovative						0.142* (0.076)	0.133* (0.077)
SEnhan_lo							0.053 (0.058)
Constant	10.614*** (0.068)	6.192*** (1.024)	5.239*** (1.090)	6.199*** (1.118)	6.448*** (1.139)	5.743*** (1.137)	5.646*** (1.143)
Observations	117	117	117	117	115	113	113
R-squared	0.059	0.266	0.298	0.346	0.400	0.449	0.454
Adj R-squared	0.051	0.240	0.270	0.300	0.340	0.380	0.380

Standard errors in parentheses \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 6. Dependent variable log salary (Specification 7 in Table 5)  
Chow Test Regression**

VARIABLES	(1) OLS7	(2) Chow
gender	-0.225** (0.094)	0.932 (2.271)
age_er	0.110** (0.044)	0.108* (0.060)
age_er2	-0.001** (0.000)	-0.001 (0.001)
educorr	0.058 (0.044)	0.158*** (0.057)
lhrsrealn	0.167 (0.135)	0.659*** (0.246)
founderr_dum	-0.204** (0.098)	-0.233* (0.124)
jobonlyn	0.221 (0.145)	0.021 (0.166)
indum2	-0.005 (0.183)	0.038 (0.216)
indum3	0.395*** (0.141)	0.442*** (0.168)
indum4	0.203 (0.134)	0.218 (0.165)
risk	0.070* (0.041)	0.051 (0.052)
innovative	0.133* (0.077)	-0.155 (0.115)
SEnhan_lo	0.053 (0.058)	0.057 (0.082)
gen_age_er		-0.015 (0.086)
gen_age_er2		0.000 (0.001)
gen_educorr		-0.116

gen_lhrsrealn		(0.092)
		-0.768**
gen_founderr_dum		(0.302)
		0.047
gen_jobonlyn		(0.201)
		0.456
gen_indum2		(0.305)
		-0.304
gen_indum3		(0.382)
		-0.090
gen_indum4		(0.286)
		0.084
gen_risk		(0.266)
		0.046
gen_innovative		(0.081)
		0.511***
gen_SEnhan_lo		(0.158)
		-0.060
Constant	5.646***	(0.117)
	(1.143)	5.006***
		(1.749)
Observations	113	113
R-squared	0.454	0.582
Adj R-squared	0.380	0.460

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Chow test:  $F(13, 87) = 2.56$ ; Prob > F = 0.005

**Table 7. Estimations by gender (Specification 7 in Table 5)**

VARIABLES	(1) men	(2) women
age_er	0.108* (0.058)	0.093 (0.066)
age_er2	-0.001 (0.001)	-0.001 (0.001)
educorr	0.158*** (0.055)	0.041 (0.076)
lhrealn	0.659*** (0.236)	-0.109 (0.187)
founderr_dum	-0.233* (0.118)	-0.186 (0.169)
jobonlyn	0.021 (0.159)	0.477* (0.272)
indum2	0.038 (0.207)	-0.266 (0.336)
indum3	0.442*** (0.161)	0.353 (0.246)
indum4	0.218 (0.158)	0.302 (0.222)
risk	0.051 (0.050)	0.097 (0.066)
innovative	-0.155 (0.110)	0.355*** (0.115)
SEnhan_lo	0.057 (0.078)	-0.003 (0.089)
Constant	5.006*** (1.677)	5.938*** (1.542)
Observations	67	46
R-squared	0.530	0.573
Adj R-squared	0.430	0.420

Standard errors in parentheses \*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 8. Dependent variable job satisfaction: probit marginal effects (Specification 7 in Table 5)**

VARIABLES	(1) jobsat probit1	(2) jobsat probit2
gender	0.137* (0.080)	0.168* (0.087)
age_er	0.071** (0.036)	0.107** (0.048)
age_er2	-0.001* (0.000)	-0.001** (0.001)
educorr	0.045 (0.041)	0.046 (0.045)
lhrealn	-0.125 (0.111)	-0.031 (0.140)
lsalarownGBP		0.018 (0.096)
founderr_dum	0.189** (0.094)	0.208** (0.099)
jobonlyn	0.215 (0.136)	0.201 (0.165)
indum2	-0.080 (0.190)	-0.158 (0.221)
indum3	-0.054 (0.134)	-0.119 (0.164)
indum4	-0.094 (0.134)	-0.129 (0.150)
risk	0.028 (0.038)	0.045 (0.041)
innovative	0.068 (0.070)	0.007 (0.080)
SEnhan_lo	0.003 (0.050)	-0.021 (0.056)
Observations	129	113

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 9. Dependent variable job satisfaction (Specification 7 in Table 5): SUREG**

VARIABLES	SUREG		Separate equations		
	lsalary (1)	jobsat (2)	lsalary (OLS7) (3)	jobsat1 (4)	jobsat2 (5)
gender	-0.225** (0.088)	0.148* (0.079)	-0.225** (0.094)	0.125 (0.082)	0.150* (0.087)
age_er	0.110*** (0.041)	0.108*** (0.037)	0.110** (0.044)	0.073** (0.033)	0.107** (0.041)
age_er2	-0.001** (0.000)	-0.001*** (0.000)	-0.001** (0.000)	-0.001* (0.000)	-0.001** (0.000)
educorr	0.058 (0.041)	0.038 (0.037)	0.058 (0.044)	0.041 (0.038)	0.037 (0.040)
lhrsrealn	0.167 (0.127)	-0.034 (0.114)	0.167 (0.135)	-0.107 (0.097)	-0.036 (0.123)
lsalarownGBP					0.012 (0.091)
founderr_dum	-0.204** (0.092)	0.168** (0.082)	-0.204** (0.098)	0.164* (0.086)	0.170* (0.090)
jobonlyn	0.221 (0.136)	0.177 (0.121)	0.221 (0.145)	0.177 (0.116)	0.174 (0.132)
indum2	-0.005 (0.171)	-0.115 (0.153)	-0.005 (0.183)	-0.081 (0.160)	-0.115 (0.165)
indum3	0.395*** (0.132)	-0.064 (0.118)	0.395*** (0.141)	-0.033 (0.121)	-0.069 (0.132)
indum4	0.203 (0.125)	-0.091 (0.112)	0.203 (0.134)	-0.080 (0.117)	-0.093 (0.122)
risk	0.070* (0.039)	0.040 (0.035)	0.070* (0.041)	0.021 (0.035)	0.039 (0.038)
innovative	0.133* (0.072)	0.008 (0.065)	0.133* (0.077)	0.056 (0.066)	0.006 (0.070)
SEnhan_lo	0.053 (0.054)	-0.009 (0.049)	0.053 (0.058)	0.013 (0.048)	-0.010 (0.052)
Constant	5.646*** (1.069)	-2.260** (0.958)	5.646*** (1.143)	-1.496* (0.830)	-2.327** (1.149)
Observations	113	113	113	129	113

R-squared	<b>0.454</b>	<b>0.216</b>	<b>0.454</b>	<b>0.166</b>	<b>0.216</b>
Adj R-squared			0.380	0.072	0.100

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Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## **Appendix 1 – Values**

Personal values are stable individual preferences, or life goals ((Bardi et al., 2009; Schwartz, 1992). Past research relates values to individual decisions, occupational choices and behaviours (e.g., Bardi and Schwartz, 2003; Schwartz, 2011). We measured personal values based on the leading theory of values by Schwartz that has been validated in research in 82 countries (Schwartz, 2012). The theory differentiates four general value types which can be ordered along two dimensions, the first contrasts self-interest and other-interest values represented through self-enhancement and self-transcendence values. The second dimension focuses on whether individuals are inclined to take risks, proactively seek out new things, stimulation and autonomy or whether they are more chiefly concerned with fitting into society and abiding by societal, community and family norms. This is captured by openness to change and conservation values respectively. Since values theory and supporting empirical evidence specifies that the four value types (self-enhancement, self-transcendence, openness to change and conservation) are closely correlated, Schwartz recommends only including a subset of values into any one regression. Thus we include the self-enhancement values in our set of explanatory variables, in order to capture different preferences for pay between male and female social entrepreneurs (i.e., the gender differences in the individualistic values).

Values were measured using the Schwartz Value Portrait Questionnaire (Schwartz et al., 2001; Schwartz, 2003) a well-validated and widely used instrument which asks respondents to react to statements such as “He/she thinks it is important that every person in the world be treated equally. He/she believes everyone should have equal opportunities in life.” (self-transcendence value), “It is important to him/her to be in charge and tell others what to do. He/She wants people to do what he/she says.” (self-enhancement value). In consideration of questionnaire length the 21 item version of the VPQ was used, which is also used in the European Social Survey (Schwartz, 2003). However, as some individual value scales are known to have low reliabilities for these scales additional items from the 40 item version of the VPQ were used (Schwartz et al., 2001). Thus, self-transcendence was captured with 8 items (Cronbach’s Alpha reliability was 0.792), self-enhancement with 7 items (Cronbach’s Alpha reliability was 0.853), openness to change with 5 items (reliability was 0.700) and conservation with 6 items (reliability was 0.707).

## **Appendix 2 – Tables (Robustness Checks)**

**Table A5a. Dependent variable log salary: Specifications 1-6. Robustness checks with imputed salary (*lsalarownGBPiI*).  
Missing observations imputed by the variable mean (19 observations imputed)**

VARIABLES	(1) OLS1	(2) OLS2	(3) OLS3	(4) OLS4	(5) OLS5	(6) OLS6	(7) OLS7
gender	<b>-0.265***</b> (0.098)	<b>-0.224**</b> (0.089)	<b>-0.220**</b> (0.088)	<b>-0.217**</b> (0.087)	<b>-0.220**</b> (0.086)	<b>-0.222**</b> (0.086)	<b>-0.206**</b> (0.086)
age_er		<b>0.137***</b> (0.033)	<b>0.116***</b> (0.035)	<b>0.098***</b> (0.034)	<b>0.091**</b> (0.035)	<b>0.093***</b> (0.035)	<b>0.098***</b> (0.035)
age_er2		-0.001*** (0.000)	-0.001*** (0.000)	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)	-0.001** (0.000)
educorr		0.090** (0.037)	0.083** (0.037)	0.088** (0.038)	0.080** (0.038)	0.049 (0.039)	0.041 (0.039)
lhrealn			0.184* (0.094)	0.101 (0.104)	0.129 (0.103)	0.134 (0.101)	0.122 (0.102)
founderr_dum				<b>-0.163*</b> (0.092)	<b>-0.170*</b> (0.090)	<b>-0.193**</b> (0.090)	<b>-0.206**</b> (0.090)
jobonlyn				0.177 (0.120)	0.138 (0.120)	0.128 (0.121)	0.144 (0.121)
indum2					-0.028 (0.165)	-0.008 (0.166)	0.021 (0.167)
indum3					<b>0.301**</b> (0.126)	<b>0.371***</b> (0.127)	<b>0.377***</b> (0.126)
indum4					0.186 (0.122)	0.230* (0.122)	0.219* (0.122)
risk						0.073** (0.036)	0.063* (0.037)
innovative						0.122* (0.069)	0.110 (0.069)
SEnhan_lo							0.068 (0.050)
Constant	10.593*** (0.059)	6.691*** (0.808)	6.472*** (0.807)	7.146*** (0.822)	7.102*** (0.837)	6.425*** (0.852)	6.189*** (0.867)
Observations	133	133	133	133	131	129	129
R-squared	0.053	0.245	0.268	0.313	0.367	0.411	0.420
Adj R-squared	0.046	0.220	0.240	0.270	0.310	0.350	0.350

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table A5b. Dependent variable log salary: Specifications 1-6. Robustness checks with imputed salary (*IsalarownGBPi3*)**  
**Missing observations imputed by the values from the first wave of SELUSI data and the variable mean (19 observations imputed)**

VARIABLES	(1) OLS1	(2) OLS2	(3) OLS3	(4) OLS4	(5) OLS5	(6) OLS6	(7) OLS7
gender	<b>-0.267**</b> (0.102)	<b>-0.221**</b> (0.095)	<b>-0.217**</b> (0.095)	<b>-0.218**</b> (0.095)	<b>-0.218**</b> (0.093)	<b>-0.221**</b> (0.092)	<b>-0.205**</b> (0.093)
age_er		<b>0.102***</b> (0.036)	<b>0.082**</b> (0.037)	<b>0.066*</b> (0.038)	<b>0.057</b> (0.038)	<b>0.058</b> (0.037)	<b>0.063*</b> (0.037)
age_er2		-0.001** (0.000)	-0.001* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
educorr		0.104** (0.040)	0.097** (0.040)	0.105** (0.042)	0.093** (0.041)	0.058 (0.042)	0.051 (0.042)
lhrealn			0.166 (0.101)	0.082 (0.114)	0.113 (0.111)	0.118 (0.109)	0.106 (0.110)
founderr_dum				-0.129 (0.100)	-0.136 (0.097)	-0.162* (0.097)	-0.175* (0.098)
jobonlyn				0.183 (0.131)	0.147 (0.129)	0.139 (0.131)	0.155 (0.131)
indum2					0.004 (0.178)	0.031 (0.179)	0.059 (0.180)
indum3					<b>0.395***</b> (0.135)	<b>0.474***</b> (0.136)	<b>0.479***</b> (0.136)
indum4					<b>0.248*</b> (0.132)	<b>0.296**</b> (0.132)	<b>0.285**</b> (0.132)
risk						0.082** (0.039)	0.072* (0.040)
innovative						0.138* (0.075)	0.127* (0.075)
SEnhan_lo							0.066 (0.054)
Constant	10.595*** (0.061)	7.468*** (0.868)	7.271*** (0.870)	7.877*** (0.895)	7.844*** (0.903)	7.088*** (0.918)	6.858*** (0.936)
Observations	133	133	133	133	131	129	129
R-squared	0.049	0.203	0.220	0.254	0.327	0.376	0.384
Adj R-squared	0.042	0.180	0.190	0.210	0.270	0.310	0.310

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table A5c. Dependent variable log revenues.**

VARIABLES	(1) OLS1	(2) OLS2	(3) OLS3	(4) OLS4	(5) OLS5	(6) OLS6	(7) OLS7
gender	<b>-0.875***</b> (0.316)	<b>-0.834***</b> (0.316)	<b>-0.789**</b> (0.302)	<b>-0.810***</b> (0.298)	<b>-0.870***</b> (0.307)	<b>-0.913***</b> (0.307)	<b>-0.877***</b> (0.310)
age_er		0.289** (0.116)	0.153 (0.117)	0.096 (0.115)	0.072 (0.121)	0.090 (0.121)	0.101 (0.122)
age_er2		-0.003** (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)
educorr		0.073 (0.131)	0.034 (0.125)	0.084 (0.128)	0.046 (0.133)	-0.045 (0.136)	-0.060 (0.137)
lhorealn			<b>1.135***</b> (0.314)	<b>0.730**</b> (0.352)	<b>0.840**</b> (0.356)	<b>0.829**</b> (0.355)	<b>0.797**</b> (0.358)
founderr_dum				-0.397 (0.308)	-0.416 (0.311)	-0.434 (0.314)	-0.463 (0.317)
jobonlyn				<b>0.885**</b> (0.406)	<b>0.727*</b> (0.417)	<b>0.748*</b> (0.425)	<b>0.790*</b> (0.428)
indum2					-0.191 (0.580)	-0.045 (0.590)	0.032 (0.598)
indum3					0.514 (0.432)	0.736* (0.440)	0.749* (0.441)
indum4					0.574 (0.420)	0.732* (0.422)	0.706* (0.424)
risk						0.233* (0.129)	0.214 (0.131)
innovative						0.283 (0.239)	0.257 (0.241)
SEnhan_lo							0.146 (0.177)
Constant	13.475*** (0.186)	6.099** (2.803)	4.772* (2.702)	7.064** (2.731)	7.145** (2.871)	5.209* (2.957)	4.669 (3.032)
Observations	130	130	130	130	128	126	126
R-squared	0.056	0.107	0.192	0.251	0.275	0.313	0.317
Adj R-squared	0.049	0.079	0.16	0.21	0.21	0.24	0.24

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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