Personnel is Policy: Labor Investment Efficiency and Firm Value*

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ABSTRACT: Labor is an essential factor of production. Like many other emerging markets, Korean economy has been developed with heavy reliance on labor over the past few decades, and therefore efficient investment in labor has been of primary interest to Korean companies. We investigate whether and to what extent the labor investment efficiency contributes to firm value in Korea. Following prior studies, we construct an empirical proxy for labor investment efficiency - abnormal changes in the number of employees which deviates from the fitted value based on firm fundamentals. We then find that more deviation from the optimal labor investment is related to lower future operating performance and higher external financing costs (i.e., required rates of returns). We further document that long-term stock performance decreases as the deviation from the optimal labor investment increases. Our results remain unchanged with a battery of robustness checks such as controlling for capital investment efficiency, addressing endogeneity concerns, or using alternative measures of labor investment efficiency. In sum, our results collectively indicate that investment efficiency in human resources indeed significant contributes to
I. Introduction

In a perfect market, a firm's investment policy relies solely on its investment opportunities (Modigliani and Miller 1958). The literature, however, has recognized the possibility that corporate investments may deviate from the optimal level because of market frictions such as information asymmetry and agency problems (e.g., Stein 2003). In this regard, many studies have examined suboptimal investment practices and have suggested effective ways of mitigating such inefficiencies (e.g., Biddle, Hilary, and Verdi 2009). These studies tend to focus on non-labor investment such as capital expenditure, research and development expenses, and acquisition expenses. However, labor, another important factor of production, has not been as thoroughly investigated in the prior literature.

In fact, human capital management as a type of investment deserves more attention. First, human capital, a key factor of production, significantly determines a firm's output. For example, Merz and Yashiv (2007) document that investment in labor incrementally affects firms' value beyond the size of the investment in physical capital. Second, while investment in physical capital depreciates with time, investment in human capital appreciates with time because the training effects of firm-specific skills on workers materialize with a considerable time lag (Webster 1999; Wyatt and Frick 2010). Retaining and training key personnel constitutes a primary importance in knowledge-driven economies in particular. Third, labor accounts for a greater share of costs than depreciation on physical capital. Banker, Byzalov, and Plehn-Dujowich (2014) present that SG&A costs, on average, account for about 27.1% of total operating costs, whereas depreciation on physical capital accounts for 4.6% only. Fourth, despite the importance of labor investment described above, labor investment is as vulnerable as other types of