Financial Development, Entrepreneurship, and Job Satisfaction*

Milo Bianchi†
Paris School of Economics

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Abstract

In this paper, I show both theoretically and empirically that greater financial development increases the job satisfaction of the self-employed, relative to employees. Financial development favors both job creation and matching between talents and occupations. Hence, in more financially-developed countries, individuals choose to become self-employed because of their talent, rather than for a lack of better opportunities. In addition, the effects of financial development are not only monetary. Increasing financial development makes the self-employed relatively more satisfied mainly because it allows them to enjoy greater independence in their job.

Keywords: Financial development; entrepreneurship; job satisfaction.

JEL codes: G20, J23, J28.

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†E-mail: bianchi@pse.ens.fr

1 Introduction

Several studies have documented that the self-employed tend to be more satisfied with their job, both in absolute terms and controlling for wages and hours worked (Blanchflower and Oswald, 1998; Hundley, 2001; Benz and Frey, 2004). Such systematic differences have been referred to as labor market rents.[1] A popular explanation for these rents relies on barriers to entry into self-employment: financial constraints prevent some people from becoming self-employed, so those who can afford it enjoy utility above market clearing (Blanchflower and Oswald, 1998). If this interpretation is correct, then rents should decrease with financial development.

This paper studies labor market rents in a large set of countries over two decades, and it correlates them with financial development. We report three main findings. First, rents are not a universal phenomenon. The self-employed report higher job satisfaction than employees only in *more* developed countries. Second, rents *increase* with financial development, and this effect is stronger in less developed countries. Third, greater financial development increases rents *not* by making entrepreneurs richer, but by allowing them to enjoy an higher freedom in their work.

These results are consistent with an occupational choice model in which self-employment may be either a profitable choice or the last resort to avoid unemployment. In such model, people face financial constraints to enter self-employment, but these constraints are more likely to bind for those who want to set up a firm and hire employees, rather than running a business alone. Being self-employed gives profits, which depends on market competition and possibly on one's talent, and non-monetary benefits of control. These benefits may be higher in big firms, where there are more employees and greater scope for entrepreneurial action.

In this setting, financial development favors both job creation and a better matching between talent and occupational choice. In fact, as a country develops, the poor and talented entrepreneurs expand their business, and so enjoy higher utility. The rich and untalented instead leave self-employment, as the demand for employees increases. As a result, more people are self-employed because they are highly motivated, rather than because they lack better opportunities. In this way, the model predicts that entrepreneurial rents are associated with *high* levels of financial development.

Moreover, these effects are not only monetary. Indeed, financial development increases competition, so it may reduce profits, particularly for small entrepreneurs. However, it also allows entrepreneurs to grow their firm, and so enjoy higher non-monetary benefits of control. This effect seems a major channel between financial development and labor market rents.

[1] Somewhat differently from other branches of economics, the term "rent" here is not necessarily associated with some market imperfections. Indeed, the present paper shows that it is quite the opposite.

1.1 Related literature

The literature provides several occupational choice models that analyze who becomes an entrepreneur (for a review, see Bianchi and Henrekson, 2005). In this paper, as in Lucas (1978), individuals differ in their talent as entrepreneurs and this affects the size of their firm and their profits. In such models, more developed countries have a lower share of entrepreneurs and firms of larger size, which is confirmed in our data and in a number of other studies (see Acs, Audretsch and Evans, 1994; Schneider and Enste, 2000; Gollin, 2007). We enrich Lucas' classic approach with three ingredients. First, potential entrepreneurs may be limited by credit constraints; second, entrepreneurs enjoy also non-monetary benefits; third, individuals may become entrepreneurs by choice or by necessity. All these aspects have been widely documented, and, to some extent, incorporated in formal models.

The role of personal wealth and credit constraints in determining the probability of becoming an entrepreneur is shown in many studies including Evans and Leighton (1989), Evans and Jovanovic (1989), Holtz-Eakin, Joulfaian and Rosen (1994), Blanchflower and Oswald (1998) and Hurst and Lusardi (2004). This relation is explored formally, for example, in Banerjee and Newman (1993), who analyze occupational choices with credit market imperfections and show how a country's development path may be highly dependent on the initial distribution of wealth.

The fact that the self-employed value also non-monetary dimensions of their job, and in particular the possibility of being independent, is documented e.g. in Taylor (1996), Hamilton (2000), and Benz and Frey (2004). This literature reports higher level of job satisfaction for the self-employed, but the analysis so far is limited mostly to OECD countries.

The idea that some people are forced into self-employment by lack of better opportunities stems from a classic proposition, expressed especially in studies on the informal sector in developing countries, stating that labor markets are imperfect and workers in the formal sectors are paid above equilibrium wages (see Harris and Todaro, 1970; and Loayza, 1994). In support of this view, for example, Evans and Leighton (1989) find that those who are unemployed, have low wages, or have changed job frequently are more likely to enter self-employment; while Borjas (1986) discusses the role of discrimination in pushing minorities into self-employment. To my knowledge, no study explores this view formally. In existing models, the self-employed have chosen to be so and they could have become employees, while employees for some reason could not become self-employed. However, if this were the case, the self-employed would always be better off than employees, which is not true in our data.

Finally, the present paper may be viewed also as a contribution to the literature on financial development. A growing body of works investigates the mechanisms linking finance to the real economy, with an increasing attention

to micro evidence (see Levine, 2005, for a recent survey). No study that I know considers how financial development affects individuals, and none uses subjective data in order to capture the effects on non-monetary dimensions of individual utility. Indeed, we will see that financial development acts also through non-monetary channels.

2 The Model

Consider an economy populated by a continuum n of risk-neutral individuals with identical preferences. Each individual is characterized by a type $\theta = (a, t)$, where a describes his initial wealth and t his managerial talent. Wealth is drawn from a cumulative distribution function F; talent from a cumulative distribution function G, with support on the interval $[\underline{t}, \bar{t}]$. These draws are assumed to be statistically independent. In addition, each individual is endowed with one unit of labor, which he can use as follows: he can either set up a firm, look for a job as employee of such firm, or run a one-man business.

2.1 Options

The way an individual employs his labor defines his occupation. As just mentioned, three options are available. First, an individual can set up a firm, and enjoy a profit that depends on his managerial talent and on the level of competition in the product market. In particular, we assume that each firm produces the same homogeneous good and it has the same size: it employs k units of capital and l workers.[2] A firm run by an individual with talent t produces tq_1 units of output.[3] The profit is then

$$\pi_1 = ptq_1 - wl - rk, \tag{1}$$

where p denotes the price of the good, w denotes workers' wage, and r is the market interest rate. In addition, managing a firm gives utility b_1, which is independent of the talent t. Hence, an individual who sets up a firm enjoys

$$U_1 = \pi_1 + b_1. \tag{2}$$

These individuals are called *big entrepreneurs*, and we denote their population share with x_1.

As a second option, an individual can look for a job in such firm. If he is hired, he enjoys

$$U_2 = w,$$

[2] As will become clear, the effects of financial development in our model would be amplified if the amount of capital invested and the number of employees were a function of one's talent.

[3] This formalization of managerial talent follows Lucas (1978), and several subsequent occupational choice models (e.g. Gollin, 2007).

where the wage w is independent of his managerial talent t. The population share of *workers* is denoted with x_2. If instead he is not hired, an individual can turn to the last option, which we now describe.

The last option is to run a one-man business, which requires no capital investment, no employees, and it generates q_3 units of the same good produced by big firms. This output is independent of managerial talent, so the profit of one-man businesses writes simply as

$$\pi_3 = pq_3.$$

In these businesses, labor is less productive than in big firms. More precisely, we assume that $(1 + l)$ one-man businesses produce less than one of the big firms considered above, even when such firm is managed by the least talented individual.[4] That is,

$$(1 + l)q_3 \leq \underline{t}q_1. \tag{3}$$

In addition, running a one-man business gives utility b_3, which is lower than the non-monetary benefit enjoyed in big firms, that is

$$b_3 < b_1. \tag{4}$$

In sum, individuals who run a one-man business enjoy

$$U_3 = \pi_3 + b_3, \tag{5}$$

they are called *small entrepreneurs*, and their population share is denoted with x_3.

2.2 Markets

There are three markets in our economy: a labor market, a product market, and a credit market. In the labor market, the wage w is fixed and exogenous, which implies that such market may not clear. In case of excess supply, each applicant has the same probability of getting a job.[5] The number of workers equals firms' demand, so we have

$$x_2 = lx_1. \tag{6}$$

The product market is described by a strictly decreasing inverse demand function

$$p = P(Q), \tag{7}$$

[4] This assumption seems natural if one considers that a firm employs one manager, l workers and k units of capital, while one-man businesses employ one worker and no capital. On the other hand, it rules out socially inefficient firm creation, which may be driven by the private benefit b_1. This is an interesting case to consider, but it deserves a separate paper.

[5] As we will see, there cannot be excess demand in our economy. More sophisticated reasons for non-market clearing wages are for example in Shapiro and Stiglitz (1984).

where Q denotes the total output produced in the economy. Entrepreneurs take the price p as given, and inelastically supply their output.

The financial market is competitive, the interest rate r is fixed and exogenous, and we normalize it to zero. Individuals can tap this market and ask for a loan $m = k - a$ in order to set up a firm. However, ex-post moral hazard limits the maximum size of such loan. Since, at cost c, the borrower can renege on his contract and run away with the money, the required repayment m cannot exceed c. Hence, only individuals with enough wealth can become entrepreneurs, and we define such lower bound on wealth as

$$a \geq a^* \equiv k - c. \tag{8}$$

The threshold a^* decreases with c, which measures how easy it is to enforce loan contracts and so it is an indicator of financial development.[6]

2.3 Equilibrium

In equilibrium, each individual, given his type θ, chooses an option in order to maximize his expected utility; everyone is given one occupation, so

$$x_1 + x_2 + x_3 = 1; \tag{9}$$

and the markets function according to equations (6), (7) and (8).

We first consider the case of an individual with wealth lower than a^*. Since he cannot afford to set up a firm, he can look for a job as worker or become a small entrepreneur. To simplify our analysis, we assume that, for any price level, the utility of small entrepreneurs does not exceed the one of workers. The highest utility of a small entrepreneur occurs when the output Q is at its minimum, and so the price p at its maximum. The output writes

$$Q = nx_1\hat{t}q_1 + nx_3q_3, \tag{10}$$

where $\hat{t}$ is the average talent of a big entrepreneur. Given condition (3), Q is minimized when everyone is a small entrepreneur, in which case the output is nq_3 and the price is $P(nq_3)$. Hence, the maximum that a small entrepreneur can get is

$$\overline{U_3} \equiv P(nq_3)q_3 + b_3,$$

and we assume that

$$\overline{U_3} \leq w. \tag{11}$$

This condition implies that individuals become small entrepreneurs as they cannot get a better job. Hence, the choice of an individual with wealth lower

[6] Our formalization of financial market imperfections is very similar to the one in Banerjee and Newman (1993). The fact that only sufficiently rich people get loans is a very common feature in financial markets and it can be also derived in a model of moral hazard à la Holmstrom and Tirole (1997) or costly screening.

than a^* is pretty trivial. He applies for a job as employee, and, if he is not assigned one, he becomes a small entrepreneur.

A more interesting case is when an individual has wealth greater than a^*. Depending on his talent, he can decide whether to set up a firm or go through the same procedure as those with wealth lower than a^*. Specifically, an individual with wealth $a \geq a^*$ and talent t sets up a firm if and only if

$$tq_1p - wl + b_1 \geq \frac{x_2}{1-x_1}w + \frac{x_3}{1-x_1}(q_3p + b_3), \tag{12}$$

where the right hand side is the sum of the utility as worker, weighted by the probability to be hired, and as small entrepreneur, weighted by the probability to be forced to run a one-man business. Equation (12) implicitly defines a lower bound on the talent of big entrepreneurs as

$$t \geq \frac{wl + x_3(q_3p + b_3) - (1-x_1)b_1}{(1-x_1)q_1p} \equiv t^*. \tag{13}$$

Hence, provided that an equilibrium exists, the share of big entrepreneurs x_1 is implicitly defined by

$$x_1 = \min\{\frac{1}{1+l}, [1 - F(a^*)][1 - G(t^*)]\}. \tag{14}$$

Given equations (6) and (9), equation (14) is sufficient to characterize also the equilibrium share of workers and of small entrepreneurs.

3 Analysis

We first show that an higher number of big entrepreneurs increases competition in the product market, and so it lowers the price of the good.[7]

Lemma 1 *The price p is decreasing in x_1.*

Proof. By equation (7), p decreases with the output Q. Recall from equations (6) and (9) that $x_3 = 1 - x_1 - lx_1$. Hence, differentiating equation (10), we write

$$\frac{\partial Q}{\partial x_1} = n\hat{t}q_1 - (1+l)nq_3.$$

By equation (3), the last equation is positive, so p decreases in x_1. ■

Given Lemma 1, we see that the minimal talent needed to run profitably a firm increases with the share of big entrepreneurs x_1. In fact, an higher

[7] While in the real world there are also positive externalities among firms, we show that, even abstracting from them, entrepreneurs may get higher payoffs when more firms are created.

x_1 increases the demand for workers, which lowers the incentive to set up a firm as a way to escape one-man businesses, and it increases competition, which also reduces the incentive to set up a firm. This is expressed in the next Lemma.

Lemma 2 *The minimal talent t^* is increasing in x_1.*

Proof. With simple algebra, one can write

$$\frac{\partial t^*}{\partial x_1} = \frac{l(w - pq_3 - b_3)}{q_1 p(1-x_1)^2} - \frac{1}{q_1 p^2 (1-x_1)} \frac{\partial P}{\partial x_1}[wl - (1-x_1)b_1 + x_3 b_3].$$

The first term is positive due to equation (11). The second term is also positive. In fact, given equation (13), we have $wl - (1-x_1)b_1 + x_3 b_3 = t^*(1-x_1)q_1 p - x_3 q_3 p$, which is positive since $1 - x_1 > x_3$ and, by equation (3), $t^* q_1 > q_3$. Hence, t^* increases in x_1. ■

Lemma 2 ensures that an equilibrium in our economy exists and it is unique. In fact, notice that the right hand side of equation (14) is always non-negative and weakly decreasing in x_1. Hence, this equation uniquely defines the share of big entrepreneurs x_1, and, with equations (6) and (9), this characterizes our equilibrium. We summarize with the following Proposition.

Proposition 1 *An equilibrium exists and it is unique. It is defined by equations (6), (9) and (14).*

The mechanics of our model depend on how x_1 varies with financial development. First, notice that, by relaxing wealth constraints, financial development allows more people to set up a firm. This increases competition, and it increases the minimal talent needed to run profitably a firm. Hence, financial development allows the poor with high talent to become entrepreneurs, and induces the rich with low talent to exit and work as employees. As shown in the next Lemma, the share of big entrepreneurs increases with financial development.

Lemma 3 *The share of big entrepreneurs x_1 is weakly increasing in c.*

Proof. If $[1 - F(a^*)][1 - G(t^*)](1 + l) < 1$, implicitly differentiating equation (14), we have

$$\frac{\partial x_1}{\partial c} = \frac{\frac{\partial F}{\partial a^*}[1 - G(t^*)]}{1 + [1 - F(a^*)]\frac{\partial G}{\partial t^*}\frac{\partial t^*}{\partial x_1}}.$$

The numerator measures the increment in people who can afford to become big entrepreneurs. The denominator tells how the mass of people who are

sufficiently talented and hence willing to be big entrepreneurs changes as entry increases. Given Lemma 2, $\partial t^*/\partial x_1$ is positive and hence $\partial x_1/\partial c$ is also positive. If instead $[1-F(a^*)][1-G(t^*)](1+l) \geq 1$, then $\partial x_1/\partial c = 0$. ■

Now, recall that, from equation (9), the share of small entrepreneurs decreases in x_1, and hence in financial development, since having more firms increases the demand for employees. Hence, we can define the maximal level of financial development $\bar{c}$ so that both big and small entrepreneurs are in the market. Such threshold is defined by

$$x_1(\bar{c}) = \frac{1}{1+l}.$$

We first describe the effects of financial development when $c < \bar{c}$ and so $x_3 > 0$.[8] We are interested in analyzing entrepreneurial "rents", i.e. systematic differences in utility of entrepreneurs vs. employees. The average utility of an entrepreneur is

$$\bar{U} = \frac{x_3(pq_3 + b_3) + x_1(p\hat{t}q_1 + b_1 - wl)}{x_1 + x_3}, \tag{15}$$

where $\hat{t}$ denotes the average talent of a big entrepreneur, as a function of the equilibrium share of big entrepreneurs. It is useful to decompose such utility as the sum of the average profit of entrepreneurs

$$\bar{\pi} = \frac{x_3 pq_3 + x_1(p\hat{t}q_1 - wl)}{x_1 + x_3},$$

and their average non-monetary benefit

$$\bar{b} = \frac{x_3 b_3 + x_1 b_1}{x_1 + x_3}.$$

Entrepreneurial rents are defined as

$$R = \bar{\pi} + \bar{b} - w. \tag{16}$$

Notice first that entrepreneurial rents need not be positive. By construction, employees enjoy higher utility than small entrepreneurs. Hence, whether or not the labor market displays rents depends on the composition of entrepreneurs, i.e. on the share x_1 vs. x_3.

We now look at the effects of financial development on such rents. For consistency with the empirical analysis in the next Section, we do not explicitly consider how the utility of a given entrepreneur changes as the country

[8] Obviously, we are only considering the case in which $c < k$, so indeed financial development has an effect.

develops. Changes in rents are rather analyzed by comparing the group of entrepreneurs in a financially developed country with the one in a less developed country. Differentiating equation (16) with respect to c, we can see that the ratio of $\partial R/\partial c$ over $\partial x_1/\partial c$ writes as

$$\frac{x_3 q_3}{x_1 + x_3}\frac{\partial P}{\partial x_1} + \frac{x_1 q_1}{x_1 + x_3}(\frac{\partial \hat{t}}{\partial x_1}p + \frac{\partial P}{\partial x_1}\hat{t}) + \frac{(\hat{t}q_1 - q_3)p - wl + (b_1 - b_3)}{(x_1 + x_3)^2}. \quad (17)$$

As shown in Lemma 3, financial development plays a fundamental role as it relaxes wealth constraints, thereby increasing the share of big entrepreneurs. Equation (17) describes the resulting effects. The first term describes the effect on those who remain small entrepreneurs: their profit is reduced as they suffer from more competition from big entrepreneurs. The second term describes the effects on big entrepreneurs. They also suffer from increased competition, but this may be compensated by an increase in their average talent (see Lemma 2). Hence, the total effect on their profits is unclear. The last term is particularly important in our analysis. It tells that financial development allows more jobs to be created and some people to access a more desirable occupation, in terms both of profits and of non-monetary benefits. That is, the composition of entrepreneurs changes with financial development, as some poor but talented entrepreneurs have the possibility to leave their one-man businesses and become big entrepreneurs.

It is also clear that these effects will not be at play when financial development is very high, so that the share of big entrepreneurs is large enough to have no small entrepreneurs in the market.[9] That is, if $c \geq \bar{c}$, then $x_3 = 0$, $x_1 = 1/(1 + l)$ and

$$\frac{\partial R}{\partial c} = q_1(\frac{\partial \hat{t}}{\partial x_1}p + \frac{\partial P}{\partial x_1}\hat{t})\frac{\partial x_1}{\partial c} = 0.$$

The following Proposition summarizes these predictions, which we test in the next Section.

Proposition 2 *a. Entrepreneurial rents R occur only in countries with high financial development.*

b. The average profit $\bar{\pi}$ decreases with financial development, especially when financial development is low.

c. The average non-monetary benefit $\bar{b}$ increases with financial development, especially when financial development is low.

4 Testing the model

We are interested in exploring the effects of financial development on the utility of entrepreneurs relative to workers. However, as shown in many

[9] If $\bar{c} > k$, then the share of small entrepreneurs is positive for any level of financial development.

studies, money is not the only argument to evaluate the returns from a job. We need a broader indicator of the utility U, and for this purpose, we use self-reported levels of job satisfaction. In our view, this measure includes both monetary and non-monetary dimensions.[10]

It is also important to notice from the outset that we are going to estimate the changes in job satisfaction within the group of entrepreneurs relative to the group of employees, but indeed the composition of these groups changes with financial development. In other words, we do not estimate the effects on the same individuals, but rather the effects on a representative individual within a group over time or across countries.

Moreover, in order to interpret our findings along the lines suggested by our model, we also look at the effects of financial development on the income of entrepreneurs relative to workers, and on the share of entrepreneurs in the labor force. We also test whether the effects of financial development depend on the country's stage of development, and whether they affect non-monetary components of job satisfaction.

4.1 Data

In most of our analysis, the dependent variable will be the individual level of job satisfaction. This variable is taken from the World Value Surveys and it is a 1 to 10 index based on the answer to the question: "Overall, how satisfied or dissatisfied are you with your job?" Our sample covers 46 countries over the period $1981-2001$. The surveys were conducted in three waves (in the early 80s, early 90s and late 90s) and not all countries were included in all waves.[11] We denote each country and year pair with k, indicating e.g. Austria 1990, Austria 1999, Belgium 1990, and so on. In total, our data set comprises 46607 individual observations for full time employees and 6888 for self-employed, divided into 91 country-year groups. For each individual, we have information on demographic characteristics, income, employment status, and several variables describing beliefs, personality and different dimensions of his or her job.

This data set presents three major advantages: first, it displays a significant cross-country and time-series variation, which allows to explore rents and financial development beyond the standard sample of OECD countries. Second, these data may capture the effects on small-scale business, which are usually considered quite sensitive to finance. In our dataset, among the self-employed, 11% have more than 10 employees, 26% have less than 10 employees, 18% are farmers, and the rest are running a one-man business. Third, subjective data may capture also non-monetary dimensions, which

[10] This assumption will be validated empirically: We will see that income is a major determinant, but not the only determinant, of job satisfaction.

[11] All the results of these surveys are available at the webpage http://www.worldvaluessurvey.org/.

have proven a fundamental determinant of occupational choices.

As indicator of financial development in a given country-year k, we use the level of domestic credit to the private sector, as percentage of GDP. The variable is taken from the World Development Indicators, available from the World Bank website. In our sample, it displays a considerable variation both within and across countries, ranging from 1.68 (Poland, 1989), to 195.98 (Japan, 1990). This is the most commonly used indicator in the literature on finance and growth, and it seems well suited for our purposes as well. It reflects the availability of bank credit, which is a fundamental ingredient to ease the creation of new enterprises.

The other macroeconomic variables too are taken from the World Development Indicators. These include per capita GDP, GDP growth, unemployment, and market capitalization of listed firms. Summary statistics of all our variables can be found in the Appendix.

5 Empirical evidence

5.1 Rents are not everywhere

As suggested by our model, the self-employed need not enjoy greater utility than employees: in imperfect labor markets, self-employment can be the last resort to avoid unemployment. To get a first picture of where the status of self-employed is a significant determinant of one's job satisfaction, we estimate the following equation separately for each country-year k:

$$U_i = \alpha + \beta X_i + \gamma E_i + \varepsilon_i. \tag{18}$$

The dependent variable U_i denotes the individual job satisfaction, X_i is a set of individual variables including gender, age, age-squared, education, marital status, and E_i is a dummy equal to one if i is self-employed. If in a given country in a given year the self-employed enjoy some rent, then the coefficient γ should be positive.

Table 1a reports the estimates of the coefficient γ for each county-year k. It is evident that labor market rents are not everywhere, but tend to be a feature of developed countries. In developing countries, the self-employed are not systematically more satisfied than employees.

Moreover, the results remain basically unchanged if income is included in the set of controls X_i. In fact, the set of countries-years displaying rents becomes slightly larger, which already suggests that income differentials are not the explanation behind differences in job satisfaction. If anything, controlling for income strengthen the existence of rents.

We can see these relationships more clearly by constructing the following variables. The variable RENTS is a dummy equal to one if γ is positive and significant at the 5% level. We also run a similar regression with income as

dependent variable in equation (18). Given this regression, we construct the dummy RICH_SE, which equals one if γ is positive and significant at the 5% level, and the dummy POOR_SE, which equals one if γ is negative and significant at the 5% level.

As shown in Table 1b, the variable RENTS is positively correlated with financial development, GDP per capita and POOR_SE; and negatively correlated with share of self-employment and RICH_SE. In accordance with our model, rents occur in countries with high GDP per capita, high financial development and low self-employment. Moreover, in these countries, the self-employed tend to have a lower income than employees.

5.2 Rents and Financial Development

The previous results suggest that labor market rents are *not* due to financial market imperfections. We now explore this argument in further detail. We first estimate the equation

$$U_{i,k} = \alpha + \beta X_{i,k} + \gamma I_k + \delta F_k * E_{i,k} + \varepsilon_{i,k}, \tag{19}$$

where $U_{i,k}$ denotes the reported job satisfaction for an individual i in a country-year k; $X_{i,k}$ is a set of individual variables including gender, age, age-squared, education, marital status and employment status; I_k is a country-year dummy, F_k is the level financial development and $E_{i,k}$ is an employment status dummy, equal to one if i is self-employed.

Equation (19) follows the spirit of Rajan and Zingales (1998), and it allows to estimate the effect of financial development on a particular set of individuals, the self-employed, after having controlled for the effect on the whole population and for country-year fixed effects. Our main interest is in the coefficient δ, which describes how financial development affects the job satisfaction of the self-employed *relative to* (full-time) employees.[12]

Table 2a reports our estimates on the full sample. The first column includes only the controls $X_{i,k}$. Self-employed, old, married and well-educated individuals tend to be more satisfied with their job. The second column includes the most basic specification, as in equation (19). The coefficient δ is positive and statistically significant. Financial development benefits the self-employed more than employees, hence financial development appears positively correlated with entrepreneurial rents.

When we add GDP per capita, interacted with the employment status dummy (column 3), the effect of financial development is slightly weaker, but still highly significant. Adding other macroeconomic variables like GDP growth and unemployment, always interacted with the employment dummy,

[12] To ease the interpretation of our coefficients, part-time employees are excluded from the analysis. This exclusion does not change our results.

does not change the estimate of δ (column 4). Hence, our preferred specification, which will serve as the baseline for the next analysis, is the one in column 3.

In columns 5 and 6, we see that rents tend to occur in places with a low share of self-employment, where, according to our model, entrepreneurship is mostly by choice rather than by necessity. Moreover, financial development seems to capture this mechanism, since the share of self-employment becomes insignificant once we control for financial development.

The second set of regressions estimates whether the effect of financial development depends on the country's stage of development. We divide the sample into countries-years with high and with low financial development, where such threshold is determined by the median value in our sample.[13] Similar exercises are done splitting the sample in relation to GDP per capita. The results are in columns 1-4 of Table 2b: the effects of financial development on rents are positive and significant only in less developed countries.

Our model suggests a possible explanation for this result. In less developed countries, many people become self-employed out of necessity. As these countries develop their financial systems, some of these people can afford to expand their business, and hence access better occupation, or they can leave self-employment, since additional salaried jobs are created. In more developed countries, instead, most people become self-employed by choice, so this effect on the composition of the self-employed is weaker. Indeed, we get similar findings if we split the sample according to the share of self-employed over employees, or to the level of unemployment. Financial development is positively associated with rents only in countries where the self-employed are many and unemployment is high.[14]

The same result appears if we use another widely used measure of financial development: the market capitalization of listed companies (as a percentage of GDP). The coefficient is positive and significant in less developed countries, and insignificant in more developed ones (columns 5 and 6).[15] This suggests that there is nothing peculiar in our measure of financial development. Still, we prefer to keep our original indicator because, apart from being the most commonly used, banks rather than markets should have a bigger impact on the availability of credit for small entrepreneurs.

To explore the nonlinearity in the effects of financial development, column 7 includes the level of financial development squared and cube. The first appears to be negative and the second positive, and both are signifi-

[13] Splitting the sample according to the mean gives the same qualitative results. We prefer to use the median to have approximately equal numbers of observations and so potentially enough variation in both samples.

[14] The median value for financial development is 71.78, for GDP per capita is 15252.62, for the share of self-employed is 0.1220557, and for unemployment is 8.2. Results for the share of self-employment and unemployment are not reported.

[15] The median value for market capitalization, used to split the sample, is 32.27.

cant. These estimates are used to draw Figure 1, which plots the relation between rents and financial development. It is evident that rents occur only in countries with high financial development. In less developed countries, rents increase with financial development. In highly developed countries, approximately those above the sample median, the effect of financial development is U-shaped, and it appears insignificant if one applies a linear model.

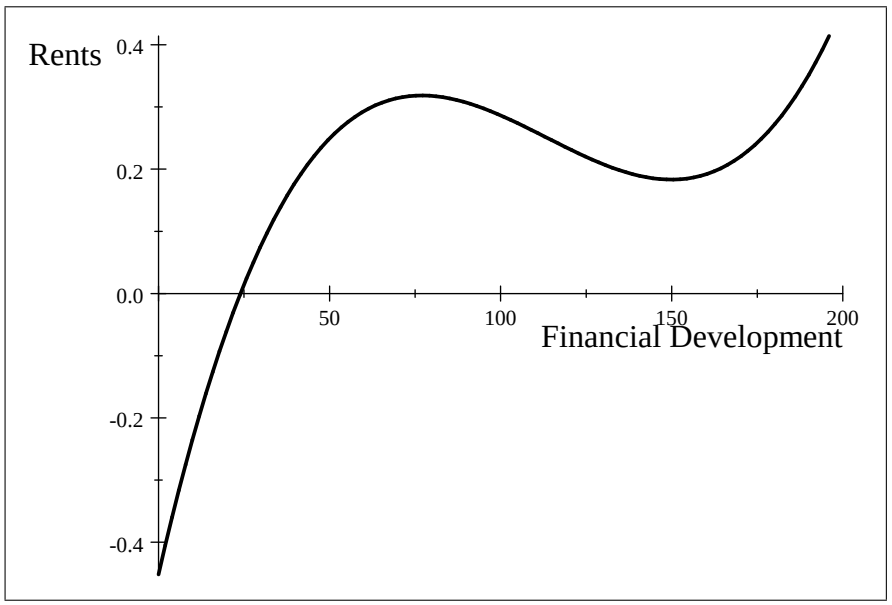

Figure 1: Rents and Financial Development (estimates obtained from Table 2b, Column 7).

5.3 Mechanisms

We now explore the mechanisms underlying the relation between financial development and rents. According to the model, financial development allows people to access better occupations, as it favors both job creation and a better matching between talents and occupational choices. Moreover, the model stresses that these mechanisms cannot be evaluated only in monetary terms.

We start by enriching the set of regressors in equation (19). First, we control for income, both in the full sample and separating countries-years according to their level of financial development. As shown in columns 2-4 of Table 3a, the results are basically unchanged. Income appears to be a major determinant of job satisfaction, but, as documented also in other works (e.g. Benz and Frey, 2004), higher income for entrepreneurs does not

explain labor market rents. In addition, we document that the effects of financial development on job satisfaction are not only monetary.

Table 3b reports the estimates with income as the dependent variable. The overall effect is negative but not significant, but if we split the sample, we see that financial development decreases the income of the self-employed, relative to employees, in less developed countries, while its effect is not significant in more developed ones. This is consistent with our model in that financial development creates competition and this hurts disproportionately more the small entrepreneurs, who are the majority in less developed countries. For big entrepreneurs, instead, this may be counterbalanced by the fact that their average talent increases so their profits need not decrease.

Second, we explore whether financial development acts via non-monetary aspects of job satisfaction. We include variables like the degree of pride in the work, the satisfaction with job security, the degree of independence enjoyed in the job. We also control for work-related beliefs: how much work is important in life, the aspects of work one values more, the main reason why one works. None of these variables significantly affects our results, with the exception of independence, that is an indicator derived from the question: "How free are you to make decisions in your job?" Controlling for independence, the effect of financial development is considerably weaker, both in magnitude and in significance (see Table 3a, column 7). The importance of this variable in explaining rents was already pointed out in Benz and Frey (2004), and indeed, also in our sample, being self-employed becomes negatively related to job satisfaction once one adds this control.

It is interesting to notice that part of the effects of financial development seems to work through this channel. This may be explained in terms of selection: financial development allows different people, and specifically those with higher value for independence, to become entrepreneur. Alternatively, it may be the case that financial development creates different working conditions, e.g. it gives entrepreneurs more freedom to experiment and innovate, and so higher utility from independence.

In order to explore further the issue of selection, we control for other aspects of personality, which are likely to be uncorrelated with financial development and so they would provide a strong case for selection arguments. These variables include the perceived freedom and control over the future, satisfaction with home life, personality traits like whether one welcomes major changes and innovations, enjoys taking responsibility, is confident of getting what he wants... However, while these aspects are generally an important determinant of job satisfaction, none of them appears to have a significant role in driving the effects of financial development on rents. Hence, selection along these dimensions does not seem to be a major player in our estimates.[16]

[16]However, these questions were not asked in all countries in all waves, so we have

Last, we add occupation dummies, which classify workers according to whether they are employer/manager of a large or small firm, office workers or manual workers of different levels, agricultural workers, and so on. In all these occupations, workers can be either self-employed or employees.[17] These dummies may capture the effect of financial development in allocating the self-employed into more desirable occupations, e.g. in increasing the fraction of big entrepreneurs among the self-employed. If this were the only effect, then we would expect financial development to become insignificant once occupation dummies are included. If instead financial development affected job satisfaction also for a given occupation, or if this classification of occupations were too coarse, then we would expect financial development to maintain some explanatory power. The data seem to validate the latter hypothesis: occupation dummies alone do not change our estimates (see column 5). However, if we control also for independence, the effect of financial development becomes considerably smaller and statistically insignificant (column 6).

In sum, we interpret these results as suggesting that financial development increases labor market rents in developing countries as it allows the self-employed to access better occupations, especially in non-monetary terms. In addition, it allows them to enjoy higher utility within occupations, in particular because of increased freedom in taking decisions in their job.

6 Conclusion

In this paper, we have studied labor market rents in a large set of countries over two decades, and we have correlated them with financial development. We have shown that the self-employed report higher job satisfaction than employees only in more developed countries; that labor market rents increase with financial development, especially in less developed countries; and that financial development affects job satisfaction mostly along non-monetary dimensions, in particular independence. These findings have been interpreted with a simple occupational choice model in which financial development favors both job creation and a better matching between talents and occupations. Hence, in more developed countries, entrepreneurs display higher

some sample selection biases, and this makes it hard to assess whether such variables have indeed any affect. These results are not reported.

[17] More precisely, occupations are divided as follows: employer/manager of an establishment with 500 or more employed; employer/manager of an establishment with 100 to 500 employed; employer/manager of an establishment with 10 to 100 employed, employer/manager of an establishment with less than 10 employed; professional worker; middle level non-manual office worker; supervisory non manual -office worker; junior level non manual; non manual -office worker; foreman and supervisor; skilled manual; semi-skilled manual worker; unskilled manual; farmer: has own farm; agricultural worker; member of armed forces; never had a job.

job satisfaction as they have chosen their occupation because of their talent, rather than for lack of better opportunities.

Financial development and job satisfaction are very broad concepts, and it is obviously difficult to pin down their mechanisms in a neat and indisputable way. While the results in this paper are preliminary in many respects, it appears that greater financial development has considerable effects on occupational choices, and that these effects are not only monetary. In our view, this is an interesting and highly unexplored avenue for future research.

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7 Appendix

7.1 Variables

Summary Statistics

Variable	Observations	Mean	Std. Deviation	Min	Max
Job Satisfaction	53495	7.368427	2.137275	1	10
Financial Development	53495	66.01027	38.44095	1.68	195.98
GDP per capita	52941	13788.58	9755.539	317.15	43267.25
Unemployment	38045	8.447804	4.292947	0.6	16.4
Market Capitalization	38370	48.96034	51.08159	1.51	243.55
GDP growth	51967	1.666195	4.538714	-11.89	12.67
Share of Self-Employed	53495	0.1629402	0.1441684	0	0.80102
Self-Employed	53495	0.1287597	0.3349369	0	1
Gender (Male=1)	53443	1.386879	0.4870402	1	2
Age	53385	38.43434	12.09285	16	100
Married	53299	0.6778739	0.4672954	0	1
Education	49422	6.695905	2.733959	1	10
Income	46107	5.601297	2.424443	1	11

7.2 Results

The following tables report our main results. To ease the interpretation, Tables 2 and 3 report the estimates from OLS regressions. Results using ordered probit are qualitatively the same (see Ferrer-i Carbonell and Frijters, 2004, for a methodological discussion).

Table 1a: Rents are not everywhere

Dependent variable: Job Satisfaction							
Country	Year	Self-Empl.	Std Error	Obs	Self-Empl.	Std Error	Obs
Argentina	1991	0.218498	0.1181881	356	0.2699054	0.139542	276
Austria	1990	0.0209013	0.1120682	689	0.0485767	0.1164346	663
Austria	1999	0.1391111	0.1168346	762	0.1815151	0.1438807	623
Belarus	2000	-0.2323577	0.2036998	636	**-0.4506517**	**0.2084008**	**630**
Belgium	1981	0.1887899	0.1593701	503	0.1042161	0.1849902	429
Belgium	1990	0.1450615	0.0795144	1282	0.0987844	0.1074882	825
Belgium	1999	0.1832029	0.1291225	836	**0.317821**	**0.1458575**	**711**
Brazil	1991	0.0726732	0.0965632	797	0.0924957	0.0999072	764
Bulgaria	1990	0.0800142	0.185855	414	-0.0186508	0.2561555	650
Bulgaria	1999	0.0775414	0.2435584	693	-0.0240338	0.1994808	397
Canada	1982	**0.5367734**	**0.2491967**	**657**	**0.6687528**	**0.2771464**	**573**
Canada	1990	**0.3633602**	**0.1291664**	**1004**	**0.4820272**	**0.1430273**	**876**
Chile	1990	-0.0251365	0.1090495	520	0.0115252	0.1096087	518
China	1990	-0.0007054	0.0967042	567	-0.0244881	0.0984042	560
Croatia	1999	-0.2486404	0.1799297	474	-0.3622906	0.1928684	459
Czech Republic	1990	0.1923959	0.269138	610	0.1579135	0.2703282	607
Czech Republic	1991	**0.2870060**	**0.1416923**	**1371**	**0.2960847**	**0.1475212**	**1322**
Czech Republic	1999	**0.4087304**	**0.1141571**	**981**	**0.3788697**	**0.1208506**	**891**
Denmark	1981	**0.3384088**	**0.1682615**	**674**	0.2992409	0.1794807	622
Denmark	1990	**0.2796825**	**0.1396793**	**639**	**0.5643670**	**0.1803649**	**571**
Denmark	1999	**0.9144910**	**0.2072332**	**627**	**0.7675682**	**0.2184019**	**578**
Estonia	1990	0.0730747	0.2963629	768	0.0614218	0.2967007	767
Estonia	1999	0.2926264	0.1674545	575	0.3125535	0.2182028	494
Finland	1990	0.1974547	0.1509961	424	-0.0218696	0.0305315	424
Finland	2000	0.1629761	0.1481705	490	0.2222935	0.1526546	449
France	1981	**0.4995818**	**0.1486594**	**588**	**0.7115967**	**0.1979121**	**465**
France	1990	0.2282116	0.2372401	453	0.176351	0.3375077	389
France	1999	0.2240496	0.2272016	736	0.1655217	0.2780597	610
Germany	1990	**0.4758192**	**0.1186316**	**2124**	**0.4789135**	**0.1252535**	**2045**
Germany	1999	0.0552915	0.1171329	862	0.1061966	0.1729893	607
Greece	1999	0.135569	0.1217611	644	0.0464116	0.1338035	563
Hungary	1991	0.062686	0.2834765	552	0.0590176	0.2833752	544
Hungary	1999	0.0118501	0.2869907	420	-0.1178635	0.3009352	409
Iceland	1984	0.1677834	0.1071644	679	0.174816	0.1118156	642
Iceland	1990	0.2014569	0.1065232	559	**0.0463004**	**0.0221510**	**434**
Iceland	1999	**0.2725058**	**0.1004065**	**732**	**0.2937111**	**0.1046515**	**695**
India	1990	0.0644648	0.0955979	580	0.0043798	0.0972911	573
Ireland	1981	0.1978731	0.1393969	598	0.0269862	0.2692462	222
Ireland	1990	0.0779317	0.135106	549	0.1616179	0.1481016	486
Ireland	1999	0.0860587	0.1271181	519	0.124438	0.1384172	461
Italy	1981	**0.5217998**	**0.0921763**	**699**	**0.464150**	**0.1081868**	**541**
Italy	1990	**0.2923001**	**0.0921062**	**1030**	**0.2676279**	**0.1142673**	**782**
Italy	1999	0.0922859	0.0815739	1031	0.101719	0.0929629	795

Results from ordered probit regression. Controls are gender, age, age squared, education, marital status. Columns 6-8 also include income. Coefficients significant at the 5% level are in bold.

Table 1a (continued): Rents are not everywhere

Dependent variable: Job Satisfaction							
Country	Year	Self-Empl.	Std Error	Obs	Self-Empl.	Std Error	Obs
Japan	1990	**0.3220911**	**0.1274906**	**469**	0.236718	0.1333606	429
Latvia	1999	-0.3273278	0.2978669	455	-0.4622407	0.3155974	430
Lithuania	1999	-0.5827697	0.2436269	513	**-0.6629838**	**0.2908186**	**447**
Luxembourg	1999	0.3633811	0.2197068	589	0.4690223	0.2849504	342
Malta	1983	0.5196789	0.3011161	205	**1.0229910**	**0.4706113**	**147**
Malta	1999	-0.0290905	0.1822961	464	-0.1450087	0.2061636	352
Mexico	1990	-0.1702467	0.105702	563	-0.1720934	0.10733	541
Netherlands	1981	0.2670397	0.2105276	480	0.0885858	0.2606471	350
Netherlands	1990	0.4447107	0.3047075	432	0.3888468	0.333793	358
Netherlands	1999	**0.4887995**	**0.1304009**	**631**	**0.4953881**	**0.1384707**	**597**
Nigeria	1990	0.0633401	0.1485335	226	-0.0287253	0.1563111	203
North Ireland	1981	0.670004	0.3710942	165	-0.2996089	0.1633143	36
North Ireland	1990	**1.2420090**	**0.4946521**	**156**	0.9445484	0.6738315	122
North Ireland	1999	0.1296344	0.1412417	464	0.1423546	0.1725758	340
Norway	1982	**0.2632919**	**0.1187842**	**713**	**0.2995462**	**0.1267983**	**684**
Norway	1990	**0.2153681**	**0.1083191**	**845**	**0.3135317**	**0.1177507**	**741**
Poland	1989	-0.1731505	0.1215037	477	-0.2318058	0.1226506	474
Poland	1990	-0.0753738	0.1160193	567	-0.1443434	0.1195364	548
Poland	1999	**-0.4631074**	**0.1434599**	**506**	**-0.4752768**	**0.1440401**	**495**
Portugal	1990	0.2235283	0.1285427	611	0.1880178	0.1320787	585
Portugal	1999	0.2374519	0.1411886	442	NA	NA	NA
Romania	1999	0.2960203	0.2269626	416	0.2847744	0.2375436	388
Russia	1999	0.1129042	0.1638472	1310	0.0913674	0.1756154	1235
Slovakia	1999	0.2435412	0.1654046	754	-0.0208156	0.1818599	707
Slovenia	1992	0.2700367	0.2015518	567	0.1919063	0.2044795	561
Slovenia	1999	-0.0854957	0.2082448	527	0.0801262	0.3321093	366
South Africa	1990	0.1922348	0.099104	1056	**0.2063035**	**0.1038238**	**927**
Spain	1981	**0.2773977**	**0.0736411**	**984**	**0.2709970**	**0.0774734**	**897**
Spain	1990	**0.2931021**	**0.0671669**	**1624**	**0.2759815**	**0.0742207**	**1375**
Spain	1999	**0.2987274**	**0.1308793**	**478**	0.0924025	0.1751715	319
Sweden	1982	**0.3267322**	**0.1495769**	**651**	**0.3381471**	**0.1598292**	**619**
Sweden	1990	**0.4079321**	**0.1333923**	**770**	NA	NA	NA
Sweden	1999	**0.7091366**	**0.2334724**	**634**	**0.6261598**	**0.2399972**	**621**
Turkey	2001	-0.0775182	0.1184038	369	-0.0575062	0.118804	369
UK	1981	**0.7374404**	**0.2242033**	**678**	**0.5898634**	**0.261545**	**509**
UK	1990	**0.5916594**	**0.1292271**	**838**	**0.5926061**	**0.1527917**	**657**
UK	1999	0.3124838	0.209776	434	0.145983	0.2437486	318
Ukraine	1999	-0.0973014	0.3300307	585	-0.1290457	0.3319256	571
US	1982	0.5060187	0.2303115	1317	**0.5766977**	**0.2376557**	**1262**
US	1990	0.3586575	0.1613992	1082	0.3210855	0.1680259	1016

Results from ordered probit regression. Controls are gender, age, age squared, education, marital status. Columns 6-8 also include income. Coefficients significant at the 5% level are in bold.

Table 1b: Partial Correlations

	RENTS	RICH SE	POOR SE	Financ Develop	GDP PC
RENTS	1				
RICH SE	-0.0275*	1			
POOR SE	0.0867*	-0.1671*	1		
Financ Develop	0.3296*	-0.1122*	0.0608*	1	
GDP PC	0.2983*	-0.1913*	0.0255*	0.6476*	1
Share of Self-Empl	-0.0323*	-0.1196*	-0.0057	-0.1708*	-0.1917*

Partial correlation coefficients. The star indicates significance at the 1% level.

Table 2a: Financial Development and Rents

Dependent Variable: Job Satisfaction (Full Sample)						
Fin Dev*SE		**0.0042804**	**0.0026134**	**0.0027910**		**0.0040764**
		(0.0008271)	**(0.000977)**	**(0.0011157)**		**(0.0008514)**
GDP pc*SE			**0.0000095**	**0.0000112**		
			(0.00000375)	**(0.00000497)**		
Unemploym*SE				0.0126092		
				(0.0088019)		
GDP growth*SE				-0.0088260		
				(0.0120389)		
Share SE*SE					**-0.4288944**	-0.1899596
					(0.2191341)	(0.2254966)
Self-Employed	**0.2988502**	0.0202529	0.0056881	-0.1174733	**0.3970303**	0.0770164
	(0.0292735)	(0.0645355)	(0.0706861)	(0.1486892)	**(0.054636)**	(0.0892026)
Gender (Male=1)	0.0052085	0.0047338	0.0080404	-0.0022978	0.0060638	0.0051352
	(0.0194553)	(0.0194503)	(0.0195238)	(0.0224946)	(0.0194652)	(0.0194602)
Age	0.0023248	0.0024882	0.0024136	-0.0007280	0.0023882	0.0025085
	(0.004653)	(0.0046506)	(0.0046622)	(0.0053367)	(0.0046523)	(0.0046504)
Age squared	**0.0001530**	**0.0001495**	**0.0001495**	**0.0001800**	**0.0001518**	**0.0001492**
	(0.0000544)	**(0.0000543)**	**(0.0000545)**	**(0.0000619)**	**(0.0000544)**	**(0.0000543)**
Married	**0.1896052**	**0.1892803**	**0.1905596**	**0.1812794**	**0.1899908**	**0.1894665**
	(0.022709)	**(0.0227069)**	**(0.0227678)**	**(0.0257143)**	**(0.0227102)**	**(0.0227082)**
Education	**0.0355397**	**0.0351340**	**0.0352367**	**0.0358855**	**0.0351764**	**0.0349924**
	(0.0039674)	**(0.0039667)**	**(0.0039746)**	**(0.0045765)**	**(0.0039668)**	**(0.003966)**
Observations	49101	49101	48648	35886	49101	49101
R-squared	0.0802	0.0808	0.0816	0.0881	0.0803	0.0808

All regressions include country-year dummies. Robust standard errors in parenthesis.

Coefficients significant at the 5% level in bold. SE means Self-Employed.

Table 2b: Financial Development and Rents

Dependent Variable: Job Satisfaction (Sample splits)							
	Low Findev	High Findev	Low GDP	High GDP	Low Findev	High Findev	Full Sample
Fin Dev*SE	**0.0097686**	0.0009133	**0.0035302**	0.0015997			**0.0241540**
	(0.0029152)	(0.0017962)	**(0.0017837)**	(0.0011241)			**(0.0069934)**
(Fin Dev*SE)^2							**-0.0002375**
							(0.0000815)
(Fin Dev*SE)^3							**0.0000007**
							(0.000000277)
Mkt Capitaliz*SE					**0.0171855**	0.0010193	
					(0.0080735)	(0.0008038)	
GDP pc*SE	**0.0000138**	0.0000017	**0.0000496**	-0.0000038	0.0000120	**0.0000170**	**0.0000075**
	(0.00000555)	(0.00000525)	**(0.0000115)**	(0.00000822)	(0.00000651)	**(0.00000565)**	**(0.00000382)**
Self-Employed	**-0.2984839**	0.2833401	**-0.2497469**	**0.3497168**	-0.1703375	-0.0944642	**-0.4518678**
	(0.1163849)	(0.1646331)	**(0.1043552)**	**(0.1772009)**	(0.1269183)	(0.1331187)	**(0.1640174)**
Gender (Male=1)	0.0245148	-0.0097240	0.0087935	0.0052967	0.0280590	0.0068214	0.0073872
	(0.0284872)	(0.0267184)	(0.0306634)	(0.024554)	(0.0335877)	(0.0314204)	(0.0195232)
Age	0.0033907	0.0014277	-0.0063681	0.0093533	-0.0081005	-0.0140730	0.0022860
	(0.0070569)	(0.006147)	(0.0078771)	(0.0056197)	(0.0090645)	(0.007409)	(0.0046637)
Age squared	0.0001285	**0.0001695**	**0.0002515**	**0.0000663**	**0.0002399**	**0.0003120**	**0.0001507**
	(0.0000831)	**(0.0000711)**	**(0.0000935)**	**(0.0000649)**	**(0.0001088)**	**(0.0000846)**	**(0.0000545)**
Married	**0.1978516**	**0.1826483**	**0.2132834**	0.1712164	**0.1834348**	**0.2167752**	**0.1904068**
	(0.0334192)	**(0.0309099)**	**(0.0367424)**	(0.0280986)	**(0.0399475)**	**(0.0351052)**	**(0.0227663)**
Education	**0.0444113**	**0.0267768**	**0.0595156**	**0.0124408**	**0.0416813**	**0.0390812**	**0.0352758**
	(0.0059072)	**(0.0053484)**	**(0.0062113)**	**(0.0049987)**	**(0.0069007)**	**(0.0066912)**	**(0.0039741)**
Observations	24399	24249	23704	24944	17188	17397	48648
R-squared	0.0915	0.0692	0.0646	0.0642	0.0714	0.0785	0.0819

All regressions include country-year dummies. Robust standard errors in parenthesis. Coefficients significant at the 5% level in bold.

Table 3a: Mechanisms

	Dependent Variable: Job Satisfaction						
	Full Sample	Full Sample	Low Findev	High Findev	Low Findev	Low Findev	Low Findev
Fin Dev*SE		**0.0029554**	**0.0105339**	-0.0009701	**0.0058457**	**0.0107435**	0.0047721
		(0.0011276)	**(0.0031716)**	(0.0020137)	**(0.0027549)**	**(0.0000058)**	(0.0036372)
GDP pc*SE		**0.0000133**	**0.0000179**	0.0000062	**0.0000174**	0.0000094	**0.0000238**
		(0.00000407)	**(0.00000593)**	(0.00000574)	**(0.0000053)**	(0.0000058)	**(0.0000060)**
Income	**0.1058458**	**0.1054052**	**0.1172527**	**0.0941281**			**0.0599896**
	(0.0050712)	**(0.0050838)**	**(0.0073951)**	**(0.006969)**			**(0.0075878)**
Freedom in job					**0.3256878**		**0.3062039**
					(0.0059266)		**(0.0068150)**
Self-Employed	**0.2710708**	-0.0794165	**-0.4117407**	**0.4063587**	**-0.8496402**	**-0.4160432**	**-0.7630571**
	(0.032662)	(0.0762226)	**(0.1228474)**	**(0.1774827)**	**(0.1109457)**	**(0.1338845)**	**(0.1353570)**
Gender (Male=1)	0.0029319	0.0061913	0.0283109	-0.0159328	**0.1488681**	0.0394654	**0.1546513**
	(0.0211411)	(0.0212347)	(0.0306485)	(0.0293346)	**(0.026247)**	(0.0313340)	**(0.0315293)**
Age	0.0004746	0.0004846	0.0001389	0.0009105	**-0.0196259**	-0.0084715	**-0.0214524**
	(0.0051649)	(0.0051752)	(0.0077473)	(0.006884)	**(0.0065276)**	(0.0073464)	**(0.0076354)**
Age squared	**0.0001803**	**0.0001772**	0.0001705	**0.0001832**	**0.1438672**	**0.0002299**	**0.0003384**
	(0.0000607)	**(0.0000608)**	(0.0000917)	**(0.0000801)**	**(0.0306824)**	**(0.0000864)**	**(0.0000903)**
Married	**0.1080028**	**0.1092122**	**0.1202280**	**0.1000381**	**0.0003154**	**0.1951896**	**0.1085367**
	(0.0249903)	**(0.0250734)**	**(0.036056)**	**(0.0347145)**	**(0.0000768)**	**(0.0349382)**	**(0.0352147)**
Education	**0.0147632**	**0.0144140**	**0.0243810**	0.0047208	-0.0103643	-0.0125758	**-0.0412371**
	(0.0044786)	**(0.0044894)**	**(0.0065642)**	(0.0061232)	(0.0056281)	(0.0072400)	**(0.0074339)**
Occupation	No	No	No	No	No	Yes	Yes
Observations	42259	41809	21413	20396	24132	22147	19285
R-squared	0.0912	0.0928	0.1026	0.0802	0.2307	0.1112	0.2331

All regressions include country-year dummies. Robust standard errors in parenthesis. Coefficients significant at the 5% level are in bold.

Table 3b: The effects on income

Dependent Variable: Income			
	Full Sample	Low Findev	High Findev
Fin Dev*SE	-0.0018289	**-0.0091418**	0.0034655
	(0.0012567)	**(0.0035957)**	(0.0026605)
GDP pc*SE	**-0.0000104**	-0.0000084	-0.0000095
	(0.00000469)	(0.00000731)	(0.00000664)
Self-Employed	**0.2967345**	**0.5926134**	-0.2655474
	(0.0744278)	**(0.1163334)**	(0.2144357)
Gender (Male=1)	**-0.0525414**	**-0.0988691**	0.0003247
	(0.0206253)	**(0.0287626)**	(0.0295163)
Age	**0.0119500**	-0.0024892	**0.0272718**
	(0.0054366)	(0.0074906)	**(0.0079008)**
Age squared	**-0.0001460**	-0.0000176	**-0.0002823**
	(0.0000646)	(0.0000895)	**(0.0000934)**
Married	**0.8743811**	**0.7233974**	**1.0336720**
	(0.0242663)	**(0.0340043)**	**(0.0345314)**
Education	**0.2336714**	**0.2248508**	**0.2433377**
	(0.0042017)	**(0.0059822)**	**(0.0058901)**
Observations	41809	21413	20396
R-squared	0.3253	0.3456	0.294

All regressions include country-year dummies. Robust standard errors in parenthesis. Coefficients significant at the 5% level are in bold.