

The Justice of Earnings in Dual-Earner Households

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Abstract

The rise in female labor market participation and the growth of “atypical” employment arrangements has, over the last few decades, brought about a steadily decreasing percentage of households in which the man is the sole breadwinner, and a rising percentage of dual-earner households. Against this backdrop, the present paper investigates the impact of household contexts in which the traditional *male breadwinner model* has been called into question on individuals’ subjective evaluations of the equity or inequity of their personal earnings. In the first step, based on social production function theory, we derive three criteria used by individuals to evaluate the fairness or justice of their personal earnings: compensation for services rendered, coverage of basic needs, and the opportunity to earn social approval. In the second step, we apply considerations from household economics and new approaches from gender research to explain why men’s and women’s evaluations of justice are determined to a considerable degree by the specific situation within their household—for example, by the status and income relation between the two partners. The assumptions derived regarding gender-specific patterns in justice attitudes are then tested on data from the German Socio-Economic Panel Study (SOEP) from the year 2007. We find that, among women, the perceived justice of personal earnings depends much more strongly on the particular household context. At the same time, opportunities for social comparison within the household and the relation between the woman’s personal income and that of her husband play central roles. Men’s justice evaluations, in contrast, are determined to a much greater extent by whether their income allows them to conform to traditional gender norms and concepts of “masculinity,” and by so doing, to gain social approval outside the household as well.

One of the main changes in the social structure of western societies over the past thirty years has been the increase in female labor market participation. In contrast to the *golden age of marriage* in the 1950s and 1960s, female labor market participation today is no longer an episode preceding family formation, since many women also remain employed after getting married. This has led to a decline of the previously dominant household model with the man as the sole breadwinner. It has been accompanied by another process, referred to in the labor market research as the erosion of the “typical” employment arrangement, which is finding expression especially in increased forms of part-time and temporary employment. Together, these two processes are bringing about a pluralization of income structures within households. Along with the traditional single-breadwinner households, there are now increasing numbers of households with different combinations of full-time, part-time, and marginally employed or unemployed spouses or companions. Either due to economic necessity or because the woman also wants to have a career of her own, in an increasing number of households, the man’s income makes up only part of total household income. In the research on inequality, this observation has led to analyses taking not just individuals but entire households as the object of analysis. This is because, first of all, individual poverty risks can be absorbed or intensified by the household, and individual levels of well-being can be increased by the income flowing into the household. Second, individual access to the educational and employment system is determined in large part by the amount of economic, social, and cultural capital in a household.

In our view, not only have these changes affected the objective structures of social inequality; they also play a crucially important role in attitudes regarding how people perceive and assess

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their own economic situation. The more the household context determines the individual's supply of basic goods—which in turn entails specific opportunities and restrictions—the more the resulting personal attitudes will be affected by the specific arrangements within the household. This applies particularly to how people assess the fairness or justice of their own earnings. After all, a fair wage is not measured only by the level of compensation provided in the workplace for services rendered by the individual; it is just as important whether and to what extent the income earned allows the individual to meet the expenses to maintain his or her lifestyle. But to the extent that the level of need is determined not only by the lifestyle of one person but that of a multi-person household—and if, in addition, both spouses or companions contribute to the household income by working—the household structure takes on importance for the evaluation. Ultimately, the changes households are currently undergoing are leading to an erosion of the model of the gender-based division of labor that has long characterized Western societies. At its core, this model states that the man is to produce an adequate income through his work *outside* the home in order to provide a reasonable standard of living for his wife, who is occupied as a homemaker *within* the home, and for his children. To the degree that the real conditions in a household diverge from this ideal model, those social identities that are based on personal income and oriented toward the male breadwinner model are called into question (for men), while factual evidence of income discrimination becomes more apparent (for women). This is the case for men because they can no longer live up to the normative expectations of the traditional model due to the loss of their main breadwinner status, and for women because in dual-earner households, they obtain possibilities for social comparison under complete information about income potentials on the market.

Against this backdrop, the present paper addresses the question of how employment and income structures in dual-earner households affect the ways people evaluate the fairness, or justice, of their personal earnings. In a first step, based on previous—mainly individually oriented—models from empirical justice research as well as social production theory, we identify three criteria used to evaluate the justice of earnings. Following on this, based on considerations from household economics, we show how the conditions within the household determine the ways these three criteria are applied in evaluating personal earnings. Crucial to this analysis is the observation that women and men use very different logics in evaluating their earnings and thus apply the three criteria in gender-specific ways. Here, traditional gender norms play just as much a role as the existing arrangements in the particular household for the spouse's or partner's employment. On this basis, we derive hypotheses on the dependence of individual fairness evaluations on the structures within the household, and test these hypotheses on data from the German Socio-Economic Panel using multivariate analysis. In conclusion, we discuss the results in terms of their implications both for questions of income justice and for the methodologies employed here.

1. The justice of personal earnings

When attempting to understand how changes in the employment structure of households have affected how people perceive the justice of their own income, we first have to determine under what conditions earnings can be described as either “just” or “unjust”.¹ As a rule, the category of justice, can only be applied to income if that income results from individual or institutional decisions (Young 1995). Only when it can be determined who is “responsible”

¹ The individual consequences of unjust income clearly demonstrate that income equity is indeed a subjectively relevant category of evaluation. There is now an array of empirically well documented findings showing that the experience of injustices does not just affect attitudes and behaviors, but also produces symptoms of psychological and physical illnesses (see Cohen-Charash/Spector 2001, Colquitt et al. 2001, Siegrist et al. 2004, Vegchel et al. 2005).

are injustices actually perceived as such (Mikula 2002: 268). If earnings—as assumed in the neoclassical economic model—were only to result from the supply and demand conditions on the markets, it would be impossible to assign responsibility to any particular individual or decision-making authority (Hayek 1977). The income amount would result from the conditions of supply and demand, which change from one hour to the next and cannot be controlled by either economic actors themselves or by any other overarching authority (Coleman 1974). For this reason, it is impossible under market conditions to determine who is responsible, and earnings or profits also cannot be evaluated from the point of view of fairness (Hayek 1977). In the capitalist economic systems that exist today, people's earnings are determined by market processes, but they are also in large part the result of—in the broadest sense—personal decisions: for example, when the management of a company sets the wages for different employee groups, or when unions and management negotiate categories or pay levels in the negotiated wage structure or agree on legal wage rates (for example, minimum wage), or when other labor or social policy provisions exist. In each of these cases, people or groups of people can be identified to whom one can assign responsibility for the fact that individual earnings do not meet subjective expectations. It is also decisive, of course, that these expectations must be formulated based on legitimate claims.

It is not subjective, idiosyncratic expectations but rather claims founded on social norms and processes of social comparison that people take as the yardstick for evaluating the fairness of their personal earnings. Here the norm of reciprocity² plays a fundamental role. It states that compensation for previously rendered services should be provided in the form of a corresponding service in return. The goods exchanged do not have to be the same: they can differ (work in exchange for wages) but should possess the same value—in which case, according to Gouldner (1960), we are talking about heteromorphic reciprocity. If a specific labor output is not adequately compensated, in this sense, this constitutes a violation of the norm of reciprocity. At its core, the reciprocity norm depicts what has been described in previous papers on social exchange theory as a normative framework for all exchange situations (Fong et al. 2006). Homans (1968) thus argues that two actors in an exchange relationship would have the expectation that the costs incurred will be compensated for by corresponding benefits, and that higher costs will be associated with higher benefits. Costs are considered as not just current investments made in the particular exchange situation, but also as investments made previously—for example, education or occupational experience (Homans 1968: 223, see also Adams 1965). At the same time, the expectation exists—as discussed in equity theory in particular (see Mikula 2002)—that one's personal effort-reward relation is the same as that of one's exchange partner. The other person should therefore not enjoy any advantage in terms of lower costs or higher benefits.

The problem, however, is that the actors cannot determine the value of the costs and benefits—their own as well as those of others—based solely on the local exchange situation (Berger et al. 1972: 122). The value of the individual exchange components associated with a particular level of remuneration can only be determined through processes of social comparison. Particularly in the case of income, comparisons with colleagues in a similar work situation (Fehr/Schmidt 2006) or with generalized reference persons (a coworker or a colleague, a relative or neighbor) or reference groups (a group of coworkers, a craft group, an industry-wide pattern) are important (Adams 1965: 279). Whether these benefits will provide

² The norm of reciprocity can indeed be described as a universal norm of human coexistence common to all cultures, for which people are also willing to live with disadvantages in order to achieve it (Bowles/Gintis 2004, Diekmann 2004, Diekmann/Voss 2008, Falk/Fischbacher 2006, Fehr/Gächter 2000, Fehr/Schmidt 2006, Gintis et al. 2008).

adequate compensation for the costs, and whether the demands of heteromorphic reciprocity have been met can only be answered based on processes of social comparison. Individuals are thus forced to rely on information about what people with similar qualifications and similar job performance receive.

With the reference to the norm of reciprocity and processes of social comparison, the criteria people use to evaluate their personal earnings are not yet sufficiently known. This becomes clear when one asks, in a much more fundamental sense, what functions personal earnings fulfill for individuals. The theory of social production functions can provide insight into this. Its fundamental idea is that human activity is nothing other than the constant “attempt to secure the resources, goods, events, and services that are required for the conduct of everyday life” (Esser 1999: 86). Individuals are thus not passive consumers; rather, their activities are aimed at satisfying at least two fundamental needs under the social conditions of their lives, which are shaped by opportunities and restrictions: they seek to (1) increase their physical well-being, and (2) obtain social recognition or approval (Lindenberg 1986, 1991).³ Human beings share the first of these objectives with other biological organisms: after all, physical well-being forms the precondition for biological reproduction. The second results from the unique anthropological feature of human beings as “deficient creatures” (A. Gehlen): the fact that they have an “urgent and constant need to gain a secure basis for action, mediated by society, because human beings lack an adequate genetic regulation of their actions and orientations” (Esser 1999: 94). The assumption here is that most actions are carried out because and as long as they serve to meet these two general needs (Esser 1999) or goals (Lindenberg 1991). In this sense, actions and the goods or resources attained through them, are mainly means for the production of physical well-being and/or social recognition.

This is equally true of employment (see Kocka/Offe 1999). People work because and only to the extent that by doing so, they can “produce” physical well-being and social recognition. This is because, first, the earnings they derive from employment provides the necessary material resources for everyday life. The claim that can be derived from this is therefore that a job must provide the resources necessary to ensure that the individual can maintain his or her way of life. This kind of claim is legitimated by an understanding of employment as the main source by which human beings obtain the means to live, as has emerged historically in Western societies through the transformation of labor and its social organization over the course of the nineteenth and twentieth century (Kocka 1999, Offe 1999). This normative model for the “work society” becomes evident in welfare state systems of social security that are structured around the principle of subsidiarity: they only intervene when no independent earnings are available. Which level of need is considered legitimate and which is not are determined first by the institutional regulations and second by social standards in a society.⁴ An income that does not allow individuals to meet the social demand of providing for their own material needs through their own paid labor should, as a result, be perceived as unjust.

Earnings do not serve exclusively to ensure and promote physical health; they are also a means of gaining social recognition. Having a certain level of income allows people to surround themselves with the material objects that others value; the things that people use to distinguish themselves from others—in the sense of a Bourdieuan “social distinction”—and thus to clearly display their own status in the social hierarchy. At the same time, fulfilling social expectations for personal behavior necessitates having available income. For example,

³ Social approval relates, according to Lindenberg (1996), to status determined by the possession of scarce goods (positional goods), to the affirmation of behavior, as well as to affective or emotional support from others.

⁴ Compare this with the debates and various approaches to determining and measuring poverty (for an overview, see Ludwig-Mayerhofer/Barlösius 2001).

when the male breadwinner norm is viewed by the majority of people in a society as binding, men attain social recognition by behaving according to the norm. But the precondition is having an adequate income that allows those to whom the norm applies to meet the behavioral expectations. Those who do not possess an adequate income—whether because they do not work or because their earnings are too low—cannot meet the behavioral expectation and will therefore enjoy less social approval. In this case, income does not contribute to the production of social approval.⁵

One can therefore differentiate three central criteria used by individuals to evaluate the justice of their earnings: (1) compensation for current and past services rendered, (2) coverage of basic needs, and (3) the opportunity to earn social approval. What level of claims can be derived from each of these three criteria depends, first of all, on processes of social comparison, and second, on the conditions of the person's particular social context. Whether the earnings actually do provide adequate compensation for the services rendered can only be judged based on information about other employed people's effort-reward relations. What income level actually does meet a person's needs depends on the number of people who have to live with that particular income. And finally, it can only be determined whether an income actually does help the individual attain social approval when it becomes clear which behavioral expectations the individual wants to fulfill and what kind of approval he or she will derive. Our central thesis is that the application of these three criteria in evaluating personal earnings follows gender-specific patterns, and the earnings and income structure in dual-earner households intensifies this gender-specific logic. Explaining this in detail will be the subject of the next section.

2. Households as the context of gender-specific evaluations of personal earnings

The constant increase in female labor market participation over recent decades in Germany is due mainly to the increasing numbers of women working in part-time and marginal jobs (Blossfeld 2007; Cornelißen 2005). At the same time, women are also employed in a few fields with lower wage levels. The more women there are working in a particular occupation, the wider the wage gap is between men and women (Achatz et al. 2005, Hinz/Gartner 2005). This structural pattern on the labor market has direct consequences for how people assess whether their personal efforts and investments are being appropriately—that is, justly—compensated. Looking at the results of the SOEP innovation study from the year 2008, “people working in the same occupation” and “co-workers in the same company” are used as the main points of reference for such comparisons. Women who work in gender-homogeneous fields only have the opportunity for gender-homogeneous comparisons, and therefore can also only take a relatively low level of pay as their point of orientation. In other words, since women remain largely among themselves on the labor market, in many cases they can only compare themselves with other women, who—if one follows recent studies on the *gender wage gap*—show a 23 to 25 percent lower wage level than men in comparable positions. It is precisely here that the earnings structure in the household becomes relevant. Women in dual-earner households are not limited to comparing themselves solely with other women in the workplace. Since their husbands are also employed, they have a reference point in their immediate social environment that provides them with complete information: they know their partner's endowment level and his investments, and they know—in most of the cases—what level of compensation is associated with that. Thus, women in dual-earner

⁵ More recent studies from justice psychology see this as the main reason why the justice of earnings has such a high subjective value: “people primarily care about justice because it serves their need to belong, and because it validates their status and standing in groups they deem important” (Skitka 2003: 288). Unjust pay is interpreted as an expression of disrespect for the person's material, social, and personal goals and interests, and as a sign of not belonging and of social exclusion (see Lind/Tyler 1988).

households have a far higher chance of recognizing the objective earnings differences between men and women, and of deriving corresponding expectations for their own income from the comparison. This is particularly true of women whose partners share similar characteristics relevant to the labor market. Because of the similar components of investments made—for example, education or work experience—women can make direct comparisons between their benefits and those reaped by their partners. Dual-earner households—particularly in relationships between partners with similar educational or status levels—open up the possibility for women to identify gender-specific income inequalities. This can express itself in higher demands or expectations—because these demands are oriented toward the man’s wage level—and more acute perceptions of injustice regarding their own income.

The importance of earnings and income structures in dual-earner households for a gender-specific evaluation of personal earnings on the basis of the other two criteria—need and possibility to gain social approval—is not rooted in the objective conditions on the labor market but in the existing gender norms. This will be shown in the following based on considerations from household economics. From a household economic perspective, households are comparable with firms (see Becker 1981). They produce goods—such as well-being, health, prestige, pleasure of senses—which serve the household members in achieving their goals. For the production of these commodities, two input factors are used: money and time. Since in both cases, the inputs are scarce commodities that cannot be multiplied, the two partners have to agree on how they are allocated. The decisive advantage of a household containing at least two partners is that the production of the commodities can be achieved through the division of labor. Each of the two partners can concentrate on specific tasks and achieve efficiency advantages through specialization. Since the input factor money is usually generated outside the household, while commodities are generated through the expenditure of time inside the household, the central allocation problem consists in determining who has to spend how much time outside and inside the household.

It has been well documented empirically that the actors do not behave as rationally as the classic household economic approaches assume—that is, they do not distribute resources solely on the basis of who can carry out the particular tasks most efficiently (see Schulz/Blossfeld 2006). Rather, they also allocate time, under the particular influence of existing gender norms, that is, the ideas existing in society about “masculinity” and “femininity” and the associated behavioral expectations. Here, the traditional male breadwinner / female homemaker model plays a decisive role. In this framework, the man’s task is to generate the resources the household requires *outside* the household (male breadwinner model), and the woman’s task is to use these resources and her own time to produce the goods needed *within* the household (female homemaker model). Despite rising female labor market participation, this conception of a gender-specific division of labor appears to have retained a comparably high degree of persistence (Breen/Cooke 2005), and relationships based on models that do not adhere to this division of labor also tend to adapt more and more to this model over time and especially after the birth of a child (Schulz/Blossfeld 2006).

Given the dominance of the male breadwinner / female homemaker model, any violation of the traditional model for the allocation of time, first of all, must be justified, and second, it depends on processes of negotiation in which the potential power of the partners in negotiation is decisive (Ott 1992, 1993, 1995). The partner’s position of power is dependent on the financial resources that he or she can generate outside the home per time unit. The larger this contribution is, the more advantageous that partner’s position of power is. Earnings are therefore not just a resource for producing commodities needed or desired by the

household; earnings also have a status value because they can strengthen or weaken a partner's relative position of power within the household (Ludwig-Mayerhofer/Allmendinger 2003, Ludwig-Mayerhofer et al 2006, Wimbauer 2003). It has been shown empirically that the status value of money one has earned personally is gender-specific in a dual sense, leading to unequal distributions of power (Bittman et al. 2003): first, the money earned by the woman outside the household can be converted to a lesser degree into time within the household.⁶ Second, the status value follows a gender-specific orientation: for men, it is outwardly oriented, and for women inwardly oriented (Pahl 1983, Zelizer 1994). For women, the position of power within the household is determined much more by the level of personally earned income than is the case for men.

The “doing gender” approaches (West/Zimmermann 1991) point to a further important aspect of gender norms. These norms do not just prescribe particular behavioral norms and relieve the individual of complex decision-making processes; in the process, they also define criteria for gender identity. When norms demand that the man earns an income that meets his family's needs, having such an income level becomes a precondition for the construction of a male identity. Then, not only does the following rule apply: “Because I am a man I have to earn a high enough income to meet my family's needs,” or conversely, “Because I am a woman, my income does not have to be high enough to meet my family's needs.” The opposite applies as well: “Since my income allows me to meet my family's needs, I am a man.” Fulfilling norms connected with either the male breadwinner or the female homemaker model thus becomes a constituting element of male or female identity (Pfau-Effinger 1998). A series of empirical studies have shown that this connection between income level and male identity actually does exist (see Baur/Lüdtke 2008). The increase in female labor market participation may call precisely this element of male identity into question. Men are no longer the sole breadwinners of the family in these kinds of household contexts, and as such, they lose a constituting element of their gender identity.

The continuing power of traditional gender norms as expressed in the male breadwinner / female homemaker models—despite their gradual erosion in some areas—also means that the criterion of need in evaluating personal earnings takes on different degrees of importance for men and women. If the normative expectation is that the man is the “provider” for the family, this criterion should play a much stronger role among men in deciding whether their own earnings are just or unjust. After all, only when the man's personal income enables him to actually meet the family's needs would he fulfill one of the three aforementioned criteria. In contrast, this criterion would be much lower in importance among women, since the female gender norm does not apply to earning an income that meets the family's needs.

Fulfilling gender-specific behavioral expectations in the household is thus a central component of the individual production function in relation to social approval. And this is the case in a dual sense: first, because fulfilling these behavioral expectations entails positive social sanctioning, and second, because this contributes to the construction and stabilization of a corresponding gender identity. In both cases, earnings constitute the means by which one is able to fulfill the particular behavioral expectations.

From the assumptions presented on the importance of household earnings and income structures for gender-specific justice evaluations of personal income, we can derive the following hypotheses, which will be empirically tested in the following:

⁶ Schulz and Blossfeld (2006: 39) come to the conclusion that “Women generally [have to] achieve more, that is, work more hours or have a higher income in order to rise to at least the same level of negotiation as men.”

H₁: Women in dual-earner households evaluate their personal earnings as more unjust than women in single households, which should be especially true for couples in which the two partners have a similar status.

H₂: Men evaluate their personal earnings as unjust when their partner contributes a larger share of household earnings than they do.

H₃: The larger share the woman contributes to household earnings, the more she will evaluate her personal income as “just.”

H₄: Men evaluate their personal earnings much more in relation to household need than women do.

3. Data, Methods, and Variables

To test our assumptions, we use data from the German Socio-Economic Panel Study (SOEP) from the year 2007. This dataset is particularly well suited to our research question because it routinely collects information on both partners in a household (Wagner et al. 2007). The 2007 wave also contains a question module on how people evaluate the fairness of their personal net income. Since the hypotheses under examination do not necessarily require⁷ a longitudinal data structure, we are using all SOEP subsamples available for the year 2007. Because of the different sizes of the SOEP subsamples cross-sectionally weighted household or person-related results are reported.

Since this paper focuses on personal earnings, we only take those persons into account who reported personal earnings in the year 2007 and lived in their own household or shared a household with a spouse or partner. Along with full-time and part-time work, we also include persons in marginal employment. We exclude from the analysis those who were in occupational training or were registered unemployed at the time of the survey, as well as employed minors or other employed persons living with a couple in the same household.

Table 1: Description of the Household Samples Used

	Sample I		Sample II	
	All households		Dual-earner households	
	Single households in parentheses			
	Men	Women	Men	Women
N	5087 (775)	4277 (594)	2591	2598
Relative percentage among all employed persons			58	68
Age (Mean)	44 (41)	43 (42)	45	42
Percentage working part-time	3.8 (6.0)	40.0 (18.0)	3.3	45.5
Net hourly wages (€)				
Mean	11.60 (9.65)	9.10 (9.35)	12.20	9.20
Median	10.40 (8.70)	8.10 (8.50)	10.50	8.10
Net income (monthly, in €)				
Mean	2205 (1683)	1204 (1383)	2212	1070
Median	1900 (1600)	1050 (1300)	1900	925
“Just” net income (monthly, in €)				
Mean	2437 (1982)	1331 (1560)	2610	1265
Median	2000 (1800)	1200 (1500)	2100	1100
Justice evaluation J (Mean)	-1.159 (-1.187)	-1.148 (-1.126)	-1.157	-1.149

⁷ We cannot completely rule out that a structured process of self-selection occurs in the process of household formation that would violate the assumptions about the independence of the error terms in cross-sectional analyses. However, since SOEP currently contains too few longitudinal observations, we chose to present only cross-sectional analyses here.

In the following, we distinguish between two different samples used in the analysis. The first sample is constituted by employed persons in single households and employed spouses or partners in multi-person households in which either one or both partners earn their own income.⁸ The second sample includes just the spouses or partners in dual-earner households. Table 1 lists the number of men and women as well as the net income, hourly wages, and average justice evaluations, separated by gender for both samples. For comparison, the first sample also includes the corresponding figures for single-person households in parentheses. Here some of the differences between the sexes and household types already become apparent. Thus the percentage of women working part-time in dual-earner households is 45 percent, in single-person households 18 percent. The percentage of men working part-time is lowest in dual-earner households, at 3.3 percent. Women in single households earn a higher monthly income than women in dual-earner households. Among men, the opposite is the case: here, men living in single households earn the least. From Table 1, the existing income differences between men and women are evident (see especially net hourly wages).

To test the hypotheses, in the first step, we report descriptive results. To this end, the mean values of the evaluations of personal earnings and ideas about just personal earnings are compared by gender, occupational status,⁹ and household type. In the second step, we carry out a differentiated test of these hypotheses using linear regression analysis. The dependent variable is the justice evaluation, which we operationalize following Jasso (1978). The regression models are estimated separately for men and women and reported in Tables 2 and 3. The first model uses the sample with all three household types; the second model focuses on men and women in dual-earner households.

Justice evaluations of personal earnings

SOEP first began surveying the perceived fairness of personal income in the 2007 wave, in a two-step process. First, employed persons were asked to estimate whether their net income was just or unjust (*xp52*)¹⁰. Among the 11,672 employed persons who answered this question, approximately 60 percent assessed their earnings as just. The remaining 40 percent were asked in two steps to name what a just monthly net income would be (*xp5301*). 4,066 respondents provided an answer in euros. For those who rated themselves as being paid fairly in the first step, the current net income (*labnet07*) also provided in SOEP constitutes what the respondent considers “just earnings.” Thus, a variable can be created that contains the monthly net income in euros perceived by the respondent as just. The mean and median of this just income is reported in Table 1 for both samples as well as for the single households.

From the data on actual earnings and the level of net income perceived as just, we calculate, following Jasso (1978), a justice index that serves as an independent variable in the regression models. The subjective justice evaluation (J) is determined from the logarithmic ratio of the individual’s actual earning (A), i.e. current net income, and his or her just earning (C) (Jasso 1978).

$$J = \ln\left(\frac{A}{C}\right)$$

If an income is perceived as just, the actual and just income are identical, and the justice index (J) takes on the value of zero (logarithm of 1). The more actual income diverges from the

⁸ Households with same-gender partners are not included in our analyses.

⁹ We pool the individual values from the International Socio-Economic Index of Occupational Status (ISEI) into ten groups.

¹⁰ The original variables used in SOEP are given in parentheses.

perceived just income, the greater the degree of earnings injustice, and the justice index (J) diverges from zero. With negative values, the respondent views his or her current earnings as unjustly low, while positive values indicate that current earnings are unjustly high.

Independent variables or covariates in the regression models

In the regression models, four theoretically substantiated sets of characteristics are used as independent variables:

(1) *Investments made in the framework of work*: We initially operationalize these investments through the classic human capital variables of education and professional experience. The educational level is taken into account in the form of the CASMIN educational classification (*casmin07*). To measure professional experience, we use the information available in SOEP on labor market experience in number of years. Since this experience may be derived from both full-time and part-time employment, the periods of time given for both types of employment are added together (*expft07* and *exppt07*), whereby we only take into account half of the time spent in part-time employment.¹¹ Another important investment aspect of the question of just compensation is the amount of time actually worked. Thus, along with the contractually agreed weekly working hours (*xvebzeit*), we also take into account the number of overtime hours stated by respondents (*xuebstd*). As education and time investments increase, earnings should, *ceteris paribus*, be judged as increasingly more unjust. Among men in dual-earner households, we expect only increased overtime hours to have an effect, but not contractually agreed working hours. Since previous analyses of income justice have shown that persons in part-time or marginal employment display a significantly lower perception of injustice (Liebig/Schupp 2008), we control for both forms of employment by including two dichotomously coded variables (*xp13*).

In the first hypothesis, we assume that status homogeneous dual-earner households provide especially women with the possibility to compare their own effort-reward relation with men. Correspondingly, a dichotomously coded variable is included in the dual-earner model, which marks the existence of a relationship between two partners of homogeneous status. A relationship is considered “status-homogeneous” when the occupational status values (*isei07*) of the two partners according to ISEI (Ganzeboom et al. 1992) differ by fewer than ten scale points. This is connected with the assumption that women in particular tend to describe their income as unjust when they live in status-homogeneous relationships, because in this context, the generally lower pay levels become immediately visible.

(2) *Endowment levels and financial need*: with regard to the expectation of an income that covers basic needs, in dual-earner households, we expect the level of total monthly household net income to have a positive influence on justice evaluations. The above-mentioned assumption of a lower level of expectations among women can be tested explicitly by taking into account the current household earnings. The corrected monthly household income available in SOEP (*ahinc07*) is used.

The classic criterion of need—and the guiding principle behind welfare state transfer systems—is the number of children who need to be provided for by or within the household. Furthermore, the level of need determines the consumer preferences of a household—an aspect that has received little attention in the research to date. A household should have a lower level of need in everyday life if the possibility still exists, with otherwise the same endowment, to put money aside on a monthly basis—for example, as savings deposits

¹¹ Following the model of human capital theory, we add a quadratic term to the regression models for occupational experience, since the value of occupational experience no longer increases to the same degree from a certain point in time on.

(*xh5201*). Thus, monthly income is not entirely used up by normal expenditures. If a household is capable of creating these kinds of reserves, this should also be expressed in a lower perception of injustice regarding personal earnings.

Additionally, we control in the models for the respective individual endowment level. With the assumption of a positive effect on the justice evaluation, we use the gross monthly income of the respondent (*labgro07*), that is, the higher the income actually is, the more it will, *ceteris paribus*, be viewed as just. Here we expect differences to appear in the effect sizes between men and women. This is due to the fact that, under the male breadwinner model, female employment activity is aimed ultimately at closing gaps in the provision for household needs caused by inadequate male earnings. Women will therefore tend to content themselves with a lower income as long as the income situation of the household improves.

(3) *Status value of earnings*: Occupational prestige (*mps07*) is used as an indicator for an orientation toward external status. We expect that men will connect the expectation of higher income with higher social prestige, which reflects the external status value of earnings for men in contrast to woman.

In dual-earner households, earnings take on an internal status value as well, since the share that one partner contributes to the household income through his or her earnings determines his or her relative power position within the household. This internal status value is more important for women than for men. The variable used results from the division of individual net income (*labnet07*) by the corrected household net income (*ahinc07*). At the same time, the validity of the male breadwinner model gives rise to the suspicion that men whose partners contribute a significantly larger share to the household income tend to perceive their own earnings as unjust. In order to be able to test this, we also include a dichotomously coded variable that takes on the value of 1 when the partner is the main wage earner (more than 50% of household income). We expect this effect to be stronger among men if they were still the main earner in the household in the year 2005, that is, if they went through a role change within the household.

In order to show that the household context is relevant for the evaluation of personal earnings, we test the importance of household type for the first sample in the regression model. Here the decisive factor is whether an effect of household size is actually found despite our controls for the other independent variables. This will be tested through a dichotomously coded variable that shows whether a person lives in a single or multi-person household. Women in single households are expected to estimate their earnings as more just than women in two-person households due to their gender-homogeneous activity on the labor market and lack of possibilities for comparison.

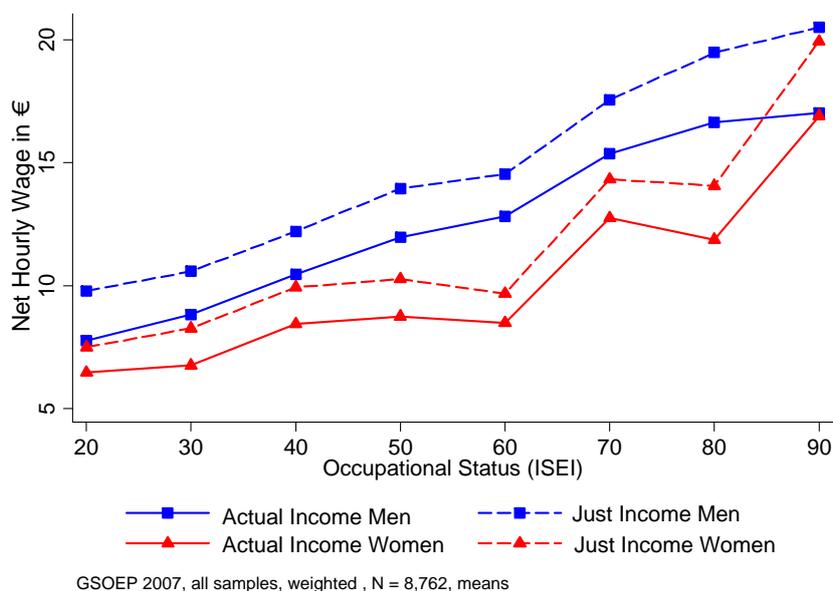
Finally, two control variables for region of residence (East-West) (*nuts107*) and self-employed work (*stib07*). Even 20 years after the fall of the Berlin Wall, there is a wage gap between East and West Germany that—along with other regional wage differences—is important particularly in connection with questions of just earnings, since relevant comparisons can still be made between East Germans and West Germans. Correspondingly, we expect to find a higher level of injustice in East Germany—as was the case already in 2005 (Liebig/Schupp 2008). At the same time, we assume, based on previous findings on earnings evaluations, that self-employed persons perceive higher levels of injustice. We therefore control for this through a dichotomously coded variable for self-employment.

Finally, the situation of a dual-earner household allows people to orient their own justice evaluations toward the assessment of their partner. In studies on voting behavior of spouses (De Graaf/Heath 1992) it was shown that women take men more strongly as a point of orientation than vice versa. Applied to evaluations of justice, we therefore expect that women's evaluations of their personal earnings depend more strongly on their partner's evaluations than vice versa. In the case of women with a higher status, this connection should be weaker than with women with a lower status. To this end, we include an interaction term for the partner's evaluation and the respondent's own occupational prestige (*mps07*).

4. Results

In Figure 1, the mean actual and just net hourly wages are shown, divided by occupational status group and gender. The solid line shows the development of actual net hourly wages, and the dashed line shows the net hourly wages viewed as just. To start with, the well-known finding is confirmed: women earn less than men with the same occupational status. This gender wage gap can also be identified when looking at *just* net hourly wages—in the mean, their wages lie below men's *actual* hourly wages (those groups with a higher occupational status constitute an exception). This means that also in a “fair world,” in which everyone is paid the hourly wage that he or she considers just, a gender wage gap would still exist. Despite the widely held view of “equal pay for equal work” and the legally established prohibition of wage discrimination, women do not claim higher pay supplements that would be capable of balancing out the existing differences from men in the aggregate. Comparing the difference between actual and just wages shows that between the two sexes, no statistically significant difference can be identified: men and women do not differ fundamentally in their earnings expectations. This means that the degree of perceived earnings injustice—despite existing wage differences—is the same between men and women (see also Table 1, last row).

Figure 1: Actual and Just Net Hourly Wages for Occupational Status and Gender



The general assumption is that it is decisive whether one lives in a single or multi-person household for the assessment of personal income. In Figure 2, this is tested, first on the descriptive level by comparing justice evaluations in dependence on occupational status, household status type, and for men and women separately. It becomes apparent that the perceived injustice varies by occupational status, and that differing patterns of evaluation are

necessary to test the household differences on the basis of multivariate statistics. To this end, we introduce an OLS regression model, estimated separately for men and women (Table 2). As expected we find a positive effect of gross hourly wages. Higher earnings are thus assessed as more “just” than lower earnings. It is noteworthy that the income effect among women is considerably—that is, statistically significant in an interaction model—lower than among men: women accept much lower earnings than men do.

Table 2: Determinants of Justice Evaluations (J) of Personal Net Income by Gender in Single and Multi-Person Households.

	Justice Evaluations of Personal Net Income (J)			
	Men		Women	
<i>Level of endowments and needs:</i>				
Gross monthly income (log)	.1781 ^{***†}	(.0088)	.1247 ^{***}	(.0088)
Number of children	-.0164 ^{**}	(.0058)	-.0309	(.0691)
Possibility to save (1 = yes)	.0478 ^{***}	(.0095)	.0424 ^{***}	(.0100)
<i>Compensation:</i>				
Education (CASMIN)	-.0118 ^{***}	(.0018)	-.0102 ^{***}	(.0020)
Occupational experience	-.0101 ^{***†}	(.0014)	-.0036 [*]	(.0015)
Occupational experience quadr. x .01	.0020 ^{***†}	(.0003)	.0008 [*]	(.0003)
Contractually agreed hours (in hrs.)	-.0007 [*]	(.0003)	-.0017 ^{***}	(.0004)
Hours per week (in hrs.)	-.0043 ^{***†}	(.0011)	-.0116 ^{***}	(.0017)
Part-time employment (1 = yes)	-.0892	(.0553)	.0628 ^{***}	(.0131)
Marginal employment (1 = yes)	-.1969 ^{**†}	(.0698)	.1944 ^{***}	(.0225)
<i>Status value:</i>				
Occupational prestige (MPS)	-.0012 ^{***†}	(.0001)	.0000	(.0004)
<i>Household type</i>				
Single household (1 = yes)	-.0263 [†]	(.0108)	.0253 ^{**}	(.0120)
<i>Control variables:</i>				
Self-employed (1 = ja)	-.1463 ^{***}	(.0178)	-.1824 ^{***}	(.0218)
Region	-.0537 ^{***}	(.0118)	-.0751 ^{***}	(.0125)
Constant	-1.320 ^{***}	(.0674)	-.9500 ^{***}	(.0611)
R ²	.141		.091	

Notes: SOEP 2007, all samples, N = 5087 / 4277, household weighted, unstandardized regression coefficients, standard errors in parentheses, * p_t < .05; ** p_t < .01; *** p_t < .001.
† Coefficients differ significantly (interaction model)

The number of children is important only for the justice evaluations of men. Men with children tend to assess their income as more unjust, while women with children do not. This corresponds to the normative expectation that the man is the provider for his family. On the other hand, we find no gender-specific effect in savings possibilities. If a household shows a lower level of consumption and is therefore not capable of putting money into savings on a monthly basis, the result is an equally more positive evaluation among both women and men. Both of these findings indicate that the level of a household’s need is seen as a legitimate claim to higher pay.

In regard to the compensation for personal human capital and the time spent on work, first of all we find no gender-specific effects. Men and women with higher education and higher occupational experience evaluate their income *ceteris paribus* as more unjust, in the sense that they consider themselves underpaid. Correspondingly, the expectation exists that higher education and higher occupational experience justify higher earnings. Also the significant effect of the quadratic term for occupational experience shows that decreasing value of occupational experience over time is considered just. Higher working hours should be reflected in a similar way—in relation to the contractually agreed working hours or the

number of overtime hours worked—in a higher income. At the same time, women’s justice evaluations depend much more heavily on overtime: the effect among women is more than twice as high as among men. Part-time and marginal employment results in a more positive evaluation of income only among women.

With regard to external status value of income, the indicator of occupational prestige used shows a significant negative effect only among men. Those who work in an occupation associated with higher social standing also expect higher earnings. This means: income injustices are identified by men where occupational prestige is not reflected in correspondingly high income.

Finally, the significant effect of household type (single vs. multi-person household) confirms the descriptive finding and the assumption from Hypothesis 1: women in single households evaluate their income—despite control for the characteristics used—more positively, and men more negatively. Women living alone feel *ceteris paribus* more justly paid. We interpret this as a result of the lack of gender-heterogeneous possibilities for comparison.

Table 3: Determinants of Subjective Justice Evaluations (J) of Personal Net Income by Gender in Dual-Earner Households

	Justice Evaluations of Personal Net Income (J)							
	Individual model (M ₁)				Household model (M ₂)			
	Men		Women		Men		Women	
<i>Level of endowments and needs:</i>								
Gross hourly wage (log)	.1840****	(.0124)	.1396***	(.0115)	.0619**	(.0201)	.0518***	(.0142)
Net household income (log)					.1167****	(.0250)	.1751***	(.0193)
Number of children	-.0142**	(.0070)	.0002	(.0073)	-.0217***	(.0069)	-.0015	(.0070)
Monthly savings (1 = yes)	.0285*	(.0127)	.0383**	(.0128)	.0253*	(.0125)	.0383**	(.0124)
<i>Compensation:</i>								
Education (CASMIN)	-.0136***	(.0025)	-.0089**	(.0027)	-.0143***	(.0026)	-.0192***	(.0028)
Occupational experience (in years)	-.0053*	(.0023)	-.0029	(.0023)	-.0058*	(.0023)	-.0034	(.0022)
Occupational experience quadr., (x .01)	.0001	(.0006)	.0008	(.0006)	.0005	(.0005)	.0007	(.0006)
Contractually agreed hours (in hrs.)	-.0003	(.0005)	-.0019***	(.0006)	-.0002	(.0005)	-.0022***	(.0006)
Overtime per week (in hrs.)	-.0072***	(.0014)	-.0086***	(.0023)	-.0071***	(.0014)	-.0095***	(.0023)
Part-time employment (1 = yes)	.0031	(.0330)	.0757***	(.0168)	.0355	(.0328)	.1133***	(.0170)
Marginal employment (1 = yes)	.3228***	(.0440)	.2274***	(.0283)	.3265***	(.0439)	.2556***	(.0280)
Partner with equal status (1 = yes)					-.0010	(.0131)	-.0335*	(.0131)
<i>Status value:</i>								
Occupational prestige (MPS)	-.0007****	(.0002)	-.0012***	(.0002)	-.0010****	(.0002)	-.0020***	(.0002)
Share of household income					.2302****	(.0514)	.6126***	(.0727)
Partner is main earner (> 50%)					-.0671**	(.0224)	.0004	(.0252)
Self main earner in the year 2005					-.0836**	(.0283)	.0522	(.0300)
<i>Partner’s evaluation</i>								
Partner’s justice evaluation (J)					.1769****	(.0381)	.2561***	(.0458)
Partner evaluation x occupational prestige					-.0004	(.0004)	-.0016*	(.0006)
<i>Control variables</i>								
Self-employed (1 = yes)	-.1794***	(.0251)	-.2667***	(.0288)	-.1719***	(.0246)	-.2661***	(.0279)
Region	-.0717***	(.0156)	-.0770***	(.0157)	-.0423**	(.0154)	-.0411**	(.0155)
Constant	-1.415***	(.0985)	-1.082***	(.0804)	-1.489***	(.1396)	-1.998***	(.1448)
R ²	.136		.109		.185		.180	
Δ R ² (M ₂ -M ₁)					.049		.071	

Notes: SOEP 2007, all samples, only dual-earner households, N = 2591 / 2589, household-weighted, unstandardized regression coefficients, standard errors in parentheses, * p_t < .05; ** p_t < .01; *** p_t < .001.

The findings for dual-earner households are listed in Table 3 for two regression models separated by sex. The first model corresponds to that presented in Table 2, but aims at identifying different answer patterns of respondents in dual-earner households. In the second model, the characteristics relevant for dual-earner households are added. First of all, the results of the first model: with the indicators on levels of endowments and needs, we see no changes in comparison to Table 2. In dual-earner households as well, women’s justice evaluations are independent of the number of children in the household. But two differences

should be noted in the compensation indicators. First, occupational experience plays no role for women in dual-earner households, and the quadratic term of occupational experience is not significant among men. Thus, while men consider it just for pay to rise continuously in line with occupational experience, this characteristic does not appear to play a role among women. Second, the contractually agreed working hours do not play a role among men. This corresponds to our assumption, formulated based on the findings of previous studies on the division of labor within the household, that men in dual-earner households would show considerably stronger traditional orientations to maintain their “masculine identity.” In the male breadwinner model, the man is automatically expected to earn the necessary financial resources outside the household in a set period of time.

Through the comparison with the first model, the relative importance of household characteristics for justice evaluations can be estimated. Through the second model, a substantial increase in the explanation of variance (R^2) is achieved (five and seven percent) and second, considerable gender-specific effects of the household characteristics are found. As expected, women in status-homogeneous relationships evaluate their earnings as more unjust than women who live with a man who holds a different occupational status position than they do. A status-homogeneous partnership thus offers women direct possibilities for comparing their own effort-reward relation with that of their husband. Because of the existing gender wage gaps, this relation is usually more advantageous for men. Therefore if women compare themselves with partners of equal status, their own disadvantage becomes apparent. As a result, they assess their own effort-reward relation as more unjust and derive higher expectations for their personal earnings. This is consistent with our assumption. In the context of a horizontally segregated labor market, the status relation within the household is thus important particularly for women’s justice evaluations.

For both men and women, we find that the share the individual contributes to household income has a positive effect on the evaluation of personal income: the larger the personal share, the more just the individual assesses his or her personal income to be. However, this share—as expected—plays a significantly stronger role for women (H_3). The effect coefficient is three times larger than that of the men. This means, first of all, that women evaluate their income primarily from the point of view of their status value *within* the household. The higher the share and the greater the power their income position achieves for them within the household, the more just they evaluate their earnings to be. Personal earnings are thus interpreted by women much more strongly as a means to obtain social approval within the household.

Second, an effect appears among the men that again underscores the power of traditional gender norms: if their partner contributes more than 50% of the household income, this results in perceptions of greater injustice (H_2). In this case, the man’s earnings do not allow him to meet the behavioral expectations of the male breadwinner model, and thus to obtain social approval. This interpretation is substantiated by the finding that women whose partners contribute more to household income do not claim higher income for themselves, and that the negative effect was intensified among men who were still the main income earner in the household in the year 2005.

But how does the partner’s earnings assessment in dual-earner households affect the respondent’s assessment of his or her own earnings? The corresponding coefficient is significant for both sexes. Men and women influence each other in forming their justice evaluations. However, women show a considerably stronger dependence on the earnings evaluations of men in forming their own earnings evaluations. This effect is lower, however,

among women with higher levels of occupational prestige. In their justice evaluations, they orient themselves much less towards their partners. A similar effect cannot be found among men.

5. Discussion of the results

This paper focused on the question of how household contexts that diverge from the traditional male breadwinner model in their earnings and income structures affect household members' evaluations of the justice of their own earnings. To this end, in a first step, we used a general behavioral theory model—the theory of the social production function—to derive three criteria for evaluating earnings: compensation for services rendered, coverage of basic needs, and the opportunity to earn social approval. Here we also pointed out that the justice of one's personal income plays a major role because a just income is equally important to the recognition of individuals' material and social interests. Thus, just personal earnings are themselves in a sense an expression of social approval, which an employer can express toward his employees or which “society” in general can express toward its members, and thereby signal to individuals that they belong. In the second step, we formulated hypotheses on the gender-specific importance of the household context for justice evaluations of personal earnings based on household economic considerations, recent theoretical approaches, and empirical findings from the gender research. These were tested on cross-sectional data from the German Socio-Economic Panel Study (SOEP). A first result was that women in Germany generally do not perceive their objectively lower earnings compared to men as being unjust. A gender wage gap would exist even if everyone received the pay that he or she considered just. Thus, the gender wage gap is apparently consistent with women's perceptions of justice at this point in time. If one also takes household-related contexts into consideration along with individual contexts, our hypothesis is confirmed that women primarily evaluate their income from the point of view of their status within the household, and that their perceived income justice in the household increases when their relative earnings position rises. Conversely, men see a violation of the traditional male breadwinner model as a legitimate reason to demand higher income for themselves. If wage differences continue to narrow, then according to our findings, this will be accompanied in particular by increased perceptions of injustice among men, especially men in dual-earner households.

Against the backdrop of the structural changes mentioned at the outset of this paper, this means that households can represent a remarkable “new” social context that will be important for the formation of attitudes. Apparently, a “plurality of lifestyles” is emerging—not just in terms of how people cohabit with each other, but also whether and how much the partners work and can therefore contribute to the household income. The paper also shows that future research should dedicate more attention not only to the household context, but also to individual dynamics across the life course. Questions of selective partner choice or analyses of the separation of households are themes that can soon be addressed with further waves of both SOEP and the recently launched project “Panel Analysis of Intimate Relationships and Family Dynamics,” or PAIRFAM (Feldhaus/Huinink 2008).

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