China Economic Review 21 (2010) 442–455

Contents lists available at ScienceDirect

China Economic Review

Job satisfaction and relative income in economic transition: Status or signal? The case of urban China[☆]

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ARTICLE INFO

Article history:
Received 10 June 2009
Received in revised form 31 March 2010
Accepted 2 April 2010

JEL classification:
I31
J28

Keywords:
Job satisfaction
Relative income
Urban China

ABSTRACT

We use two datasets for urban China to examine whether an increase in reference group income lowers or increases job satisfaction. The former is consistent with a status effect — an increase in the income of others lowers my satisfaction because I feel jealous. The latter is consistent with a signal effect — an increase in the income of others might make me jealous, but it also provides an information signal about my future prospects. When we use a single item indicator of job satisfaction we find no support for a status or signal effect; however, when we use a psychometrically valid instrument to measure job satisfaction, we find some support for the existence of a status effect. We consider the components of job satisfaction through which the status effect operates. We find that the status effect operates through satisfaction with co-workers, operating procedures, pay and supervision.

1. Introduction

A large economics literature on the determinants of subjective well-being has focused on the role of relative income in explaining job or life satisfaction (see Clark, Frijters, & Shields, 2008 for a survey). This literature has generally concluded that relative income is important for determining job and life satisfaction. An important implication of this result is that the neoclassical utility function, in which one's utility is a function of the individual's own consumption or income, should be extended to incorporate relative consumption or income.

The relationship between relative income and job satisfaction is important for several reasons. First, within the firm the link between relative income and job satisfaction is important for human resource managers. Job satisfaction has been shown to be associated with absenteeism (Leicht & Shapelak, 1994); labour turnover (Crampton & Wagner, 1994) and productivity (Harder, 1992). Second, income comparisons are important for the functioning of the labour market and public policy. Concern about relative status affects the supply of labour and wage profiles (Frank, 1984); savings (Kosicki, 1987) and optimal tax policy (Oswald, 1983). Income comparisons are relevant for whether policies should be put in place to smooth income distribution (Luttmer, 2005). If relative income matters, the case for economic growth becomes less clear and the case for progressive taxation is strengthened (Oswald, 1983). Akerlof and Yellen (1990) argue that involuntary unemployment and other macroeconomic phenomena can be explained in a model in which relative income matters. Third, job satisfaction is positively correlated with life satisfaction (see eg. Knight, Song, & Gunatilaka, 2009). Thus studying the relationship between relative income and job satisfaction is relevant to the broader economics literature examining the economics of happiness.

☆ An earlier version of this article was presented at WISE at Xiamen University.

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1043-951X/$ – see front matter
doi:10.1016/j.chieco.2010.04.002

Conceptually relative income could have a negative or positive effect on job satisfaction. The former refers to a status effect, while the latter refers to a signal effect. The status effect is where the higher earnings of my reference group make me jealous, lowering my sense of well-being. The signalling effect is where the higher earnings of my reference group increase my sense of well-being: the more others earn, the happier I am. The signalling effect is consistent with Hirschman (1973) tunnel effect — while others wage increases might make me jealous, it also provides information about my own future prospects. If others are doing well, this acts as a signal that I too have better prospects of doing well in the near future.

To this point most studies for stable industrialized capitalist studies have found evidence consistent with a status effect. However, Clark, Kristensen, and Westergard-Nielsen (2009) and Panos and Theodossiou (2007) find support for the signal effect using Danish and British panel data respectively. It is likely that there will be more evidence of the signal effect in transitional economies, than stable western industrialized economies. Senik (2004, 2008) finds evidence of a signalling effect in transitional economies. In an unstable labour market, as is often the case in transitional economies, what happens to others who have similar characteristics to me today might be thought of as providing a signal about my own future labour outcomes. In this respect, Senik (2008) argues that the respective importance of status and signalling effects depend on the level of economic uncertainty and labour market mobility. China represents an interesting case study to examine the signalling and status effects of relative income on job satisfaction. Senik (2004, p. 2100) describes transition in Russia "as a natural experiment characterized by an unusually high variance in absolute and relative incomes". This is also true for China. China's market reforms have created tremendous opportunities for people to climb the labour market ladder, not only through fast wealth creation in the non-state sector, but also through more flexible labour markets in the state sector. At the same time, China's market reforms have generated marked increases in income inequality.

We examine the effect of relative income on job satisfaction in urban China using two datasets. Both have their advantages and disadvantages. The first is matched employer–employee data from Shanghai for a sample of 784 employees in 78 firms. The advantage of this dataset is that earnings of all workers in the same establishment can be used to examine the role of reference income. Others working in the same establishment is arguably a more appropriate reference group to examine the effect of relative income on job satisfaction than other potential peer groups, such as friends, neighbours or those living in the same city, given that what others in the same establishment earn will be a better signal of my future earning capacity than what my neighbours can earn. A disadvantage of the Shanghai sample, however, is that it is relatively small and to measure worker well-being it uses a single item indicator of job satisfaction in the form, 'how satisfied are you with your job'?

While economists have almost universally used single item indicators of job satisfaction of this form to measure worker well-being and this research has been published in the leading journals (see eg. Clark et al., 2009), such an approach has been criticized in the psychology literature on job satisfaction, in which multi-item indicators have long been widely used on two grounds. The first is that the researcher cannot estimate the internal consistency of a single item indicator, with the result being that such indicators are subject to low levels of internal reliability (see Oshagbemi, 1999; Pollard, 1996; Wanous, Reichers, & Hudy, 1997). Andrews and Whithey (1976) found single item indicators of personal well-being to have relatively low reliabilities (test–retest correlation 0.40–0.66), even when asked twice in the same session 1 h apart. Test–retest correlations for multi-item indicators tend to be much higher — in the range 0.82 to 0.84 for temporal intervals of up to 10 weeks (Krueger & Schkade, 2007). The second is that single item indicators are not able to capture the multidimensionality of psychological constructs and hence construct validity is compromised.

The second sample that we employ is from a survey of job satisfaction among approximately 2800 employees across six Chinese cities; namely, Chengdu, Dalian, Fushun, Fuxin, Fuzhou and Wuhan. The advantage of this dataset is that the sample size is larger and, to measure job satisfaction, it contains data from the Job Satisfaction Survey (JSS) (Spector, 1997). The JSS, which is a 36 item multidimensional measure, subsumes nine components of job satisfaction and is one of the most widely used instruments to measure job satisfaction in the psychology literature. The disadvantage of this dataset is that it does not contain information on average establishment earnings in the firm in which the respondent works. Thus, to measure relative income, we adopt two approaches. One approach, following Clark and Oswald (1996), among others, is to estimate a conventional earnings equation on the whole cross-section of employees and then use this regression equation to predict an earnings level for each person. These predicted earnings levels correspond to the income of 'typical' employees with given characteristics. The other approach, following Blanchflower and Oswald (2004) and Luttmer (2005), among others, is use a geographical definition of reference group.

2. The Chinese context

The economic reforms that commenced in the late 1970s have not only led to rapid economic growth, but have had a profound effect on the structure of the Chinese economy. On the eve of the economic reforms, the state-owned enterprise sector was dominant, while the non-state sector lurked on the fringes of the economy. In 1978, state-owned enterprises accounted for almost 80% of industrial value added, while there were just 140,000 individuals engaged in the private sector (Qin, 2008). There was no urban labour market and urban labourers were paid according to wage grades. These wage arrangements were equalitarian, over-centralized and insensitive to variations in performance (Ding, Akhtar, & Ge, 2006). Moreover, the appointment and promotion process was based on political considerations, rather than performance (Bian, 2002). But, in the three decades since economic reforms commenced the non-state sector has increased in importance relative to the state-owned sector.

The outcome of these reforms have been significant changes in employment policies and practices for urban workers, previously characterized by strict bureaucratic control, a monopoly on labour allocation through lifetime employment policies