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Misery Loves Company: Exogenous shocks in retirement expectations and social comparison effects on subjective well-being☆

Raymond M. Montizaan[a,*], Maarten C.M. Vendrik[b]

[a] ROA, SBE, Maastricht University, P.O. Box 616, 6200 MD Maastricht, Netherlands
[b] Department of Economics, SBE, Maastricht University, P.O. Box 616, 6200 MD Maastricht, Netherlands

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ABSTRACT

This study investigates the effects of social comparison accompanying a substantial reform of the Dutch pension system on the job satisfaction of workers who are close to retirement. The reform implies that public sector workers born on January 1, 1950, or later face a considerable reduction in their pension rights, while workers born before this threshold date can still retire under the old, more generous rules. Using unique matched survey and administrative panel data on male public sector workers born in 1949 and 1950, we find strong and persistent effects on job satisfaction that are sizable compared to income effects on well-being. The drop in satisfaction is strongly affected by social comparisons with colleagues. Treated workers are less affected by the reform when the treatment group is larger in the organization where they are employed. Moreover, the social comparison effect is especially prevalent in organizations that stimulate their employees to work full-time and in teams. We also find evidence that the major part of the social comparison effect is non-monetary.

1. Introduction

People feel less happy when the situation in which they find themselves compares unfavorably with that of others. The relevance of such social comparisons for subjective well-being in the realm of incomes was first noticed by Easterlin (1974, 1995). Easterlin appealed to concepts of social comparison and adaptation to income to explain why average happiness in developed countries does not significantly rise over time as these countries become richer, whereas within a country richer people tend to be significantly happier than poorer people (the Easterlin paradox). Social comparison implies that the utility of individuals does not so much depend on the absolute level of their income but, rather, on the level of their income relative to that of others in their social reference group. A substantial theoretical and empirical literature has investigated the relevance and implications of social income comparisons for subjective well-being. Recent empirical studies generally found that there exists a systematic relative income effect on well-being (e.g., Clark and Oswald, 1996; Van Praag and Ferrer-i-Carbonell, 2004; Ferrer-i-Carbonell, 2005; Luttmer, 2005; Vendrik and Woltjer, 2007; Clark et al., 2008b; Layard et al., 2010;

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* Corresponding author. Tel.: +31 433882844; fax: +31 642150855.
E-mail addresses: r.montizaan@maastrichtuniversity.nl (R.M. Montizaan), m.vendrik@maastrichtuniversity.nl (M.C.M. Vendrik).

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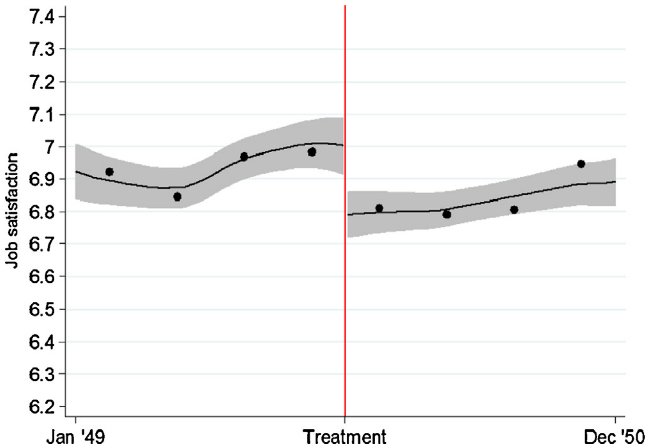

Fig. 1. Job satisfaction. This figure presents a local polynomial smooth of job satisfaction on birth date, using a Epanechnikov kernel function. The bandwidth for the kernel function is obtained using the ROT method of bandwidth selection. The ROT bandwidth is the plug-in estimator of the asymptotically optimal constant bandwidth which minimizes the conditional weighted mean integrated squared error. The vertical line in the figure marks the threshold dividing the control and treatment groups. The dots show the average job satisfaction by quarter of birth.

Clark and Senik, 2010). However, with the exception of a few experimental studies that controlled the reference group (see Carter and McBride, 2009; Card et al., 2010), most empirical studies assumed reference groups that were only proxies of the actual, unobserved reference groups, leading to problems of measurement error and endogenous variation in the income of the relevant reference groups.[1]

This study examines the extent to which social comparisons between colleagues drive the effects of a drastic change in the retirement system for the Dutch public sector on the job satisfaction of older workers. By exploiting the shock in the retirement system, we avoid the problems of potential spurious correlations and measurement error that may have biased the results in previous retirement and social comparison studies. More specifically, in 2006, the Dutch public sector was subject to a major pension reform that treated two very similar groups of employees differently. Prior to 2006, public sector workers in the Netherlands could retire at age 62 years and three months with a mean replacement rate of 70 percent of their average yearly earnings since 2004. As of 2006, those born before January 1, 1950, could continue to retire under the old rules, but for those born on or after January 1, 1950, the mean replacement rate was lowered to 64 percent. These younger workers now need to work an additional one year and one month to obtain the 70 percent replacement rate enjoyed by counterparts who may be just a few days, weeks, or months older.

We match panel survey data that contain various indicators of well-being with administrative data from the public sector's pension fund and estimate, two and three years after the shock in the pension system, the individual well-being of male workers born in 1949 and 1950. We find strong and persistent effects of the drop in pension rights on the job satisfaction of treated as well as untreated workers. The impact of the shock on the job satisfaction of treated workers is equivalent to having an annual wage that is about twenty-three percent lower. Both the size and persistence of this impact can be fully explained as being the result of social comparison with colleagues who are not affected by the reform as well as with those affected. We find that treated workers suffer more from the reform when they have more untreated colleagues in their organization and income group, while they suffer less when they have more treated colleagues. As can be expected, we find that the social comparison effect is stronger for those who work in sectors that stimulate team work, and less significant for workers who are generally allowed to work part-time. We also find evidence that the major part of the social comparison effect is non-monetary. This can be attributed to feelings of being unfairly treated among those affected by the reform. Moreover, our estimates indicate a negative external effect of the percentage of treated employees on the job satisfaction of each worker in the organization. This is the opposite of what social comparisons would imply and may hint at a negative effect of treated frustrated employees on the general atmosphere in the organization (Williamson, 1973; Zárraga and Bonache, 2005).

We contribute to the existing literature in three ways. First, our main contribution is to the social comparison literature that, in general, has difficulties to isolate exogenous variation in the income of relevant peer groups (Clark and Oswald, 1996; McBride, 2001; Clark, 2003; Bender, 2004; Ferrer-i-Carbonell, 2005; Luttmer, 2005; Vendrik and Woltjer, 2007; Clark et al., 2008b, 2010; Layard et al., 2010). Our paper is closest related to the study of Card et al. (2010) in which randomized manipulation of access to information on colleagues' wages is used to identify the effects of relative income on individual job satisfaction. They found that the information treatment asymmetrically affects workers' job satisfaction: workers with

[1] Such measurement errors may also occur in studies that use direct survey information about perceptions of social comparison groups and their importance (Mayraz et al., 2009; Goerke and Pannenberg, 2013). The perceived social comparison groups may not coincide with the actual reference groups, that are likely to be driven by social interactions other than social comparison as well (Frank, 2008; Vendrik and Woltjer, 2007), and hence may differ from the perceived social comparison groups.