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Multiple earnings comparisons and subjective earnings fairness: A cross-country study

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ABSTRACT

Earnings comparisons are defined by the earnings differential within the same social class, the parallel comparison, and the longitudinal comparison, which consists of the upward and downward comparisons. These three types of earnings comparisons are direct and significant determinants of the perception of earnings fairness. The influences of these three types of earnings comparisons on fairness perception vary with societal characteristics, such as the degree of corruption, income inequality, and unemployment. Of these three types of earnings comparisons, the group upward comparison is the most malleable to societal characteristics. Past studies on earnings fairness cannot explain workers' strong feelings of injustice in the most recent recession, in which the unemployment rate has been high, but the strong feelings of injustice can be explained by the group upward comparison in this study.

1. Introduction

Fairness must be based on some subjective comparison criteria. It has been argued that a high unemployment rate among workers of similar traits leads individuals to subjectively think that their earnings are fair (Akerlof and Yellen, 1990; Verhoogen, Burks, and Carpenter, 2007). The fairness perception results from earnings comparisons with some group similar to or worse than them during the recession. However, if individuals tend to feel that their earnings are just in a recession, then why, during the most recent worldwide recession, particularly in Europe and the United States, did the high unemployment rates not cause the workers to perceive that their earnings were just? On the contrary, what we observed is the opposite—the workers had strong feelings of injustice with regard to their earnings and called for higher taxes on the rich, which is currently being planned or already implemented by some authorities. The 2008 financial crisis was immediately followed by the "Occupy the Wall Street" protest, whose website claims that "The one thing we all have in common is that we are the 99% that will no longer tolerate the greed and corruption of the 1%." Taxing the rich is indeed being implemented in the United States. In response to the budget deficit due to the 2008 financial crisis and the recession that followed, the American Taxpayer Relief Act of 2012 led to a tax rate increase for wealthy citizens (Martin, 2014). Meanwhile, the election campaign for President Hollande of France promised to tax salaries above one million euros at 75%. Similarly, Germany currently plans to increase the taxes of the wealthy to finance the debt resulting from the financial crisis (Bach, Beznoska, and Steiner 2014). Other European countries have been making moves to tax the rich (Chu, 2012).

This scenario implies that individuals compare themselves not only with someone similar to or worse off than them, but also with someone better off than them, inter alia, during an economic downturn. This argument is in accordance with Rees (1993). After leading the Council on Wage and Price Stability in 1974, Rees (1993) found that fairness is the most crucial determinant of the wage when negotiated with a union. Rees (1993) believed that fairness was always based on an upward rather than a downward comparison. Clark and Senik (2010) reached a similar conclusion, which was that most income comparisons are upward.

Accordingly, a fair perception of earnings results not merely from a single comparison with a single reference group, for the comparisons are complex, and at least are multiple. The comparisons can possibly be made in three directions: an upward comparison, a parallel comparison, and a downward comparison. An upward comparison means that workers compare their earnings with the earnings of others who are better off than them, a parallel comparison involves a comparison with others with similar traits, while a downward comparison is based on a comparison with others whose earnings are lower. In other words, there are three reference groups to consider when performing such a comparison. As for studies on subjective well-being

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(SWB), for example, Senik (2004), McBride (2001), Stutzer (2004) and Ferrer-i-Carbonell (2005), Akerlof and Yellen (1990) and Verhoogen, Burks, and Carpenter (2007) defined the reference group as being comprised of those with similar traits. While analyzing the perception of fairness-of-pay for UK employees, Paul (2006) used average earnings according to age, in line with McBride (2001), to represent the earnings of the reference group.[1] Their comparisons were based on parallel or downward comparisons, while Rees (1993) laid emphasis on upward comparisons.

Following Wood and Taylor (1991), Falk and Knell (2004) interpreted downward comparison and upward comparison respectively by the motives of self-enhancement and self-improvement. Self-enhancement refers to the fact that individuals compare themselves with poorer individuals to make themselves feel better. The motive of self-improvement is to compare oneself with someone more successful to elicit more effort to improve himself/herself. Falk and Knell (2004) did not postulate that individuals simultaneously make these two types of comparisons, but they presumed that an individual optimally chooses a reference standard to balance the two motives of self-enhancement and of self-improvement. It is worth noting that the upward comparison in Falk and Knell's (2004) model does not cause worse feeling, but it results in individuals giving more effort. Since individuals choose their reference standards to maximize their utility, inferentially, people will not choose a comparison standard that reduces their utility. However, Clark and Senik's (2010) empirical study disputed Falk and Knell's (2004) utility maximization presumption and argued that upward income comparison is detrimental to happiness. This study differs with Falk and Knell (2004) since it allows multiple earnings comparisons. The multiple comparisons have distinct impacts on the subjective perception of fairness.

Moreover, in addition to unemployment, the impacts of these multiple earnings comparisons vary with societal characteristics. Fong (2001) indicated that when the wage is based on self-determined factors, i.e., effort, workers show little support for redistribution, implying that earnings are fair. Alesina and Angeletos (2005) proposed a similar argument. In an incorruptible society, earnings mainly reflect an individual's effort, and moderate earnings differentials do not give rise to feelings of unfairness. Alternatively, because effort is the key determinant of earnings differentials in an incorruptible society, workers in this kind of society might have a lower degree of tolerance in earnings differentials since effort will not generate a huge earnings gap.

Rotemberg (2002) argued that the income distribution will be less unequal if workers believe that they are unfairly paid. In Rotemberg's (2002) model, workers quit and search for new jobs when they recognize that they are unfairly paid. He showed that workers tend to perceive income inequality in countries with more equal income distributions (a low Gini). In other words, in a society with a more equal income distribution, workers are less likely to tolerate earnings differentials.

Although an abundance of studies have used experimental data to investigate how the perception of fairness is constructed (Falk, Fehr, and Zehnder, 2006; Gächter and Thöni, 2010; Clark, Masclet, and Villeval, 2010; Greiner, Ockenfels, and Werner, 2011; Cohn, et al., 2014), very few studies have employed empirical data to investigate this issue. Verhoogen, Burks, and Carpenter (2007) and Burger and Walters (2008) are probably the only two studies to have used empirical data, but their studies did not investigate whether these three types of comparisons constructed the perception of fairness. Therefore, the purpose of this study is to apply a multilevel model and to use cross-country data to investigate the relationship between subjective earnings fairness and these three types of earnings comparisons, and to ascertain whether the earnings comparisons vary with the societal characteristics.

The structure of the remainder of this study is as follows. Section 2 introduces the data. Section 3 specifies the model. Section 4 discusses the empirical results. Section 5 concludes.

2. The data

The data used are obtained from ISSP 2009 Social Inequality IV, compiled by the International Social Survey Programme (ISSP). The data cover 38 countries/regions (see Table 1), and comprise 53,155 observations. After deleting missing data, 49,664 observations are left. One of the questions in ISSP 2009 involved asking respondents: "Would you say that you earn (1) much less than you deserve; (2) less than you deserve; (3) what you deserve; (4) more than you deserve; or (5) much more than you deserve. The answer to this question is used to indicate how respondents evaluate their earnings.

Empirical studies rarely use a survey question regarding deserved earnings to represent fairness, but this is probably because empirical studies on fairness are rare. Economists and psychologists employed the idea considering what people think they deserve to define fairness or justness. While Akerlof and Yellen (1988, 1990) constructed a theoretical model to develop the fair wage-effort hypothesis, conceptually, they explicitly stated that workers feel fair if they earn what they deserve. Akerlof and Yellen (1990) stated, "The motivation for the fair wage–effort hypothesis is a simple observation concerning human behavior: when people do not get what they deserve, they try to get even." Economists investigating fairness or equity usually follow Akerlof and Yellen's (1988, 1990) definition; some of them include Skott (2005), Epstein and Ward (2006), Charness and Kuhn (2007), San and Jane (2008), and Gill and Stone (2015).

In the psychology field, Lerner and Miller (1978) proposed the just world theory. In its related literature, fairness and deservingness are equivalent terms (see Hafer and Begue's (2005) survey). For example, Jost et al. (2003, p. 58) delineated the just world theory by stating, "there is a universal human need to believe that outcomes are fair and just and that people 'get what they deserve and deserve what they get'." It appears that perceptions of deservingness and of fairness are exchangeable. Accordingly, respondents' response to the question of deserved earnings in ISSP 2009 is suitable for a fairness study. It is worth noting that Paul (2006) warned that perceptions of fairness of pay are not equivalent to expressions of satisfaction of pay. For example, a worker might evaluate his earnings as fair because the earnings reflect doing what is required for his job. However, he wishes he can do better, so he is not satisfied.

The first four columns of Table 1 show how respondents perceived their earnings, as compared with what they believed they deserved. Table 1 shows that a higher proportion of respondents in former communist countries and South American countries perceived their earnings to be much lower than what they felt they deserved. The last three columns in Table 1 present societal characteristics.

In Table 1, the CPI (corruption perception index) measures the perception of public sector corruption, and is compiled by Transparency International. The CPI is a composite index based on 13 expert and business surveys. Corruption is a hidden activity, and cannot be objectively measured or quantified. All the surveys of the CPI are hence subjective. A high value for the CPI is associated with an incorruptible public sector. New Zealand, Denmark, and Sweden are the three countries with the highest CPI. The Gini coefficients are obtained from the Human Development Report 2009 published by the United Nations Development Programme. South America, South Africa, and the

[1] A related perspective of wage comparison is the cognitive dissonance theory (Festinger, 1957) indicating that equitably paid workers show higher job satisfaction than overpaid and underpaid workers. However, Sloane and Williams (1996) found that overpaid and underpaid workers respectively exhibit higher and lower job satisfaction than equitably paid workers. Their results did not support the cognitive dissonance theory. Sloane and Williams (1996) employed subjective wage justification to explain job satisfaction, while the present study uses multiple wage comparison to explain subjective wage justification. In addition, the data that this study uses do not collect information of job satisfaction.