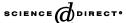


### Available online at www.sciencedirect.com



Journal of CORPORATE FINANCE

Journal of Corporate Finance 10 (2004) 615-638

www.elsevier.com/locate/econbase

# Stock options and employees' firm-specific human capital under the threat of divestitures and acquisitions

#### Hiroshi Osano\*

Kyoto Institute of Economic Research, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan Received 19 February 2002; accepted 11 October 2002

Available online 2 April 2003

#### Abstract

This paper considers whether the first-best level of firm-specific human capital investment is attained by the use of stock option plans for workers and stock offers in acquisitions even though workers are threatened with the possibility of a divestiture and acquisition. We show that the first-best level of investment is achieved by a stock option plan with a positive exercise price for workers conditional on the event of a divestiture. We also suggest that, under certain conditions, a stock offer in acquisition can resolve a collusion problem between the target firm (TF) and its workers. © 2003 Elsevier B.V. All rights reserved.

JEL classification: D82; G34

Keywords: Stock option plans; Stock offers; Firm-specific human capital

#### 1. Introduction

Although potential distortion in firm-specific human capital investment in divestiture and acquisition decisions has been the subject of extensive academic work, the role of stock option plans for workers and stock offers in such decisions has largely been ignored. The purpose of this paper is to explore whether the first-best level of firm-specific human capital investment is attained by the use of stock option plans for workers and stock offers in acquisitions even though divestiture and acquisition decisions affect the ability of firms to contract efficiently with workers.

<sup>\*</sup> Tel.: +81-75-753-7131; fax: +81-75-753-7138. *E-mail address:* osano@kier.kyoto-u.ac.jp (H. Osano).

We first consider a situation in which one firm, denoted by the acquiring firm (AF), seeks to purchase a division of another firm, denoted by the target firm (TF), with cash offers; and the TF needs to enhance the productivity by motivating its workers to acquire firm-specific skills. However, since it is costly for workers to invest their effort in firm-specific skills, workers have an incentive to underinvest if they are compensated in advance and are free to quit at their discretion and if their investment level is observable only after their productivity is revealed. This is because workers can take the money and run and can receive a wage attainable elsewhere if their underinvestment is observed after they are compensated.

To resolve the opportunism by workers, the TF can rely on deferred compensation that is paid to workers after their productivity is revealed. The contract involving such deferred compensation removes the incentive for workers to shirk even though their investment level is not observable by the TF. The reason is that the deferred compensation acts as a bond tying workers to their investment. Thus, if the TF does not renege on its promise by reason of reputation considerations or so on, the contract involving the deferred compensation deters the opportunism on the part of workers.

Nevertheless, if the TF sells a division to the AF, the workers of the division may be discharged or, if retained, not be paid deferred compensation due because the control of the division has changed hands. In this paper, we focus on the case in which the TF commits itself to upholding an initial contract, whereas the AF does not. We will then find a mechanism that can implement the first-best level of investment even under the possibility of a divestiture and acquisition.

Now, if workers rationally expect that their initial contract will be breached after their division is divested, they may have an incentive to shirk on their investment. Thus, the TF additionally needs to compensate workers for the potential cost arising from the possibility of a divestiture. The need for additional compensation is likely to induce the TF to choose a contract that leads to the lower level of investment. Then, the possibility of a divestiture

<sup>&</sup>lt;sup>1</sup> In the empirical literature of takeovers, Shleifer and Summers (1988), Bhagat et al. (1990), Pontiff et al. (1990), Ippolito and James (1992), and Franks and Mayer (1996) find evidence for the theory of the breach of implicit contract, whereas Kaplan (1989), Rosett (1990), and Healy et al. (1992) do not. Lichtenberg and Siegel (1990) obtain a mixed result. Knoeber (1986) gives evidence that golden parachutes are beneficial and designed to provide an assurance to managers against tender related opportunism. Agrawal and Knoeber (1998) also support the hypothesis that a threat of takeovers increases compensation by making managers' implicitly deferred compensation less secure.

<sup>&</sup>lt;sup>2</sup> The particular asymmetry that we focus on here is often assumed in the literature of the breach of implicit contract in the transfer of control (see Knoeber, 1986; Shleifer and Summers, 1988; Bagwell and Zechner, 1993; Jaggia and Thakor, 1994; Schnitzer, 1995). These authors defend the assumption in several ways. The main reason for this is that the breach of promise or job security would force the TF to lose its reputation and to find it difficult to retain or replace its incumbent workers, whereas the breach of promise need not cause the AF to lose any reputation because the AF never made any promise with the incumbent workers of the TF. As a result, although the AF would not renege on an implicit contract with its own workers, it would breach an implicit contract with the incumbent workers of the TF. In contrast, Holmström (1988) proposes an alternative theory that coordination problems make it difficult for shareholders of the TF to act in unison and capture rents enjoyed by stakeholders, while the AF enjoys an advantage over managers in enacting changes because the AF typically comes in with a reputation for toughness. In fact, irrespective of which theory is more plausible, our main results still hold.

## دريافت فورى ب متن كامل مقاله

### ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
  - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
    - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات