



Fairness, expectations and life satisfaction: evidence from Europe

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Abstract

This study aims to investigate whether individual beliefs about the fairness of society can account for differences in life satisfaction. Fairness here encompasses both procedural and distributive justice. The paper uses fifth-round individual-level data from the European Social Survey (ESS). The round in question contains information that can be used as a proxy for procedural justice, in the form of individual assessment of how the courts operate in their country. It also contains variables that will serve as a proxy for distributive justice. To that end we use survey information on individual assessment of whether pay is appropriate as well as a variable measuring the gap between received and expected pay. The latter is constructed using pay information and individuals' personal demographic and productive features, as well as information on the characteristics of their workplace. The hypothesis that life satisfaction is impacted by perceived unfairness cannot be rejected. Furthermore, we find that dissatisfaction with pay increases when individuals have a negative view of procedural justice.

Keywords Life satisfaction · Fairness · Expectations

JEL Classification I31 · J17 · J28 · J31 · M52

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1 Introduction

A recent article in the Financial Times (FT) entitled ‘Why fair pay matters more than high pay’ (Isabel Berwick, April 5, 2023) reports findings by Josh Bersin, head of a US human capital consultancy, showing that if individuals feel they are fairly treated, then they trust the organization they work for, its management and their peers. Trust is ‘..the number one driver of satisfaction’. ‘If pay is unfair, then usually growth, development and other benefits are unfair.’

The above suggests that if people feel they are being treated fairly in their job, their satisfaction is higher. Does this extend beyond work? And if individuals believe they are likely to be treated unfairly both in and outside work, does this reinforce any assessment of inappropriate treatment at work? These issues are the focus of this study. In a nutshell, the paper looks at whether individuals are more satisfied with their lives when they have little reason to question that they will be treated fairly.

People’s expectations of how they will be treated depend, *inter alia*, on past experiences and a general perception of whether others are being fairly treated — in other words, whether justice prevails (see, *inter alia*, Genicot and Ray 2017; Jasso et al. 2016). Justice in all its forms (procedural, distributive, retributive, restorative, commutative, social) is one of the main institutions in a society; in social sciences literature, its association with life satisfaction has been implicitly investigated by studying the importance of institutional quality for life satisfaction (see, *inter alia*, Frey and Stutzer 2000; Helliwell and Huang 2008; Helliwell et al. 2020; OECD 2017a; Spruk and Kešeljević 2016).

Di Martino and Prilleltensky (2020) look into the connection between social justice as a normative concept and life satisfaction by testing for the association between the Bertelsmann Stiftung’s country-level Social Justice Index (SJI) and life satisfaction. The SJI documents the extent to which each country enforces policies designed to prevent poverty, provide equal access to education, the labour market and health, guarantee social cohesion, prevent discrimination and safeguard inter-generational justice.¹ Their results suggest that this objective measure of social justice is closely related to life satisfaction.

On the other hand, studies using micro-level survey data (e.g., from the Eurobarometer, the European Social Survey, the German Socio-Economic Panel or the World Values Survey, etc.) or experimental data investigate the strength of the association between a subjective measure of distributive justice and life satisfaction. The extent of distributive justice is typically captured by comparing income and working conditions to some benchmark (e.g., Hamermesh 2001) or by using the subjective assessment of employed individuals on the fairness of their remuneration (e.g., Adriaans 2023; Alexander and Ruderman 1987) or by using individuals’ beliefs about how fair the world is (e.g., Harding et al. 2020). The results typically show a positive association between distributive justice and life satisfaction. Experimental evidence also suggests that individuals have lower life satisfaction when they believe

¹ See Hellmann et al. 2019 for a more detailed description of the index.

they have been unfairly treated (see, *inter alia*, Johnson et al. 2016; Schaubroeck et al. 1994).

The present paper uses micro-level survey data to investigate the following four issues: first, whether individual assessment of the quality of procedural justice impacts life satisfaction; second, whether pay lower than individual expectations is associated with lower life satisfaction; third, whether the assessment of procedural justice is associated with evaluation of pay appropriateness; and, fourth, whether negative association of unmatched pay expectations is reinforced when procedural justice is perceived to be weak.

What follows is organised as follows: Sect. 2 outlines the hypotheses to be investigated. Section 3 presents the data and discusses how it corresponds to the concepts used in formulating the hypotheses. Section 4 presents and discusses the results of the empirical analysis, and Sect. 5 summarizes and concludes.

2 Framework

In this paper, we use the perception of justice in the way Krebs (2008) uses ‘the sense of justice’. Krebs argues that distributive, commutative, and corrective justice all come under the umbrella of procedural justice. The explanation for this hierarchy is that if fair and impartial rules for determining justice do not exist, fair decisions cannot be made. One could add here that any rules must also be transparent, clear, and enforced to provide citizens with a ‘sense of justice’ (Ferreira et al. 2011; Fischer 2016). The importance of procedural justice is also emphasised in the work of (Walker et al. 1979) who look into the association between procedural justice and distributive justice in legal dispute resolutions using experimental data and find that there is a relationship from procedural to distributive justice for those involved in the disputes. Furthermore, Shaw (2013) argues that fairness concerns in distributing resources may be less about inequity as such and more about partiality.

Legal matters arise in many aspects of individuals’ lives: employment relationships, family matters, and business deals, to name but a few (Fischer 2016; OECD 2019a, b). Even if individuals have little direct contact with judicial procedures in their day-to-day life, they like to think that if they ever are involved in such procedures, they can expect efficient and fair treatment. If judicial procedures are not perceived as fair, citizens are inclined to feel they could be treated in an unjust way in any aspect of their lives, since even taking legal action might not restore fairness. In addition, the knowledge that judicial procedures are fair and impartial instills trust that others’ cases have been appropriately decided upon. Given this prominent role accorded to procedural justice, we are interested in investigating its association with life satisfaction.

It is anticipated that if individuals believe courts administer justice fairly, then they may have more confidence that if a legal matter of theirs goes to court, they too will also receive fair treatment. We thus expect a positive view of court operations to be associated with higher life satisfaction than a view that courts are not fair. This is the first hypothesis (H1) we test for.

H1 A more positive perception of procedural justice is associated with higher life satisfaction.

The hypothesis is based on two assumptions: first, that more fairness leads to higher life satisfaction and second, that the perception on the operation of procedural justice can be used to proxy the perception of fairness in society. The first argument has been investigated and corroborated in several disciplines (economics, psychology, sociology etc) with survey (cross-sectional and/or longitudinal) or experimental data. Attitudes towards fairness are usually assessed using vignettes. *Inter alia*, Bjørnskov et al. (2013), Charness and Grosskopf (2001) and Fehr and Schmidt (1999), from the economics literature, suggest that fairness considerations are important and find a positive association with well-being. In other disciplines, the effect of fairness is assessed based on its impact on physical signs (e.g., Markovsky 1988; Tabibnia et al. 2008; Robbins et al. 2012) and they find, in general, that the perception of unfairness is a stressor. Bjørnskov et al. (2013) take the analysis further to look into whether the focus on fairness arises purely from self-interest; their results suggest that this is not the case. While, Judge and Colquitt (2004) look into the mechanism through which perceptions of unfairness can affect the well-being of employees and propose as the mechanism for this association the impact of perceptions of unfair treatment on the ability to balance work and family life.

The second assumption on which H1 is based is that the operation of procedural justice can be used to proxy the perception of fairness in society. We do not wish here to argue that the quality of procedural justice is the only determinant of perceptions on fairness but that it is one of the determinants. There are at least two reasons for which justice and fairness might not necessarily coincide. A trial can, for example, be both unjust and fair (see, *inter alia*, Fletcher 2013), while certain practices that are unfair might still appear to be legal (e.g., discrimination at work). Second, our perception of whether society is fair is based on numerous other aspects of society's workings including amongst others, equality of education opportunity (Anderson 2007; Jencks 1988); the existence of a fair tax system which minimizes, for example, the room for tax evasion and tax avoidance (OECD 2017b); the issue of whether the rich are taxed less; the extent of meritocracy and corruption (Collins et al. 2016; Rothstein 2013; Wu and Zhu 2015); the use of commercial practices which do not afford domestic or foreign businesses an unfair competitive advantage; unfair treatment of the disabled; the guarantee of confidentiality in legal proceedings; the distribution of welfare benefits (Saari 2023).

One possible objection to Hypothesis 1 is that views held on the administration of justice might not be closely associated with life satisfaction, or that other features in society, as already mentioned above, also capture aspects of fairness. Comparisons of the extent to which life satisfaction is associated with other institutions suggest that at least for developed countries, judicial institutions are more important than, for example, political ones (e.g., Bjørnskov et al. 2010; Rode 2013). If data were available, we could investigate the direct and indirect impact on life satisfaction of meritocracy, corruption, tax evasion etc. Much of that impact, however, could depend on the extent to which courts identify cases involving corruption, lack of meritocracy or tax evasion, for example.

A second objection to testing H1 is that finding an association with the expected sign reveals little on the direction of causality (a reverse causality issue). Individuals who are more satisfied with their lives may have a better opinion of the working properties of the judicial system. It is not clear why an individual's perceptions of how an institution operates would be impacted in terms of life satisfaction, unless that individual has been favoured by the institution. The Di Martino and Prilleltensky (2020) finding that the SJI has a positive impact on life satisfaction suggests that the association runs from court operation to life satisfaction, as the SJI is a normative measure.

A third objection, related to the second, might be that both life satisfaction and administration of justice are positively related to a given country's level of development, e.g. as measured by per capita income (omitted variable bias). The answer to this challenge would require identification of a variable impacting per capita income but not operation of the judicial system (see, for example, Acemoglu and Johnson 2005). Such information is not available in the dataset used here, nor is it readily available.

Although procedural justice determines the attribution of distributive justice, the latter also has a direct impact on life satisfaction. Employed individuals who feel they are being fairly paid are more likely to be more satisfied with their jobs and, by extension, with their lives. This is the suggestion made by the FT article reported in Sect. 1, and leads to the second hypothesis (H2) we test for.

H2 The perception of being appropriately paid is associated with higher life satisfaction.

According to this hypothesis individuals perceiving they are being underpaid, with reference either to co-workers or to the pay they think they deserve, will be less satisfied with their work (see, for example, Clark and Oswald 1996; Hamermesh 2001). One mechanism through which dissatisfaction with pay may flow over to lower life satisfaction might be the lower self-esteem that the perception of being underpaid leads to (e.g., Lawler and O' Gara 1967).

One objection to this hypothesis, similar to the second objection to H1 above, is that finding an association with the expected sign between self-assessed appropriateness of pay and life satisfaction reveals little about the direction of causality. Individuals who are more satisfied with their lives may be more likely to assess their pay as appropriate. In what follows we not only use the self-assessed appropriateness of pay, but also a more 'objective' measure of the gap between actual pay and that predicted based on an individual's productive features. The probability of reverse causality is thus mitigated somewhat, although it may be that individuals who are more satisfied with their lives are more likely to find a job that matches their preferences.

Extending the above, we could argue that if individuals believe the courts will be partial in instances where they need to take legal action, they are likely to perceive many outcomes in their lives as unfair, largely because they fear that the decision makers behind such outcomes can get away with injustices even if their actions are challenged in court. This leads to the third hypothesis we test for.

Table 1 The four hypotheses under investigation

Hypothesis	Test performed
H1: A more positive perception of procedural justice is associated with higher life satisfaction	Associate measures of judicial impartiality with life satisfaction
H2: The perception of being appropriately paid is associated with higher life satisfaction	Associate assessment of pay appropriateness with life satisfaction Associate the gap between pay and pay predicted on the basis of Mincer wage equations with life satisfaction
H3: Procedural injustice is associated with life satisfaction also indirectly via perceptions of fairness of pay	Associate assessment of procedural justice with the evaluation of pay appropriateness
H4: Disappointment with pay is likely to be positively associated with life dissatisfaction, the more likely procedural injustice is	Assess impact of gap between pay and pay predicted on the basis of Mincer wage equations on life satisfaction at different levels of judicial impartiality

H3 Procedural injustice is associated with life satisfaction not only directly, but also indirectly via perceptions of fairness of pay. An improvement in an individual's perception of procedural justice is associated with lower disappointment regarding appropriateness of pay.

When actual pay is lower than the remuneration expected based on productive characteristics, that fact is likely to be regarded as unfair treatment, and thus more damaging for life satisfaction when individuals perceive that procedural injustice is likely. When society is perceived as unfair, the argument goes, then underpayment is likely a manifestation of this unfairness. When, however, procedural injustice is unlikely, then citizens know either that pay will be revised to close the gap, or that underpayment is not the result of unfair treatment, but the result of some most likely temporary factor. Psychologists have offered a number of explanations (see, Brockner and Wiesenfeld 1996 for a discussion) of why such an interaction may exist; for example, individuals may use information about procedures to form expectations about longer-term outcomes or fair procedures may impact on individuals' self-esteem. The above lead to the fourth hypothesis we test for.

H4 Disappointment with pay is likely to be positively associated with dissatisfaction, the more likely procedural injustice is.

Table 1 summarises the four hypotheses and tests to be performed.

3 Data

3.1 Information on the dataset and variables used

We use the European Social Survey (ESS) to test the four hypotheses outlined above. The ESS is a cross-national survey of individuals aged 15 and over

resident within private households. *Inter alia*, the survey collects information on attitudes, beliefs, and behavioural patterns, using the same questionnaire in each country. The survey was first carried out in 2002 and has been conducted every two years since, without, however, being longitudinal. It contains a core questionnaire repeated in each round and special modules that rotate between rounds.

This paper uses data from Round 5 of the ESS (ESS 2011) conducted in 2010/11, since apart from the self-assessed measure of life satisfaction, it contains information on measures of individuals' perception of how procedural and distributive justice operate as well as the variables needed to construct a measure of the gap between actual and expected pay for those in work. The procedural justice measures available in the survey refer to interviewees' views on how good courts are at administering justice. The distributive justice measure refers to whether individuals regard their pay as commensurate to their effort. From the information on demographic and productive features of individuals available in the survey, we estimate Mincer earnings equations and use the predicted values to calculate the gap between actual and expected pay.

A total of 33 countries have been surveyed over time. Investigations of the associations between institutional features and life satisfaction suggest that these associations may differ depending on a country's stage of development. We thus chose to focus on 14 high-income European countries: 12 out of the first 15 European Union (EU) members and two high-income countries in the European Economic Association (EEA): Switzerland and Norway.

The outcome variable is self-reported life satisfaction, which is the answer to the question:

All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means extremely dissatisfied and 10 means extremely satisfied.

Figure 1 shows the distribution of responses to the question on life satisfaction.

The survey contains information on demographic (age, marital status, number of children) and productive (education) characteristics of interviewees. It also contains information on social activity of individuals, on their self-rated health condition, on their feelings on the adequacy of their household income. These variables are used as controls in the life satisfaction regressions.

The quality of *procedural justice* is proxied by 4 related measures; definitions for the variables can be found in Table 2. The density distribution of all 4 measures is presented in Fig. 2. The scale used for these measures is not the same — e.g., the index of the quality of work done by the courts ranges from 1 to 5, the index of whether courts make mistakes ranges from 0 to 10 — but for all 4 indices higher value indicates courts are doing a 'worse' job. The measures are correlated.²

The proportion of individuals from all 14 countries in the sample reporting that courts do a very good or a very bad job (**ctjob**) is low, as can be seen from Table 7.

² The Pearson correlation coefficient ranges between 0.3 and 0.4 and is in all instances statistically significant.

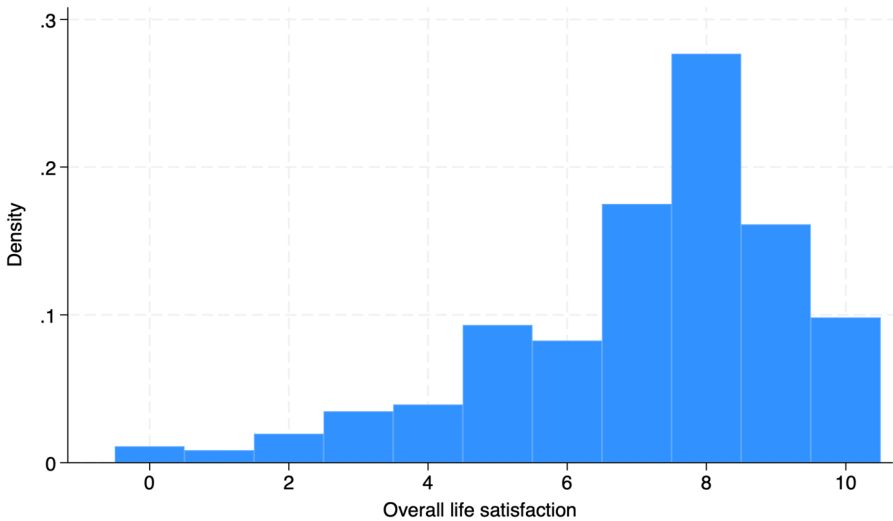


Fig. 1 Density distribution of life satisfaction

There is, however, a non-negligible proportion of individuals (12.7%) who think courts do a bad job. Three more variables reflect individual assessments of how the courts operate.

Interviewees are asked to specifically evaluate the impartiality or otherwise of court decisions (**ctpart**). The assessment is recorded on an 11-point scale ranging from 0 — court decisions are always impartial — to 10 — court decisions are always partial. Intermediate values are not explicitly defined.

Interviewees were also asked whether, in their view, courts were unduly influenced by political pressure (**ctppress**). Again, here there is a significant proportion of individuals — around half the respondents — who think courts are influenced by political pressure.

Finally, interviewees are asked to express their view on an 11-point scale — from 0 (Never) to 10 (Always) — about whether courts make mistakes that let guilty people go free (**ctmistake**).

To proxy perceptions on *distributive justice*, we use a variable taken directly from the survey and a variable constructed using information from the survey. The first variable uses a 5-point scale ranging from strong agreement to strong disagreement to record people’s belief on the appropriateness of their pay given the effort they put into their job (**pdaprpa**, Table 2). Table 7 shows the distribution of respondents across the scale. A little over half of dependent employees agree (strongly or otherwise) that pay is appropriate, whereas slightly under 30% disagree (strongly or otherwise) with this view.

The hypothesis that there is a negative association between unfair payment and life satisfaction has recently been tested by Adriaans (2023) with data from the 9th round of the ESS. The hypothesis could not be rejected. Adriaans finds that the association is stronger in countries in which the equity norm is strongly legitimized, as

assessed by whether individuals are in favour of earnings being in line with inputs. Adriaans distinguishes overreward from underreward and finds that both are negatively associated, in a non-linear way, with life satisfaction. This paper looks at the association between inappropriate pay and life satisfaction, using both a subjective and an ‘objective’ measure of inappropriate pay to investigate whether dissatisfaction with pay is magnified when individuals perceive procedural justice to be absent. Associations are all assessed at the individual level and no moderating role of country-level variables is provided for. Country-level differences are captured through fixed effects.

The second variable used to assess distributive justice, the ‘objective’ measure, is constructed using survey variables; construction is described in detail below.

3.2 Estimating the gap between actual and expected pay

As already mentioned in the previous section we wish to test the second hypothesis (H2) both with a subjective assessment regarding the appropriateness of pay variable and with a more objective measure of the gap between the pay individuals receive, the actual wage as recorded in the survey, and the pay predicted from estimating a Mincer equation referred to as the expected wage. The expected wage is the fitted value from a regression of the natural log of the monthly salary (w_i) on demographic and productive features of the employee, as specified in Eq. (1). The gap (variable **wg**) between actual and expected wages are the residuals from Eq. (1).

$$w_i = \alpha + x_i\beta + z_i\gamma + \eta_i \quad (1)$$

where w_i is the natural logarithm of the monthly salary of individual i , and x_i is a vector of the observed demographic (age, age squared, gender) and productive features of individual i (level of education, years of work experience, hours of work, trade union membership, occupation). Vector z_i contains observed features of the workplace in which individual i is employed (sector of economic activity, size of the establishment and type of organisation) and η_i is the error term.

Separate wage regressions for each country are estimated.³ The OLS coefficient estimates of the earnings equations for each country are presented in Table 9 in the Appendix. Equations are estimated for dependent employees working between 30 and 90 h a week.⁴

Turning to the coefficient estimates of the Mincer equations and starting from *demographic characteristics*, age appears to have a non-linear effect on log wages in all countries except for Belgium and Greece. In these two countries we find no effect of age squared on wages and a marginally significant positive linear effect from age on wages. Men have significantly higher wages in almost all countries; men’s wages

³ Table 8 in the Appendix presents information on the average and median gross monthly earnings in each country.

⁴ Individuals with wages that are extremely low (below the first percentile of their national average) or extremely high (above the 99th percentile of their national average) have been excluded. Excluding these outlier observations reduces each country’s sample by less than 2%.

appear to be higher by between 11% (Finland & France) and over 30% (UK). For Greece, conditional on all other variables in the regression, no statistically significant difference between men and women's pay is found.

In terms of *productive characteristics*, eight different education levels are distinguished. The levels correspond to the groupings in the detailed International Standard Classification of Education levels (ISCED, 2011 revision). The reference group is Upper secondary education (ISCED 3). As expected, higher levels of education are associated with higher wages in every country apart from Greece. Work experience, the number of years for which the individual has been doing the same job as currently, is not statistically significant in general, as this variable is closely related to age. Furthermore, in countries where years of experience are statistically significant (Finland, France, Germany, Ireland, Spain, and Switzerland), the coefficient is small. Total hours worked are positively associated with pay, as expected. Membership in a trade union is only associated with higher wages in Germany. Conversely, in Portugal and Sweden trade union membership is associated with lower pay.

Workplace features such as the size of the establishment and the type of organization individuals are working in (private sector, public sector, state-owned enterprises etc.) are also included in the wage regressions; indications of a positive association between firm size and wages are observed in all countries.

Occupational dummies for the nine one-digit International Standard Classification of Occupations (ISCO-08) occupations, and sectoral dummies for thirteen sectors of economic activity corresponding to groupings of two-digit NACE rev.2 classification coding are also included in the regressions.

As a check of what the gap between pay received and the fitted values from Eq. (1) represents, we correlate this with the perception of individuals on how appropriate their pay is. An increase in the evaluation score as regards the appropriateness of pay variable indicates greater dissatisfaction with pay. A higher value residual from the estimated Eq. (1), on the other hand, indicates that the individual is paid more than expected, or better, more than predicted on the basis of the observable variables used. We thus expect a negative correlation between the two; when pay is higher than predicted, the individual is expected to be more satisfied with pay and vice-versa. The correlation coefficients are presented in Table 10 in the Appendix. In all countries, except Ireland (IE) and Switzerland (CH), the correlation coefficient between the two is statistically significant and in the expected direction. If we break the sample down according to the sign of the gap and estimate correlations for each sample separately, we find that correlations are, in general, in the right direction. When the gap is positive, individuals are less likely to be disappointed with the pay they receive. When the gap is negative, taking its absolute value, the correlation is in general positive; the larger the gap, the more disappointed individuals are with their pay.

For all countries, except again for Ireland and Switzerland, we find significant differences in the wage gap among the five levels of the appropriateness of pay variable (pdapra) by performing ANOVA analysis.

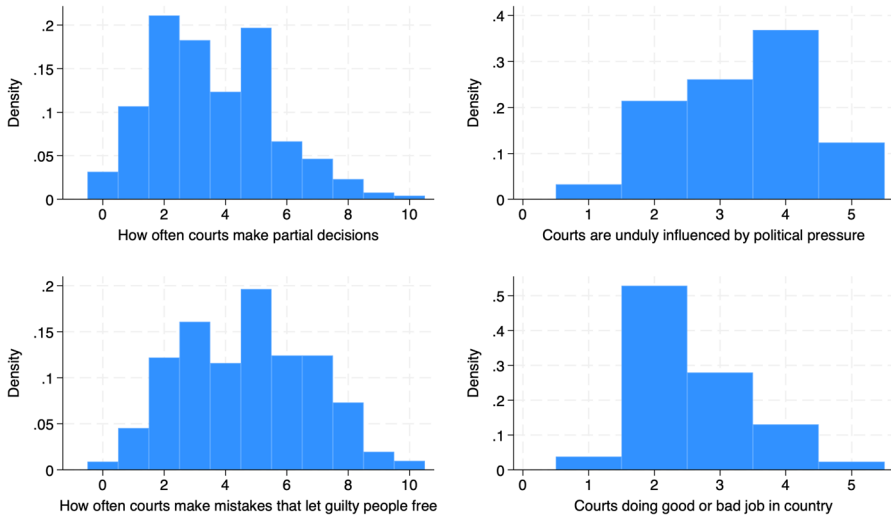


Fig. 2 Density distribution of measures on courts' operation

4 Empirical analysis

We turn next to test the hypotheses outlined in Sect. 2. For hypotheses 1, 2, and 4 we use OLS to estimate a linear model of the following form:

$$LS_i = X_i\beta' + \epsilon_i \tag{2}$$

where i is the individual.

We opted for OLS, a popular choice in relevant literature (see, for example, Ferrer-i Carbonell and Frijters 2004; Luttmer 2005), as the 11-point scale of life satisfaction is a long enough ordinal sequence to be close to a continuous variable, making interpretation more straightforward.⁵

In the model specified in (2) X , is a matrix of the variables of interest and vector β' contains the coefficient estimates. $X_i\beta'$ can be written in greater detail as follows:

⁵ The main conclusions of this paper remain valid if (2) is estimated by ordered probit or ordered logit.

Table 2 Definitions of main output and explanatory variables used in the analysis *Source: ESS 2011*

Acronym	Variable	Question
<i>Measure of life satisfaction (Outcome variable)</i>		
stlife	Life satisfaction	'All things considered, how satisfied are you with your life as a whole nowadays?' Answer using this card, where 0 means extremely dissatisfied & 10 means extremely satisfied'
<i>Measures of income (Explanatory variables)</i>		
gy	Gross pay	Usual gross pay before deductions for tax and insurance
hincfel	Adequacy of household income	Assessment of current household income, where 1 is living comfortably and 5 finding it very difficult
hinctna	Income decile	Decile of household's total net income from all sources
<i>Measures of distributive justice (Explanatory variables)</i>		
pdaprpa	Pay matches effort	'Considering all my efforts and achievements in my job, I feel I get paid appropriately'?: A 1 means agree strongly and a 5 means disagree strongly'
wg	Wage gap	Difference between actual pay and pay predicted from a Mincer equation
<i>Measures of procedural justice (Explanatory variables)</i>		
ctpart	Courts are partial	How often do courts make partial decisions based on the evidence available to them, where 0 is never and 10 is always
ctjob	Courts do a bad job	Taking into account all things courts are expected to do, would you say they are doing a good job or a bad job? A 1 means very good job and 5 means very bad job
ctmistake	Courts make mistakes	How often do courts make mistakes that let guilty people go free? 0 is never and 10 is always
ctppress	Courts are under political pressure	Courts are unduly influenced by political pressure, where 1 is disagree strongly and 5 is agree strongly

Table 2 (continued)

Acronym	Variable	Question
<i>Life-style variables (Explanatory variable)</i>		
health	Health self-assessment	Self-assessment of health in general; 1 means very good and 5 means very bad
slact	Participation in social activities	Participation in social activities compared to peers; 1 stands for much less than most and 5 for much more than most
<i>Assessment of pay with respect to effort (Explanatory variable)</i>		
wgdpft	Current salary depends on effort put into work	‘Wage or salary depends on the amount of effort I put into my work’. Where 1 not at all true and 4 very true

$$\begin{aligned}
X_i \beta' = & \beta_1 \text{age}_i + \beta_2 \text{age}_i^2 + \beta_3 \text{gender}_i + \beta_4 \text{marital status}_i + \beta_5 \text{children}_i \\
& + \sum_{g=1}^3 \beta_{6g} \text{education level}_{ig} + \sum_{h=1}^5 \beta_{7h} \text{health}_{ih} + \sum_{j=1}^5 \beta_{8j} \text{social activity}_{ij} \\
& + \sum_{k=1}^6 \beta_{9k} \text{activity}_{ik} + \sum_{l=1}^4 \beta_{10l} \text{feelings about household income}_{il} \\
& + \sum_{m=1}^{11} \beta_{11m} \text{assessment of courts operations}_{im} \\
& + \sum_{n=1}^5 \beta_{12n} \text{pay commensurate to effort}_{in} + \beta_{13} \text{wage gap}_i \\
& + \beta_{14} \text{wage gap}_i \times \sum_{m=1}^{11} \beta_{11m} \text{assessment of courts operations}_{im} \\
& + \sum_{q=1}^{14} \beta_{15q} \text{country dummies}_{iq}
\end{aligned} \tag{3}$$

The first ten variables in Eq. (3) are typical in life satisfaction regressions (see, for example, Dolan et al. 2008 for a review of the literature), and are included in all models estimated in this paper. Note that gender, marital status and children (presence or absence) are single 0,1 dummies. Education, health, social activity and activity, on the other hand, are a group of dummies each corresponding to different levels or activities. In greater detail, three education levels are distinguished; ISCED I & II; ISCED III & IV; ISCED V. Health is assessed using a 5-point scale ranging from *Very good* to *Very bad*, with the category *Good* used as the reference group. Social activity compared to peers is also reported on a 5-point scale ranging from *Much less than most* to *Much more than most* with the category *About the same* used as the reference group. Regarding activity, six different activity statuses are identified: employment, unemployment, retirement, in education, disabled and doing housework. The tenth variable refers to self-assessment of the adequacy of household income used here as a proxy for household income. Four different levels of adequacy are used, ranging from *Living comfortably* to *Very difficult to live on*. The second level *Coping* is used as the reference group.

The eleventh variable, and the first variable of interest used to test H1, refers to self-assessment of court operations. The results reported in Table 3 use the **ctpart** variable. **ctpart** records individual assessment of how often informants think courts make partial decisions. As already mentioned in Sect. 3, individuals report their assessment on the frequency with which courts make impartial decisions on a scale from 0 (Never) to 10 (Always). The reference category is 2.

Two variables are used to test H2. First, the twelfth variable (**pdaprpa**) in (3) which represents individuals' evaluation of whether they feel they are paid appropriately given their efforts and achievements. (**pdaprpa**) is used as an indicator of distributive justice. Five dummies are used to record individuals' assessment on pay

Table 3 Main regression results - Dependent variable: Self-assessed life satisfaction

	(1)	(2)	(3)	(4)	(5)
	Courts make impartial decisions (ctpart)				
Always (0)	0.290*** (0.0837)	0.282* (0.120)	0.264* (0.119)	0.542*** (0.118)	0.544*** (0.118)
1	0.156*** (0.0406)	0.0781 (0.0527)	0.0714 (0.0522)	0.141* (0.0615)	0.140* (0.0614)
2	<i>Reference group</i>				
3	- 0.0795* (0.0373)	- 0.150** (0.0510)	- 0.142** (0.0505)	- 0.0867 (0.0627)	- 0.0869 (0.0626)
4	- 0.154*** (0.0439)	- 0.282*** (0.0620)	- 0.274*** (0.0616)	- 0.163* (0.0738)	- 0.163* (0.0738)
5	- 0.291*** (0.0432)	- 0.313*** (0.0667)	- 0.295*** (0.0663)	- 0.327*** (0.0818)	- 0.326*** (0.0819)
6	- 0.384*** (0.0630)	- 0.425*** (0.0979)	- 0.428*** (0.0976)	- 0.423** (0.135)	- 0.421** (0.135)
7	- 0.555*** (0.0755)	- 0.565*** (0.114)	- 0.551*** (0.113)	- 0.483*** (0.136)	- 0.483*** (0.136)
8	- 0.433*** (0.108)	- 0.209 (0.152)	- 0.189 (0.150)	- 0.303 (0.192)	- 0.304 (0.192)
9	0.200 (0.198)	0.543 (0.312)	0.569 (0.321)	0.487 (0.469)	0.488 (0.469)
Never (10)	- 0.428 (0.294)	0.467 (0.555)	0.559 (0.589)	0.703 (0.872)	0.706 (0.874)
	Pay is appropriate (pdaprpa)				
Agree strongly (1)			0.173* (0.0677)		
Agree (2)	<i>Reference group</i>				
Neither agree nor disagree (3)			- 0.177*** (0.0515)		
Disagree (4)			- 0.303*** (0.0491)		
Disagree strongly (5)			- 0.619*** (0.100)		
				Wage gap	
Wage gap (wg)				0.278*** (0.0731)	
Wage gap positive (wgp)					0.219 (0.123)
Wage gap negative (wgn)					- 0.343* (0.135)
	Feeling about household's income (hincfel)				
Living comfortably (1)	0.462*** (0.0283)	0.468*** (0.0411)	0.404*** (0.0409)		

Table 3 (continued)

	(1)	(2)	(3)	(4)	(5)
Coping (2)	<i>Reference group</i>				
Difficult to cope (3)	– 0.685*** (0.0467)	– 0.763*** (0.0762)	– 0.685*** (0.0766)		
Very difficult to cope (4)	– 1.259*** (0.0780)	– 1.302*** (0.191)	– 1.194*** (0.192)		
Constant	8.798*** (0.137)	8.988*** (0.260)	9.133*** (0.258)	9.408*** (0.317)	9.434*** (0.319)
R ²	0.32	0.29	0.30	0.25	0.25
Observations	24,127	9947	9947	6303	6303

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

appropriateness, ranging from *Strong agreement* to *Strong disagreement* with the view that pay is appropriate. Agreement with the appropriateness of pay is the reference category.

The second variable used to test H2 is the gap between actual pay and pay predicted by the Mincer equation — in other words the residuals from Eq. (1) — and is the thirteenth variable in (3).

The fourteenth variable in (3) is an interaction term between the wage gap and the assessment of court operations. The goal is to test whether bad feelings from distributive injustice are intensified when procedural justice does not prevail, as set out in H4.

As specified in (3), we use country dummies as fixed effects. Estimates are produced using STATA 18.0 with weighted data. Reported standard errors are robust for heteroscedasticity.

Table 3 presents the main results from the estimation of various specifications of model (3). In the tables in the main text we only report coefficient estimates of the variables that are the focus of this paper. Coefficient estimates for all variables in the regression can be found in Table 11.

Column (1) of Table 3 tests H1. Setting β_{12} , β_{13} and β_{14} equal to zero, we test whether the coefficient estimates at different assessment levels of the court operations variable (**ctpart**) are statistically different from zero, and whether the estimates suggest that the worse the assessment of procedural justice, the less satisfied individuals are. The results suggest that the first hypothesis cannot be rejected. Group (2) is the reference group for variable **ctpart** and as can be seen from the coefficient estimates reported in Col. (1), life satisfaction is higher for assessments better than the reference group, i.e. if individuals hold the view that courts are not frequently partial. Conversely, life satisfaction is lower for those holding the view that courts' decisions are partial. Negative association peaks at level 7, is still negative at 8 and is not significantly different from group 2 for levels 9 and 10. The last two groups have a small number of observations (see Table 7), which could perhaps explain the insignificance of estimates. The association between court operations and life satisfaction confirms the results reported in the Colquitt et al. (2001) meta-analytic review.

Column (2) of Table 3 tests H1 again, but only using the sample of dependent employees for which we have information on pay assessment. Once again, the first hypothesis cannot be rejected.

In column (3) of Table 3 we add variable **pdapprpa** which records self-assessment of pay appropriateness. Individuals who select level 1 agree strongly with the view that their pay is appropriate, and individuals selecting level 2, the reference group, also agree with this view. On the other hand, individuals choosing level 5 disagree strongly that their pay is appropriate. The coefficient estimates in column (3) suggest that life satisfaction is positively associated with the view that pay is appropriate. The inclusion of this variable does not change the coefficient estimates for the other variables presented in the table. These results confirm the findings of Adriaans (2023) according to which there is a highly significant association between perceived fairness of earnings and life satisfaction.

Column (4) in Table 3 introduces the residuals from estimating Eq. (1). As the wage gap variable requires information on all the variables used to estimate Eq. (1) the sample for which we can calculate the wage gap is significantly smaller than that for which we can find the association between life satisfaction and the subjective measure of pay appropriateness. The wage gap coefficient (**wg**) is positive and suggests that the higher the wage gap the higher life satisfaction. This result is in the direction found by (Hamermesh 2001) who investigates the impact of a wage gap on job satisfaction.

To further explore whether a positive wage gap has a different impact than a negative one, we interact the wage gap with two dummies: a dummy that takes the value 1 if the gap is positive and 0 otherwise, and a dummy that takes the value -1 if the gap is negative and 0 otherwise. The coefficient of the positive wage gap variable is not statistically significant. The coefficient of the absolute value of the negative wage gap is negative, thus suggesting that the lower the actual wage compared to the expected wage, the lower life satisfaction is.

The results in Table 3 hold even if the **ctpart** variable is used as a continuous variable i.e. if we assume a linear association between life satisfaction and **ctpart**. The results in columns (1) to (3) are also robust to using the decile in the income distribution in which the individual belongs instead of the variable indicating the feeling about household income (**hincfel**) and to using the individual's labour income, relative to the country median income, instead of **hincfel**.

As already mentioned, the four variables in the survey dataset recording individuals' assessment of court operations are correlated, so it is not necessary to present the analysis for all measures in the main text. Tables 12, 13 and 14 in the Appendix, however, show the results of Table 3 for each of **ctjob**, **ctppress** and **ctmistake** respectively. The results presented in detail above for the **ctpart** variable hold through, in general, for the other variables too with the results with the **ctmistake** variable, however, not as strong.

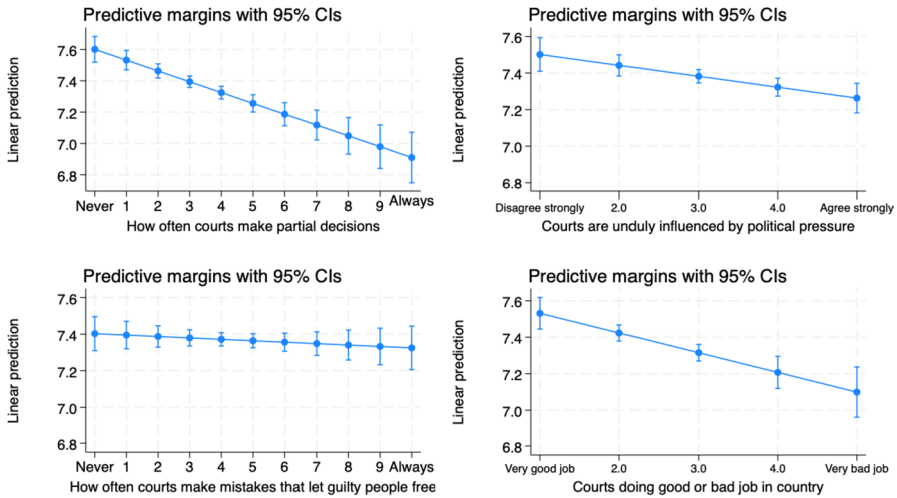


Fig. 3 Predicted life satisfaction by using the 4 different measures of court operations linearly

The robustness of the results is also checked by using the court operations variables linearly. The predicted values of life satisfaction from such a specification using each of the 4 different variables capturing the operation of courts are presented in Fig. 3.⁶

Next, we test the hypothesis that the wage gap’s impact on life satisfaction varies depending on whether individuals believe in the courts being impartial or not (Hypothesis 4). To that effect, we first interact **ctpart**, as a continuous variable, with the wage gap variable.⁷

Column (1) of Table 4 presents the coefficient estimates of the variables of interest for individuals with a positive wage gap, while column (2) shows coefficient estimates for individuals with a negative wage gap. In both instances we use the absolute value of the wage gap (as in col. 5 of Table 3). The results show that court partiality is associated with lower life satisfaction in both samples. The wage gap variable and its interaction with **ctpart** are not statistically significant for those with a positive wage gap. For the sample of individuals with a negative wage gap the interaction of the wage gap variable with **ctpart** is negative with a p-value of 0.12.

From the coefficient estimates in col. 2 of Table 4 we can calculate that the wage gap has no impact on life satisfaction when **ctpart** is equal to 2, it has a negative impact on life satisfaction if **ctpart** is greater than 2 and a positive impact on life satisfaction for **ctpart** less than 2.

To investigate Hypothesis 4 further we thus create a dummy variable on the basis of the **ctpart** variable. The dummy takes the value 1 if **ctpart** is equal to three or higher and the value 0 otherwise. Coefficient estimates from the interaction of the wage gap

⁶ The specification from which these results arise are a transformation of the specification in column 1 of Table 3 and column 1 of Tables 12, 13 and 14.

⁷ We use **ctpart** as a continuous variable, as having interactions of a continuous variable (**wgp** or **wgn**) with a categorical variable (**ctpart**) with 11 different levels makes the results very difficult to interpret.

Table 4 Interactions of wage gap with ctpart - Dependent variable: Self-assessed life satisfaction

	(1)	(2)
ctpart	- 0.0916*** (0.0258)	- 0.0484~ (0.0272)
wgp	0.164 (0.264)	
wgp × ctpart	- 0.0213 (0.0733)	
wgn		0.268 (0.286)
wgn × ctpart		- 0.134 (0.0851)
Constant	9.583*** (0.450)	9.374*** (0.478)
R ²	0.25	0.25
Observations	3126	3177

Standard errors in parentheses

~ $p < 0.10$ * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5 Interactions of wage gap with dummies based on ctpart

	(1)	(2)
wgn	0.193 (0.200)	0.175 (0.216)
ctpart >= 3	- 0.187* (0.0889)	
ctpart >= 3 × wgn	- 0.612* (0.289)	
ctpart > median country value (dmctimp=1)		- 0.196* (0.0888)
dmctimp=1 × wgn		- 0.580* (0.292)
Constant	9.370*** (0.468)	9.423*** (0.466)
R ²	0.25	0.25
Observations	3177	3177

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

dmctimp is a dummy taking the value 1 if ctpart for an individual is higher than the median country value on ctpart. dmctimp takes a value 0 otherwise

Table 6 Appropriateness of pay regression - OLS coefficient estimates

	(1)
How often courts make partial decisions	0.0215*** (0.00676)
<i>Feeling about household's income</i>	
Living comfortably (1)	- 0.374*** (0.0267)
Coping (2)	Reference group
Difficult to cope (3)	0.434*** (0.0403)
Very difficult to cope (4)	0.545*** (0.0848)
<i>Wage depends on effort put into job (wgdpeft)</i>	
Not at all true (1)	Reference group
A little true (2)	- 0.140*** (0.0282)
Quite true (3)	- 0.270*** (0.0329)
Very true (4)	- 0.257*** (0.0464)
Constant	2.800*** (0.155)
R ²	0.12
Observations	9929

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

variable with this dummy, tabulated in col. 1 of Table 5, suggest that the wage gap has a significant negative impact on life satisfaction for those with *ctpart* of three or higher.

As an additional check of Hypothesis 4, we interact the wage gap with a dummy variable, which takes the value 1 if the individual's assessment of procedural justice is higher than the median value of this variable in the country the individual is located in and zero otherwise. The results presented in col. 2 of Table 5 show that for individuals with *ctpart* higher than the median value of the country in which they are located, the interaction of the wage gap variable with this dummy has a significant negative impact. We test Hypothesis 4 using the alternative measures of courts' operations (*ctjob*, *ctppress* and *ctmistake*) but the interaction terms are not significant either in the full sample or for breakdowns of the sample by the median value of the country the individual is located in.

We last turn to testing the third hypothesis (H3) put forward in Sect. 2, that a negative view of court operations is associated with a more negative view of pay appropriateness. We test this hypothesis by regressing - using a linear model estimated by OLS — the **pdaprpa** variable of how individuals assess procedural justice as captured by the **ctpart** variable, used here as a continuous variable with a linear

association with the **pdaprpa** variable. As already mentioned in Sects. 3 and earlier on in the current section the **pdaprpa** variable takes values from 1 to 5. The higher the value, the more disappointed individuals are with their pay.

Apart from the variables presented in Table 6, this regression also includes age, age squared, gender and education levels. As shown in Table 6, the regression also includes a variable to capture whether pay is related to effort. The results suggest that, conditional on the other variables in the regression, the more individuals believe that procedural justice is partial, the more likely they are to be disappointed with their pay. These results hold for the other three variables (ctjob, ctpress and ctmistake) used to assess courts' operations. Table 15 in the Appendix contains the results using each assessment measure. Hypothesis 3 can therefore not be rejected suggesting that the impact of court operations can be both direct — as shown from the previous results — and indirect via the impact of the assessment of court operations on pay satisfaction.

5 Summary and conclusions

We set out to investigate four issues related to life satisfaction and the impact of how individuals perceive justice is administered. The focus was on procedural and distributive justice. We proxied procedural justice by views of how courts operate, and distributive justice by whether individuals think their pay is commensurate with effort and by the gap between pay received and that expected on the basis of observable features. In all instances, we find we cannot reject the hypothesis that the perception of the extent to which justice is being served has an impact on self-reported life satisfaction. Moreover, there is some evidence that the association between a negative wage gap and life satisfaction might be amplified if individuals perceive that procedural justice is elusive.

One further hypothesis we investigated was whether the perception of distributive justice is associated with the perception of procedural justice. The data cannot reject this hypothesis.

At least two caveats apply to the above. First, the results do not show causality, and there are arguments in the literature to suggest that the causality is reversed. That is, that life satisfaction has an impact on individuals' perception of the quality of procedural and distributive justice. Such a direction cannot be excluded. It would imply that one's own particular feelings, on issues unrelated to the operation of institutions does affect their assessment. Using future rounds of ESS data with the same variables to create pseudo-panels of individuals with the same demographic and productive features could shed light on the issue of reverse causality.

Second, fairness of courts cannot be considered as the sole or the most important determinant of individuals' perceptions of overall procedural fairness in a society. One's perception of whether society is fair is based on numerous other aspects of a society's workings including amongst others, equality of education opportunity, the existence of a fair tax system, the extent of meritocracy and corruption, the operation of the welfare state and wage determination procedures, to name but a few. Nevertheless, the results reached give a sense of the interdependencies between the workings of a particular institution and life satisfaction, and shed some light on the mechanisms through which these interdependencies arise.

Appendix

See Tables 7, 8, 9, 10, 11, 12, 13, 14 and 15.

Table 7 Descriptives of variables used in the analysis

Variable	Mean	Variable	Mean
<i>Life satisfaction (%)^a</i>			
Extremely dissatisfied	1.1	6	8.3
1	0.8	7	17.3
2	1.8	8	27.9
3	3.3	9	16.4
4	3.8	Extremely satisfied	10.1
5	9.2		
<i>Demographics</i>			
Age	46.3 ^b	Married (%)	54.0
Individuals with children living at home (%)	37.9	Women (%)	49.8
<i>Productive features</i>			
<i>Level of education (%)</i>		<i>Type of activity (%)</i>	
ISCED I & II	35.0	Paid work	52.1
ISCED III & IV	38.4	Unemployment	5.4
ISCED V	26.6	Retired	20.1
		In education	9.8
		Disabled	2.7
		Housework	9.9
<i>Subjective general health (%)</i>		<i>Extent of social activity (%)</i>	
Very good	27.9	Much less than most	7.5
Good	43.9	Less than most	26.1
Fair	22.0	About the same	48.4
Bad	5.2	More than most	15.2
Very bad	1.0	Much more than most	2.8
<i>Assessment of courts' job</i>			
<i>Quality of courts' job (ctjob) (%)</i>		<i>Courts under political pressure (ctppress) (%)</i>	
Very good job	3.9	Disagree strongly	3.3
Good job	53.3	Disagree	21.3
Neither good nor bad	27.8	Neither agree nor disagree	26.4
Bad job	12.7	Agree	36.9
Very bad job	2.3	Agree strongly	12.1
<i>Courts make mistakes (ctmistake) (%)</i>		<i>Courts make partial decisions (ctpart) (%)</i>	
Never (0)	0.9	Never (0)	3.2
1	4.6	1	10.7
2	12.3	2	21.1
3	16.2	3	18.3
4	11.6	4	12.4
5	19.6	5	19.9
6	12.3	6	6.4

Table 7 (continued)

Variable	Mean	Variable	Mean
7	12.3	7	4.5
8	7.2	8	2.3
9	2.0	9	0.7
Always (10)	1.0	Always (10)	0.5
<i>Assessment of pay & household income</i>			
<i>Pay appropriate compared to effort (%)</i>		<i>Adequacy of household income (%)</i>	
Agree strongly	7.6	Living comfortably	35.0
Agree	44.8	Coping	42.9
Neither agree nor disagree	17.8	Difficult	15.7
Disagree	23.9	Very difficult	6.4
Disagree strongly	5.9		
<i>Current salary depends on effort put into work</i>			
Not at all true (1)	59.1	3	12.3
2	21.3	Very true (4)	7.3

^a Estimates refer to the sample used in the regression reported in col.1 of Table 3. Weighted data are used

^b St.dev. 18.4

Table 8 Monthly gross earnings from the ESS and the SES

Country	ESS			SES
	Median	Mean	Coef. Var	Mean
Portugal (PT)	610.00	760.59	3.61	1278.00
Greece (GR)	1000.00	1165.19	2.85	1799.00
Spain (ES)	1500.00	1949.13	5.77	1923.00
France (FR)	1800.00	2157.41	5.40	2567.00
UK (UK)	1852.50	2563.37	4.23	2852.00
Ireland (IE)	2083.33	3061.06	8.22	3466.00
Belgium (BE)	2300.00	2823.05	4.50	2965.00
Germany (DE)	2300.00	3040.47	6.67	2882.00
Netherlands (NL)	2400.00	2918.34	4.38	2886.00
Finland (FI)	2500.00	2953.83	2.28	2989.00
Sweden (SE)	2742.00	3040.71	1.87	3076.00
Denmark (DK)	3888.83	5295.68	5.58	4052.00
Switzerland (CH)	4056.00	5183.36	7.03	4869.00
Norway (NO)	4273.50	4620.68	1.98	4591.00

Figures are in national currencies.

Sources: ESS (weighted data) & Eurostat

Table 9 OLS coefficient estimates of variables in Mincer wage equations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	BE	DK	FI	FR	DE	GR	IE	NL	NO	PT	ES	SE	CH	UK	
<i>Demographic features</i>															
Age	0.018 [~] (0.010)	0.061 ^{***} (0.012)	0.028 ^{**} (0.009)	0.042 ^{**} (0.014)	0.083 ^{***} (0.009)	0.031 [~] (0.017)	0.055 ^{***} (0.013)	0.047 ^{**} (0.016)	0.039 ^{***} (0.008)	0.070 ^{***} (0.016)	0.035 ^{**} (0.013)	0.035 ^{***} (0.007)	0.059 ^{***} (0.014)	0.037 ^{**} (0.014)	
Age ²	-0.000 (0.000)	-0.001 ^{***} (0.000)	-0.000 ^{**} (0.000)	-0.000 ^{**} (0.000)	-0.001 ^{***} (0.000)	-0.000 (0.000)	-0.001 ^{***} (0.000)	-0.000 [*] (0.000)	-0.000 ^{***} (0.000)	-0.001 ^{***} (0.000)	-0.000 ^{**} (0.000)	-0.000 ^{***} (0.000)	-0.001 ^{***} (0.000)	-0.000 [*] (0.000)	
Men	0.125 ^{***} (0.037)	0.134 ^{***} (0.038)	0.107 ^{***} (0.027)	0.107 ^{***} (0.031)	0.215 ^{***} (0.038)	-0.016 (0.063)	0.107 [~] (0.060)	0.151 ^{***} (0.045)	0.141 ^{***} (0.023)	0.140 ^{**} (0.048)	0.143 ^{**} (0.043)	0.131 ^{***} (0.022)	0.146 ^{**} (0.045)	0.311 ^{***} (0.047)	
<i>Productive features^a</i>															
ISCED1 ^b	-0.185 [~] (0.094)	-0.171 [~] (0.095)	-0.034 (0.089)	-0.177 ^{**} (0.058)	-0.101 (0.148)	-0.073 (0.060)	-0.173 [*] (0.086)	0.009 (0.103)	-0.356 ^{***} (0.069)	-0.190 ^{**} (0.069)	-0.117 [*] (0.073)	-0.117 [*] (0.050)	-0.079 (0.088)	-0.051 (0.081)	
ISCED2	-0.039 (0.057)	-0.112 [*] (0.048)	-0.076 (0.048)	-0.017 (0.056)	-0.324 ^{***} (0.083)	0.029 (0.086)	-0.135 (0.097)	0.022 (0.068)	-0.030 (0.034)	-0.056 (0.059)	-0.130 [*] (0.058)	-0.058 (0.050)	-0.580 ^{***} (0.097)	0.016 (0.060)	
ISCED4	-0.030 (0.055)	0.050 (0.041)	0.050 (0.041)	-0.056 (0.200)	0.094 (0.051)	0.169 (0.133)	0.237 [*] (0.119)	0.042 (0.095)	0.007 (0.050)	0.007 (0.050)	0.085 (0.068)	0.015 (0.033)	-0.105 (0.084)	0.230 [*] (0.098)	
ISCED5	0.042 (0.067)	0.109 ^{**} (0.034)	0.068 (0.046)	0.068 (0.046)	0.121 [*] (0.054)	-0.141 (0.095)	0.230 ^{**} (0.077)	0.200 ^{**} (0.060)	0.071 (0.052)	-0.029 (0.296)	-0.088 (0.095)	0.022 (0.040)	0.009 (0.060)	0.268 ^{***} (0.070)	
ISCED6	0.109 [*] (0.047)	0.044 (0.057)	0.094 [*] (0.041)	0.001 (0.073)	0.157 [*] (0.071)	-0.021 (0.103)	0.317 ^{**} (0.103)	0.142 [*] (0.058)	0.140 ^{***} (0.031)	0.003 (0.157)	0.059 (0.072)	0.089 [*] (0.038)	0.117 (0.081)	0.375 ^{***} (0.087)	
ISCED7	0.345 ^{***} (0.056)	0.166 [*] (0.065)	0.282 ^{***} (0.044)	0.187 ^{***} (0.049)	0.205 ^{**} (0.077)	0.034 (0.094)	0.256 [*] (0.100)	0.300 ^{***} (0.064)	0.211 ^{***} (0.036)	0.103 (0.171)	0.203 [*] (0.079)	0.171 ^{***} (0.038)	0.154 [*] (0.061)	0.352 ^{***} (0.074)	
ISCED8	0.378 ^{***} (0.080)	-0.011 (0.134)	0.287 ^{**} (0.097)	0.418 ^{***} (0.096)	0.233 [*] (0.116)	0.338 (0.205)	0.510 ^{***} (0.114)	0.747 ^{***} (0.103)	0.206 [~] (0.108)	0.256 (0.173)	0.256 (0.173)	0.334 ^{***} (0.077)	0.265 ^{**} (0.095)	0.806 ^{***} (0.145)	
Exper. ^c	0.003 (0.002)	0.003 (0.002)	0.004 ^{**} (0.001)	0.004 ^{**} (0.002)	0.005 [*] (0.002)	0.002 (0.006)	0.010 ^{**} (0.004)	-0.001 (0.002)	-0.001 (0.001)	-0.002 (0.003)	0.008 ^{**} (0.003)	0.001 (0.001)	0.004 [*] (0.002)	0.005 [~] (0.003)	
Hours ^d	0.006 ^{**} (0.002)	0.011 ^{***} (0.002)	0.016 ^{***} (0.003)	0.015 ^{***} (0.002)	0.015 ^{***} (0.002)	0.003 (0.003)	0.007 (0.005)	0.020 ^{***} (0.004)	0.013 ^{***} (0.003)	0.015 ^{**} (0.004)	0.008 ^{**} (0.002)	0.013 ^{***} (0.002)	0.019 ^{***} (0.003)	0.017 ^{***} (0.003)	

Table 9 (continued)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
	BE	DK	FI	FR	DE	GR	IE	NL	NO	PT	ES	SE	CH	UK	
TUM ^c	0.015 (0.033)	-0.103 (0.068)	0.024 (0.034)	0.015 (0.038)	0.110** (0.035)	-0.006 (0.082)	-0.070 (0.079)	0.051 (0.047)	0.034 (0.026)	-0.159* (0.073)	0.062 (0.048)	-0.048~ (0.028)	0.039 (0.043)	-0.023 (0.043)	
<i>Workplace characteristics^f</i>															
<i>Establishment size^e</i>															
10-24	0.049 (0.056)	-0.061 (0.049)	0.048 (0.035)	0.067 (0.046)	-0.011 (0.060)	0.061 (0.067)	0.197** (0.073)	0.107 (0.092)	0.038 (0.032)	0.156** (0.054)	0.124* (0.051)	0.027 (0.037)	-0.040 (0.050)	0.076 (0.096)	
25-99	0.074 (0.053)	0.086 (0.057)	0.093** (0.032)	0.044 (0.049)	0.108* (0.055)	0.107 (0.066)	0.183* (0.088)	0.081 (0.066)	0.069* (0.032)	0.018 (0.060)	0.140* (0.057)	0.065~ (0.036)	-0.045 (0.055)	0.104 (0.081)	
100-499	0.140** (0.052)	0.150* (0.076)	0.138*** (0.038)	0.106* (0.043)	0.114* (0.057)	0.164 (0.093)	0.302*** (0.083)	0.135* (0.066)	0.116** (0.036)	0.012 (0.069)	0.170** (0.061)	0.062~ (0.037)	0.099~ (0.054)	0.209* (0.095)	
500+	0.161** (0.059)	0.062 (0.060)	0.214*** (0.048)	0.100* (0.047)	0.244*** (0.060)	0.063 (0.093)	0.295*** (0.082)	0.188* (0.074)	0.143*** (0.037)	0.154 (0.106)	0.182* (0.071)	0.158*** (0.042)	0.112~ (0.067)	0.203* (0.083)	
<i>Type of work organisation^h</i>															
Type 1	-0.098 (0.069)	0.079 (0.056)	-0.057 (0.058)	0.040 (0.045)	0.079 (0.058)	0.066 (0.136)	0.026 (0.116)	0.113 (0.085)	-0.088* (0.039)	0.282* (0.111)	0.025 (0.088)	-0.122*** (0.033)	0.013 (0.046)	-0.031 (0.075)	
Type 2	-0.050 (0.054)	-0.000 (0.058)	-0.114** (0.042)	-0.022 (0.049)	0.030 (0.063)	0.206~ (0.115)	-0.062 (0.128)	0.028 (0.086)	-0.117*** (0.035)	0.098 (0.135)	0.020 (0.091)	-0.156*** (0.043)	-0.107~ (0.064)	0.022 (0.070)	
Type 3	-0.123~ (0.073)	0.652 (0.456)	-0.065 (0.040)	0.136* (0.056)	0.040 (0.071)	0.038 (0.068)	-0.299 (0.246)	-0.061 (0.121)	-0.069 (0.054)	0.185 (0.159)	-0.047 (0.107)	-0.081 (0.074)	0.102 (0.084)	-0.079 (0.111)	
Type 4	-0.318*** (0.086)	-0.059 (0.084)	0.028 (0.059)	-0.571 (0.391)	0.152~ (0.086)	-0.086 (0.113)	0.072 (0.121)	0.084 (0.076)	-0.126 (0.123)	-0.366** (0.133)	0.030 (0.121)	-0.128 (0.091)	-0.110 (0.214)	-0.180 (0.151)	
Constant	6.656*** (0.225)	6.125*** (0.226)	6.254*** (0.235)	5.638*** (0.302)	4.680*** (0.217)	5.819*** (0.412)	5.896*** (0.312)	5.504*** (0.337)	6.573*** (0.225)	4.439*** (0.339)	5.816*** (0.276)	6.364*** (0.176)	6.004*** (0.329)	5.468*** (0.294)	

Table 9 (continued)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	BE	DK	FI	FR	DE	GR	IE	NL	NO	PT	ES	SE	CH	UK
Observations	375	591	579	567	764	305	371	385	656	214	435	600	383	557
Adj. R ²	0.531	0.347	0.581	0.585	0.565	0.340	0.387	0.505	0.532	0.580	0.470	0.576	0.602	0.539

Robust standard errors in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, $\sim p < 0.10$

^a Occupation dummies corresponding to one-digit ISCO-08 occupation levels are also included.

^b Eight education levels corresponding to ISCED1-ISCED8 are used. Upper secondary education (ISCED3) is the reference group.

^c Work experience measured as the number of years doing the kind of job that the individual is currently doing.

^d Usual weekly working hours including overtime.

^e Currently trade union member.

^f Sectoral dummies for thirteen sectors of economic activity corresponding to groupings of two-digit NACE rev.2 classification coding are included in the regressions.

^g Establishments with < 10 employees are the reference group.

^h Types 1-4 correspond to the type of work organisation: Central or local government (Type 1), Other public sector (Type 2), State-owned enterprise (Type 3), Other type (Type 4). Private sector firms constitute the reference type

Table 10 Pearson correlation coefficients between the residuals of the wage regressions and the evaluation of the appropriateness of pay

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
BE	DK	FI	FR	DE	GR	IE	NL	NO	PT	ES	SE	CH	UK
<i>All observations independent of wage gap sign</i>													
-0.29	-0.08	-0.25	-0.26	-0.30	-0.22	-0.03	-0.26	-0.18	-0.23	-0.14	-0.27	-0.02	-0.23
(0.00)	(0.04)	(0.00)	(0.00)	(0.00)	(0.00)	(0.54)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.66)	(0.00)
<i>Positive wage gap (Actual wage > Expected wage)</i>													
-0.14	0.07	-0.26	-0.18	-0.16	-0.24	-0.04	-0.14	-0.17	-0.09	-0.21	-0.07	0.11	-0.15
(0.05)	(0.26)	(0.00)	(0.00)	(0.00)	(0.00)	(0.57)	(0.05)	(0.00)	(0.38)	(0.00)	(0.22)	(0.13)	(0.01)
<i>Negative wage gap (Actual wage < Expected wage)</i>													
0.15	-0.02	0.11	0.17	0.28	0.09	-0.03	0.12	0.01	0.27	-0.04	0.13	0.05	0.09
(0.04)	(0.77)	(0.06)	(0.00)	(0.00)	(0.28)	(0.72)	(0.11)	(0.89)	(0.00)	(0.56)	(0.02)	(0.48)	(0.12)

p-values in brackets below the correlation coefficients

Table 11 Main regression results using court partiality (Expanded Table 3)

	(1)	(2)	(3)	(4)	(5)
Age	− 0.0461*** (0.00516)	− 0.0556*** (0.0126)	− 0.0534*** (0.0125)	− 0.0769*** (0.0157)	− 0.0774*** (0.0157)
Age ²	0.000470*** (0.0000534)	0.000585*** (0.000148)	0.000553*** (0.000147)	0.000839*** (0.000186)	0.000844*** (0.000186)
Men	− 0.118*** (0.0265)	− 0.0847* (0.0371)	− 0.120** (0.0371)	− 0.00817 (0.0449)	− 0.00771 (0.0449)
Not married	− 0.414*** (0.0305)	− 0.389*** (0.0435)	− 0.375*** (0.0431)	− 0.385*** (0.0527)	− 0.384*** (0.0526)
No child at home	0.0162 (0.0314)	0.124** (0.0444)	0.123** (0.0438)	0.0625 (0.0535)	0.0628 (0.0534)
<i>Subjective general health</i>					
Very good (1)	0.470*** (0.0311)	0.413*** (0.0417)	0.395*** (0.0414)	0.455*** (0.0497)	0.455*** (0.0497)
<i>Reference group: Good general health</i>					
Fair (3)	− 0.438*** (0.0362)	− 0.443*** (0.0573)	− 0.430*** (0.0565)	− 0.409*** (0.0701)	− 0.408*** (0.0701)
Bad (4)	− 1.127*** (0.0779)	− 0.994*** (0.164)	− 0.991*** (0.165)	− 1.017*** (0.218)	− 1.016*** (0.218)
Very bad (5)	− 1.967*** (0.203)	− 2.459*** (0.474)	− 2.478*** (0.479)	− 3.656*** (0.565)	− 3.652*** (0.566)
<i>Participation in social activities</i>					
Much less than most (1)	− 0.540*** (0.0662)	− 0.470*** (0.127)	− 0.460*** (0.127)	− 0.415** (0.137)	− 0.415** (0.137)
Less than most (2)	− 0.238*** (0.0324)	− 0.209*** (0.0454)	− 0.202*** (0.0448)	− 0.336*** (0.0560)	− 0.336*** (0.0560)
<i>Reference group: About the same</i>					
More than most (4)	0.159*** (0.0357)	0.142** (0.0526)	0.146** (0.0522)	0.0698 (0.0618)	0.0698 (0.0618)
Much more than most (5)	0.267*** (0.0812)	0.336** (0.124)	0.351** (0.124)	0.303* (0.127)	0.305* (0.127)
<i>Activity</i>					
<i>Reference group: Employed</i>					
Unemployed	− 0.532*** (0.0745)				
Retired	0.149** (0.0523)				
In education	0.140* (0.0604)				
Disabled	− 0.105 (0.105)				
Housework	0.0433 (0.0527)				

Table 11 (continued)

	(1)	(2)	(3)	(4)	(5)
<i>Education level</i>					
ISCED I & II	0.0259 (0.0354)	0.0448 (0.0641)	0.0356 (0.0637)	− 0.0488 (0.0813)	− 0.0489 (0.0813)
<i>Reference group: ISCED III & IV</i>					
ISCED V	− 0.0547 (0.0293)	− 0.0332 (0.0388)	− 0.0364 (0.0385)	0.0683 (0.0470)	0.0687 (0.0470)
<i>Courts make impartial decisions (ctpart)</i>					
Always (0)	0.290*** (0.0837)	0.282* (0.120)	0.264* (0.119)	0.542*** (0.118)	0.544*** (0.118)
1	0.156*** (0.0406)	0.0781 (0.0527)	0.0714 (0.0522)	0.141* (0.0615)	0.140* (0.0614)
<i>Reference group:2</i>					
3	− 0.0795* (0.0373)	− 0.150** (0.0510)	− 0.142** (0.0505)	− 0.0867 (0.0627)	− 0.0869 (0.0626)
4	− 0.154*** (0.0439)	− 0.282*** (0.0620)	− 0.274*** (0.0616)	− 0.163* (0.0738)	− 0.163* (0.0738)
5	− 0.291*** (0.0432)	− 0.313*** (0.0667)	− 0.295*** (0.0663)	− 0.327*** (0.0818)	− 0.326*** (0.0819)
6	− 0.384*** (0.0630)	− 0.425*** (0.0979)	− 0.428*** (0.0976)	− 0.423** (0.135)	− 0.421** (0.135)
7	− 0.555*** (0.0755)	− 0.565*** (0.114)	− 0.551*** (0.113)	− 0.483*** (0.136)	− 0.483*** (0.136)
8	− 0.433*** (0.108)	− 0.209 (0.152)	− 0.189 (0.150)	− 0.303 (0.192)	− 0.304 (0.192)
9	0.200 (0.198)	0.543 (0.312)	0.569 (0.321)	0.487 (0.469)	0.488 (0.469)
Never (10)	− 0.428 (0.294)	0.467 (0.555)	0.559 (0.589)	0.703 (0.872)	0.706 (0.874)
<i>Pay is appropriate (pdaprpa)</i>					
Agree strongly (1)			0.173* (0.0677)		
<i>Reference group: Agree (2)</i>					
Neither agree nor disagree (3)			− 0.177*** (0.0515)		
Disagree (4)			− 0.303*** (0.0491)		
Disagree strongly (5)			− 0.619*** (0.100)		
<i>Wage gap</i>					
Wage gap (wg)				0.278*** (0.0731)	

Table 11 (continued)

	(1)	(2)	(3)	(4)	(5)
Wage gap positive (wgp)					0.219 (0.123)
Wage gap negative (wgn)					– 0.343* (0.135)
<i>Feeling about household's income (hincfel)</i>					
Living comfortably (1)	0.462*** (0.0283)	0.468*** (0.0411)	0.404*** (0.0409)		
<i>Reference group: Coping (2)</i>					
Difficult to cope (3)	– 0.685*** (0.0467)	– 0.763*** (0.0762)	– 0.685*** (0.0766)		
Very difficult to cope (4)	– 1.259*** (0.0780)	– 1.302*** (0.191)	– 1.194*** (0.192)		
Constant	8.798*** (0.137)	8.988*** (0.260)	9.133*** (0.258)	9.408*** (0.317)	9.434*** (0.319)
R ²	0.32	0.29	0.30	0.25	0.25
Observations	24,127	9947	9947	6303	6303

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As a check on the values recorded in the ESS, Table 8 also presents the average monthly salaries from the Eurostat Structure of Earnings Survey (SES) for 2010.⁸ For most countries, the difference between the average monthly salary in the ESS and the SES is not substantial. In Greece and Portugal, however, the difference is sizeable; ESS figures are consistently lower than the Eurostat SES figures. One potential explanation for this discrepancy is that Eurostat SES figures only cover firms with 10 employees or more while ESS figures cover employees in firms of all sizes. Furthermore, as Eurostat SES figures are reported by employers while ESS figures are reported by employees, another potential explanation for the discrepancy observed in Greece and Portugal is tax evasion; in other words, the Eurostat SES sample might not be representative. As for the dispersion in earnings, all Scandinavian countries except Denmark show low dispersion as seen by the coefficient of variation. The data for Ireland, Switzerland and Germany, on the other hand, show the largest dispersion.

⁸ https://ec.europa.eu/eurostat/databrowser/view/earn_ses10_20/default/table?lang=en, accessed on the 17th June 2023.

Table 12 Main regression results using quality of courts' job

	(1)	(2)	(3)	(4)	(5)
	<i>The job courts do (ctjob)</i>				
Very good job (1)	0.294*** (0.0721)	0.142 (0.111)	0.125 (0.109)	0.196* (0.0990)	0.198* (0.0992)
Good job (2)	<i>Reference group</i>				
Neither good nor bad job	- 0.230*** (0.0313)	- 0.203*** (0.0457)	- 0.179*** (0.0458)	- 0.187*** (0.0567)	- 0.186** (0.0568)
Bad job (4)	- 0.336*** (0.0447)	- 0.243*** (0.0662)	- 0.197** (0.0658)	- 0.261** (0.0835)	- 0.260** (0.0837)
Very bad job (5)	- 0.468*** (0.121)	- 0.237 (0.203)	- 0.204 (0.202)	- 0.379 (0.259)	- 0.379 (0.259)
	<i>Pay is appropriate (pdaprpa)</i>				
Agree strongly (1)				0.176** (0.0673)	
Agree (2)	<i>Reference group</i>				
Neither agree nor disagree (3)				- 0.186*** (0.0521)	
Disagree (4)				- 0.296*** (0.0494)	
Disagree strongly (5)				- 0.597*** (0.102)	
	<i>Wage gap</i>				
Wage gap (wg)				0.295*** (0.0750)	
Wage gap positive (wgp)					0.235 (0.124)
Wage gap negative (wgn)					- 0.361* (0.140)
	<i>Feeling about household's income (hincfel)</i>				
Living comfortably (1)	0.475*** (0.0283)	0.481*** (0.0411)	0.416*** (0.0409)		
Coping (2)	<i>Reference group</i>				
Difficult to cope (3)	- 0.677*** (0.0467)	- 0.755*** (0.0767)	- 0.682*** (0.0772)		
Very difficult to cope (4)	- 1.236*** (0.0777)	- 1.297*** (0.192)	- 1.195*** (0.193)		
Constant	8.703*** (0.135)	8.864*** (0.259)	9.006*** (0.257)	9.353*** (0.320)	9.380*** (0.322)
R ²	0.32	0.28	0.29	0.24	0.24
Observations	24,127	9947	9947	6303	6303

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 13 Main regression results using political pressure on courts

	(1)	(2)	(3)	(4)	(5)
	<i>Courts are unduly influenced by political pressure (ctppress)</i>				
Disagree strongly (1)	0.195*	0.132	0.0931	0.212	0.213
	(0.0757)	(0.0967)	(0.0957)	(0.118)	(0.117)
Disagree (2)	0.135***	0.143**	0.127**	0.144*	0.144*
	(0.0334)	(0.0470)	(0.0466)	(0.0572)	(0.0572)
Neither agree nor disagree (3)	0.000156	0.0453	0.0352	0.0539	0.0528
	(0.0329)	(0.0480)	(0.0476)	(0.0602)	(0.0601)
Agree (4)	<i>Reference group</i>				
Agree strongly (5)	− 0.233***	− 0.120	− 0.0981	− 0.195	− 0.194
	(0.0537)	(0.0878)	(0.0876)	(0.111)	(0.111)
	<i>Pay is appropriate (pdaprpa)</i>				
Agree strongly (1)			0.187**		
			(0.0680)		
Agree (2)	<i>Reference group</i>				
Neither agree nor disagree (3)			− 0.192***		
			(0.0517)		
Disagree (4)			− 0.303***		
			(0.0494)		
Disagree strongly (5)			− 0.607***		
			(0.102)		
	<i>Wage gap</i>				
Wage gap (wg)				0.287***	
				(0.0751)	
Wage gap positive (wgp)					0.228
					(0.124)
Wage gap negative (wgn)					− 0.352*
					(0.140)
	<i>Feeling about household's income (hincfel)</i>				
Living comfortably (1)	0.477***	0.478***	0.412***		
	(0.0283)	(0.0411)	(0.0408)		
Coping (2)	<i>Reference group</i>				
Difficult to cope (3)	− 0.682***	− 0.760***	− 0.685***		
	(0.0468)	(0.0764)	(0.0770)		
Very difficult to cope (4)	− 1.248***	− 1.289***	− 1.188***		
	(0.0785)	(0.194)	(0.195)		
Constant	8.643***	8.783***	8.940***	9.253***	9.280***
	(0.136)	(0.260)	(0.258)	(0.322)	(0.324)
R ²	0.31	0.28	0.29	0.24	0.24
Observations	24,127	9947	9947	6303	6303

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 14 Main regression results using frequency of court mistakes

	(1)	(2)	(3)	(4)	(5)
	<i>Frequency courts make mistakes (ctmistake)</i>				
Never (0)	0.514** (0.167)	0.316 (0.286)	0.288 (0.288)	0.723* (0.303)	0.723* (0.303)
1	0.415*** (0.0654)	0.320*** (0.0870)	0.287*** (0.0859)	0.438*** (0.102)	0.438*** (0.102)
2	0.206*** (0.0452)	0.131* (0.0639)	0.123 (0.0633)	0.116 (0.0819)	0.114 (0.0819)
3	0.0576 (0.0424)	0.0216 (0.0607)	0.0125 (0.0602)	0.0720 (0.0752)	0.0717 (0.0752)
4	0.00573 (0.0471)	– 0.0502 (0.0688)	– 0.0551 (0.0687)	– 0.0871 (0.0852)	– 0.0873 (0.0852)
5	<i>Reference group</i>				
6	0.0977* (0.0472)	– 0.0172 (0.0707)	– 0.0132 (0.0704)	0.0779 (0.0892)	0.0783 (0.0892)
7	0.125* (0.0490)	0.103 (0.0752)	0.110 (0.0746)	0.0559 (0.0960)	0.0556 (0.0960)
8	0.0947 (0.0656)	0.0384 (0.106)	0.0702 (0.105)	0.0333 (0.129)	0.0337 (0.129)
9	0.0520 (0.120)	0.379* (0.185)	0.413* (0.187)	0.328 (0.225)	0.329 (0.225)
Always (10)	– 0.278 (0.219)	– 0.308 (0.387)	– 0.235 (0.380)	– 0.215 (0.519)	– 0.214 (0.519)
	<i>Pay is appropriate (pdaprpa)</i>				
Agree strongly (1)			0.183** (0.0679)		
Agree (2)	<i>Reference group</i>				
Neither agree nor disagree (3)			– 0.195*** (0.0517)		
Disagree (4)			– 0.308*** (0.0491)		
Disagree strongly (5)			– 0.615*** (0.102)		
Wage gap (wg)				0.298*** (0.0741)	
Wage gap positive (wgp)					0.234 (0.122)
Wage gap negative (wgn)					– 0.369** (0.138)
	<i>Feeling about household's income (hincfel)</i>				
Living comfortably (1)	0.478*** (0.0284)	0.481*** (0.0413)	0.415*** (0.0411)		
Coping (2)	<i>Reference group</i>				

Table 14 (continued)

	(1)	(2)	(3)	(4)	(5)
Difficult to cope (3)	– 0.691*** (0.0467)	– 0.771*** (0.0766)	– 0.694*** (0.0772)		
Very difficult to cope (4)	– 1.260*** (0.0782)	– 1.307*** (0.192)	– 1.204*** (0.193)		
Constant	8.577*** (0.137)	8.783*** (0.262)	8.938*** (0.260)	9.237*** (0.327)	9.266*** (0.329)
R ²	0.31	0.28	0.29	0.24	0.24
Observations	24,127	9947	9947	6303	6303

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 15 Appropriateness of pay regression - all court assessment measures

	ctpart	ctjob	ctpress	ctmistake
Men	– 0.174*** (0.0232)	– 0.183*** (0.0231)	– 0.176*** (0.0231)	– 0.170*** (0.0231)
<i>Education level</i>				
ISCED I & II	– 0.0406 (0.0351)	– 0.0320 (0.0349)	– 0.0310 (0.0350)	– 0.0393 (0.0350)
<i>Reference group: ISCED III & IV</i>				
ISCED V	– 0.0184 (0.0255)	– 0.0200 (0.0253)	– 0.0113 (0.0255)	– 0.0134 (0.0255)
<i>Assessment of court operations</i>				
ctpart	0.0245*** (0.00681)			
ctjob		0.118*** (0.0156)		
ctpress			0.0675*** (0.0125)	
ctmistake				0.0355*** (0.00594)
<i>Feeling about household's income</i>				
Living comfortably (1)	– 0.390*** (0.0265)	– 0.392*** (0.0264)	– 0.387*** (0.0265)	– 0.387*** (0.0265)
<i>Reference group: Coping (2)</i>				
Difficult to cope (3)	0.444*** (0.0401)	0.429*** (0.0401)	0.439*** (0.0400)	0.439*** (0.0400)
Very difficult to cope (4)	0.568*** (0.0841)	0.560*** (0.0839)	0.558*** (0.0839)	0.559*** (0.0841)
<i>Wage depends on effort put into job (wgdpft)</i>				
<i>Reference group: Not at all true (1)</i>				
A little true (2)	– 0.144*** (0.0283)	– 0.135*** (0.0282)	– 0.139*** (0.0282)	– 0.137*** (0.0283)
Quite true (3)	– 0.271*** (0.0331)	– 0.266*** (0.0330)	– 0.271*** (0.0330)	– 0.265*** (0.0329)
Very true (4)	– 0.261*** (0.0464)	– 0.257*** (0.0461)	– 0.259*** (0.0466)	– 0.262*** (0.0460)
Constant	2.959*** (0.145)	2.766*** (0.147)	2.805*** (0.149)	2.861*** (0.145)
R ²	0.12	0.12	0.12	0.12
Observations	9929	9929	9929	9929

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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