The Quarterly Review of Economics and Finance
48 (2008) 653–672

The QUARTERLY REVIEW of ECONOMICS And FINANCE

www.elsevier.com/locate/qref

Wages, supervision and sharing

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Received 13 March 2006; received in revised form 19 May 2006; accepted 15 July 2006
Available online 7 September 2006

Abstract

Instrumental efficiency wage models predict an inverse relationship between wages and supervision with this relationship being more pronounced amongst firms participating in employee sharing. My theoretical exposition predicts that an increase in remuneration reduces monitoring more in “sharing” than in “non-sharing” firms. I explore these predictions using the 1998 Workplace Employee Relations Survey. My empirical results confirm an inverse relationship between supervision and pay, but the trade-off is only heightened by performance-related pay and employee share ownership schemes. I find that employee share ownership and performance-related pay are more successful in alleviating the need to monitor.

JEL classification: J33; J41; J54

Keywords: Monitoring; Supervision; Profit sharing; Employee share ownership; Efficiency wages

1. Introduction

Efficiency wage theory suggests that employers can improve workforce productivity by paying wages above the opportunity cost of labor. Two schools of thought suggest how these wage premia operate. The “instrumentalist” view is that employees choose how hard to work by equating the marginal costs and benefits of shirking. Wage premia are thus carrots that employers use, along with the stick of dismissal, to encourage an optimal supply of work effort (Bowles, 1985; Shapiro & Stiglitz, 1984). The “sociological” approach, in contrast, argues that the premia represent a “gift” by the firm that appeals to norms of loyalty and mutual obligation on the part of its workforce (Akerlof, 1982). According to this view efficiency wages elicit effort by creating a climate of

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1062-9769/$ – see front matter
doi:10.1016/j.qref.2006.07.002

co-operation and reciprocity, rather than by entering an instrumental calculation of the expected net benefit of shirking.

Testing efficiency wage theory is difficult since standard competitive models also predict a positive correlation between productivity and wages. Moreover, one would expect to find such payments in situations where it is difficult to observe, and thus measure, worker performance. Economists have therefore attempted to test the theory by focusing on the relationship between wages and other forms of effort procurement. For example, if efficiency wages are successful in eliciting effort then, *ceteris paribus*, firms paying such premia should invest fewer resources in monitoring worker behavior.[1]

An alternative method of improving worker productivity is to divest a share of the firm into the hands of workers. Recent years have witnessed a resurgence of interest in employee sharing. Re-kindled by Weitzman's (1985) purported macroeconomic benefits of profit sharing, attention has turned towards the more readily discernible, and originally lauded, microeconomic benefits of employee sharing broadly defined (Blinder, 1990; Weitzman & Kruse, 1990).

Employee sharing has implications for both instrumental and gift-exchange models of efficiency wages. In terms of the former, a sharing scheme would directly reduce the marginal benefit of shirking. In the extreme case, a self-employed worker has no incentive to shirk. The temptation to free ride renders the issue somewhat less pellucid when a work group is considered, but even here the exchange environment is affected. Divesting part of the enterprise is perhaps the most generous gift a firm can offer its workforce and if it is *via* an exchange of gifts that wage premia elicit effort, the question arises as to the marginal utility that workers derive from such gifts.

An interesting, yet hitherto unexplored, question thus arises as to the relationship between employee sharing and the wage-monitoring nexus. *A priori* one would expect sharing to lessen the need to monitor. Whether sharing augments or assuages the relationship between pay and supervision, and thus its effect on the shape of the trade-off, is rather less obvious.

In what follows I explore the effects of "sharing" (*i.e.* profit sharing, performance-related pay and employee share ownership plans) on the relationship between supervision and pay. My empirical results, based on the British 1998 Work Place Employee Relations Survey, suggest an inverse relationship between supervision and pay with this trade-off being more pronounced amongst firms operating employee share ownership or performance-related pay schemes. This finding supports instrumental efficiency wage considerations. I also find that employee share ownership plans and performance-related pay are relatively more successful in alleviating the need to monitor.[2]

The paper is set out as follows: Section 2 discusses some background issues concerning the relationship between pay, supervision and sharing. Section 3 sets out the theoretical underpinning whilst Section 4 describes the data and methodology. Empirical results are presented in Section 5 and final comments in Section 6.

[1] See, for example, Bowles (1985), Calvo (1979) and Eaton and White (1983). It is possible, however, that high wages are a necessary compensating differential for occupations that require distastefully high rates of supervision (Aoki, 1984). Evidence of a positive (negative) relationship between wages and monitoring in the Swedish public (private) sector is obtained by Arai (1994).

[2] I use the terms "supervision" and "monitoring" interchangeably. Although supervisors have different functions at different firms, and firms may utilize other forms of technology to monitor employees (e.g., computers), the supervisor-to-staff ratio is likely to be highly correlated with the extent of employee monitoring (Groshen & Krueger, 1990).