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The HRM-Capital-Market Link: Effects of Securities Analysts on Strategic Human Capital

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Abstract

This paper develops theory about an agency problem affecting the strategic human capital (SHC) of the firm. It proposes three categories of SHC-related choices managers must make which imply a tradeoff between near- and long-term performance. Dispersed shareholding, firm coverage by securities analysts, and their practice of publishing quarterly earnings forecasts are argued to entail a bias in management incentives, shifting the balance in this tradeoff toward near-term performance. To restore the balance, securities analysts would need to distinguish transitory from recurring effects of SHC-related choices in their valuation models (e.g., treating HR-related cost savings during cyclical downturns as transitory). Restoring the balance would also require them to anticipate long-term effects in their long-term earnings forecasts (e.g., long-term positive effects of retaining employees with valuable skills during cyclical downturns). The skills and incentives analysts would need in order to account for the effects of SHC-related choices are argued to vary across firm segments. The role of HR managers in providing respective information to securities analysts is discussed.

Keywords: strategic human capital, high-performance work systems, agency theory, corporate governance, securities analysts, short termism

Recent research has become increasingly concerned with influences of the capital market on strategic human capital (SHC). Krausert (2014) argued that near-term earnings pressure from the capital market may affect decisions to invest in high-performance work systems (HPWSs) given their implementation incurs near-term costs while beneficial effects are lagging (HPWSs constituting a type of SHC investment). Liu, van Jaarsveld, Batt, and Frost (2014) found that firms tend to invest less in HPWSs if they are owned by transitory investors (such as hedge funds). Krausert (2015a) argued that SHC-related short termism would be mitigated if managers were able to credibly communicate to the capital market about long-term effects of SHC investments. Bassi and McMurrer (2005), Benson, Young, and Lawler (2006), and Edmans (2011, 2012) all found that SHC investments are associated with positive earnings surprises in the longer term, implying they should be of interest to investors in the capital market. Targeting investors, Ulrich (2015) proposed a framework of leadership- and SHC-related factors that impact on performance and, hence, could be attended to by them. Krausert (2015b) developed a model of the timing of training effects, proposing training activities with long-term effects that could be of interest to investors. Additionally, anecdotal evidence and qualitative research suggest that attention to SHC in the capital market has, to date, been sporadic, that investors are increasingly interested in SHC, however, that they are uncertain about how to take it into account (Benson et al., 2006; CIPD, 2015; Hendry, Woodward, Harvey-Cook, & Gaved, 1999; Jacobs, 2015; Ulrich, 2015).

SHC is the firm's stock of knowledge, skills, abilities, psychological traits and states, networks, social trust, structures, processes, routines, norms, values, and beliefs that make a difference for firm performance and that can be influenced through HRM. It is well established that investments in SHC have a positive effect on company performance (Combs, Liu, Hall, &

Ketchen, 2006; Jackson, Schuler, & Jiang, 2014). The above, emerging strand of literature suggests “in broad brush strokes” that SHC investments may be affected by earnings pressure from the capital market (Krausert, 2014; Liu et al., 2014), however, that investors should have an incentive to attend to them (Bassi & McMurrer, 2005; Benson et al., 2006; Edmans, 2011, 2012), and that, if they attended to them, negative effects of earnings pressure would be mitigated (Krausert, 2015a). At the same time, this literature is still relatively thin when it comes to details and underlying mechanisms. What exactly are the SHC investments that may be affected by short termism? Is SHC-related short termism only a problem given firm ownership by transitory investors? If it was, from a corporate governance perspective, should it be considered a problem at all given transitory investors are interested in short-term returns? Some of the above literature suggests that investors set quarterly earnings targets as an incentive for managers to maximize earnings in the near term. Yet, the investors’ return also depends on (expectations of) long-term earnings growth and, hence, long-term investments, such as in SHC (Benson et al., 2006; Edmans, 2009, 2011). Are investors acting irrationally? Why do widely adopted long-term incentives of executives not prevent short termism? All in all, the understanding of the causes of short termism with respect to SHC investments is incomplete. Additionally, it is not clear how SHC investments may be taken into account by investors. The assumption in the literature that investors should and would attend to SHC investments (Bassi & McMurrer, 2005; Edmans, 2009, 2011, 2012) contrasts with a lack of understanding among investors of how they might do so in practice (Benson et al., 2006; CIPD, 2015). It was argued that managers have a part to play in providing information about SHC investments to investors, too (Krausert, 2015a). However, managers appear to be equally uncertain about SHC-related information requirements of investors (Jacobs, 2015; Ulrich, 2015).

This article develops theory on the role of securities analysts in the relationship between capital market processes and SHC investments of the firm. Securities analysts are information intermediaries between investors and firms. They analyze firms, forecast future earnings, and make stock recommendations, which constitute an important influence on the stock price as well as on the behavior of firms (e.g., Benner, 2010). The first part of the article proposes an agency problem affecting the SHC of the firm: It proposes that publically traded companies tend to invest too little in SHC to optimally support firm performance in the longer term and to optimally support the interest of (longer term) investors. The focus is in particular on underlying mechanisms of this agency problem, including how securities analysts contribute to it. The second part of the article develops theory about a mechanism that might potentially mitigate the agency problem. It proposes that, to the extent securities analysts make adjustments for transitory cost effects and for long-term positive effects of SHC investments in their firm valuation models, the agency problem will be mitigated. Additionally, the article specifies what types of HRM activity classify as SHC investments with longer term effects and, hence, are most likely to be affected by the proposed agency problem. Three categories of long-term SHC investment are distinguished, including HR-related structural change, the recruitment, employment, and development of qualified, capable, and skilled employees, and retention-related HRM practices. Specific transitory cost effects and specific long-term positive effects are proposed for each of the three categories, which might potentially be taken into account by securities analysts in forecasting earnings. Finally, it is argued that the analysts' skills and incentives needed for them to make adjustments for SHC investments in their valuation models are varied across firm segments.

To develop the theory, the article draws on recent literature at the intersection of

corporate governance and corporate finance, depicting *informed trading by small blockholders* as an important corporate governance mechanism in the US capital market system (e.g., Edmans, 2009, 2014). This literature is integrated with a diverse literature (spanning finance, accounting, and strategy) on securities analysts—who are employed by small blockholders and play a central part in this corporate governance mechanism—as well as the strategic HRM literature, providing information on near- and long-term effects of SHC investments. The integration of these various strands of literature enables the development of, in the first instance, positivist theory on linkages between SHC investments and capital market processes, deepening the understanding of mechanisms underlying negative capital market influences on SHC. Subsequently, the understanding of these underlying mechanisms provides the basis for the development of normative theory, exploring how the analysts' firm valuation processes might potentially be adjusted to mitigate negative capital market influences on SHC.

Overall, the article contributes to efforts to facilitate SHC investments in an economic system that is arguably hampered by suboptimal levels of SHC investment. These efforts are relevant practically in that they have the potential to improve the competitiveness of the American industry (Porter, 1992). Higher levels of SHC investment should also serve the interests of employees, entailing more skilled, better paid jobs, more employee involvement, and greater job security (Jackson et al., 2014). Capital markets have become a significant influence on how firms do business (Benner, 2010; Zuckerman, 1999). The limited available research suggests that this influence extends to the HRM function (Krausert, 2014; Liu et al., 2014) while the strategic HRM and SHC literatures have become increasingly concerned with antecedents of SHC investments (Jackson et al., 2014; Kaufman, 2015). The development of a more thorough and detailed understanding of capital market influences on SHC investments is an important goal

for research in strategic HRM and SHC.

Long-term Investments in Strategic Human Capital

The term *SHC* was coined recently to integrate research in strategic HRM and strategy on relationships among HRM practices, HR-level outcomes such as the firm's human capital, and company performance (Wright, Coff, & Moliterno, 2014; Wright & McMahan, 2011). *Strategic human capital* denotes a construct at the firm level (while the term human capital has variously been used to denote either an individual- or a firm-level construct) (Coff & Kryscynski, 2011; Wright et al., 2014). It is also a broader construct in that it encompasses not only the firm's stock of knowledge, skills, and abilities (human capital) but also a range of other HR-level outcomes that are interconnected with it, including psychological traits and states of employees (psychological capital), their networks and social trust (social capital), and organizational structures, processes, routines, and culture (organizational capital) (Ployhart, Weekley, & Ramsey, 2009; Wright & McMahan, 2011). Being concerned with relationships between such HR-level outcomes and company performance on the one hand (as well as relationships between HRM practices and the HR-level outcomes on the other), the SHC perspective is specifically focused on those HR-level outcomes that (a) are critical for company performance and (b) can be influenced through HRM (Becker & Huselid, 2006). Hence, SHC can be defined as the firm's stock of knowledge, skills, abilities, psychological traits and states, networks, social trust, structures, processes, routines, norms, values, and beliefs that make a difference for the competitiveness of the firm and that can be influenced through HRM.

The SHC literature builds on the strategic HRM literature, which has been studying relationships between *HRM systems* (bundles of complementary HRM practices) and company performance. HRM systems are treated as antecedents of SHC. For example, Liu et al. (2014)

focused on HPWSs as antecedents of—or investments in—SHC. HPWSs are a type of HRM system encompassing practices such as involving work organization (e.g., job enrichment, team-based work organization), selective hiring, training and development, pay above the market rate, incentives linked to company performance, internal staffing and mobility, employment security, low status differences, and information sharing (e.g., Jackson et al., 2014; Pfeffer, 1998). The component practices of HPWSs vary somewhat across firms, industries, and studies. However, the core idea of HPWSs is that firm performance benefits from HRM practices that enhance the skill and motivation levels of employees while unlocking the potential of skilled and motivated employees through involving work organization (Jiang, Lepak, Hu, & Baer, 2012). The evidence for positive performance effects of HPWSs is strong overall (Combs et al., 2006; Jackson et al., 2014).

Long-term investments in SHC shall be defined as HRM practices that incur costs in the near term while they are associated with a benefit-cost ratio that increases over time (see also Souder & Bromiley, 2012). Thus, SHC investments (like any investment) have two defining components, which imply a tradeoff between near- and long-term performance and which—as will be elaborated later—both relate to management incentives for making respective investments. First, to classify as a long-term SHC investment, an HRM practice must incur costs in the near term (not necessarily *net* costs, but some level of cost). Hypothetically, if an HRM practice did not require any resources while generating lagging benefits, it would not involve a tradeoff between near- and long-term performance: Rational, wealth-maximizing managers would always engage in the practice, regardless of any biases of theirs toward near-term performance (as long as longer term effects are attributed a value greater than zero). By contrast, if an HRM practice requires resources, it may potentially become subject to management

decisions about the allocation of limited resources across various activities the firm may engage in. HRM practices incurring greater costs in the near term should be more likely to be affected by short termism, other factors being equal. Second, to classify as a long-term SHC investment, an HRM practice must also be associated with lagging benefits—or, more specifically, a benefit-cost ratio that increases over time. Different activities of the firm are associated with different benefit-cost distributions over time, some more skewed toward the near term (e.g., with a decreasing or stable benefit-cost ratio), others more skewed toward the longer term (e.g., with an increasing benefit-cost ratio). HRM practices should be more likely to be affected by short termism to the extent their benefit-cost distribution is skewed toward the longer term, other factors being equal.

A yet small but growing number of studies has provided evidence for lag effects of various HPWS component practices. Research on HRM cost effects (near-term or otherwise) is limited (Kaufman, 2015). Nevertheless, based on the available evidence, three categories of long-term SHC investment can be distinguished.

The first category shall be proposed to be changes to structures, processes, and routines entailing new ways of working—short: *HR-related structural change*—including the introduction of employee empowerment, teamworking, and lean management practices (see also Krausert, 2014). The available evidence suggests that time lags between the introduction of new ways of working and the emergence of positive effects can be substantial. The introduction of employee empowerment, self-directed teamworking, and lateral cross-departmental working were all found to result in net positive effects with a time lag in the range of years (Barker, 1993; Birdi et al., 2008; Nembhard & Tucker, 2011). It takes time for employees to learn and internalize new ways of working, calibrate new interaction patterns across long cause-effect

chains in the organization, and negotiate their roles in new work processes and routines (Krausert, 2014, 2015b). At the same time, HR-related structural change was found to cause near-term (net) cost effects in terms of disruptions to existing processes and routines, entailing a temporary decline in productivity (Adler & Clark, 1991; Barker, 1993; Nembhard & Tucker, 2011). Near-term costs may also be associated with HRM practices (such as training activities, financial incentives) adopted to facilitate the change (Nembhard & Tucker, 2011; Nyberg, Pieper, & Trevor, 2013). Hence, HR-related structural change can be argued to be associated with both near-term cost effects and an increasing benefit-cost ratio over time, rendering it a first category of long-term SHC investment.

The second category shall be proposed to be the *recruitment, employment, and development of qualified, capable, and skilled employees*. Positive effects may be lagging (increasing over time) for three reasons. First, they were found to depend on the employees' development of firm-specific human and social capital. Firms employing more qualified and more capable employees were found to obtain performance benefits only gradually, over time, with firm-specific experience of the employees (Hitt, Bierman, Shimizu, & Kochhar, 2001; Ployhart, Van Iddekinge, & MacKenzie, 2011). Second, effects may be lagging due to the need to build up a critical mass of qualifications, capabilities, and skills across the workforce (or relevant workforce segment) (Dierickx & Cool, 1989; Ployhart et al., 2009). Once a critical mass of employees possesses higher levels of qualification, capability, and skill, it becomes more likely that more effective processes and routines emerge, entailing disproportionate effects on company performance (Ployhart & Moliterno, 2011). This factor should be relevant (a) when firms alter their recruitment standards (usually, firms do not hire more qualified, capable, or skilled employees in very large numbers at a time) and (b) when they introduce new (or

significantly altered) training and development programs that cannot be applied to a large number of employees in a short period of time (e.g., management trainee and apprenticeship programs have to be conducted for one cohort of new recruits at a time) (Krausert, 2015b). Essentially, changes in standards of qualification, capability, and skill may lead to more effective ways of working (HR-related structural change)—as and when the new standards have been “rolled out” across the relevant positions in the processes and routines of the organization. Third, performance effects of the recruitment, employment, and development of a more qualified, capable, and skilled workforce may also be lagging because employee skills relate to firm adaptability—which translates into performance effects only as and when the firm is required to adapt to changes in its business environment (Bhattacharya & Wright, 2005).

In terms of near-term cost effects, the available evidence suggests that investments in qualification, capability, and skill are associated with higher wage costs (Cappelli & Neumark, 2001; Cooke, 1994; Hitt et al., 2001; see also Boudreau, 1983). Recruitment, selection, training, and development practices moreover require resources (management time) to be developed and administered (Chadwick, Way, Kerr, & Thacker, 2013; Sels et al., 2006). Training and development practices may incur wage costs for trainers and they may be associated with reduced employee productivity during training (Chadwick et al., 2013). It can be proposed that the recruitment, employment, and development of qualified, capable, and skilled employees is associated with near-term cost effects and an increasing benefit-cost ratio over time, rendering it a second category of long-term SHC investment.

The third category shall be proposed to be *retention-related HRM practices*. HPWS effects on performance were found to be moderated by employee turnover (Jackson et al., 2014). That is, firms tend to exhibit higher levels of performance in the longer term to the extent they

invest both in qualifications, capabilities, and skills and in practices containing employee turnover (Kim & Ployhart, 2014). Positive lag effects of the employment of qualified, capable, and skilled employees depend on the employees staying long enough for them to develop necessary firm-specific human and social capital and, subsequently, to deliver higher levels of performance long enough to compensate for the lower benefit-cost ratio upfront (generally, the longer the tenure, the greater the return on the upfront investment). Given new or significantly altered recruitment, selection, training, or development practices, employee turnover may furthermore relate to the number of people that need to be recruited and trained—and, hence, the cost and/or time required—to build up a critical mass of qualification, capability, and skill at the workforce level (Dierickx & Cool, 1989; Krausert, 2015b).

To contain employee turnover, firms may invest in two types of retention-related HRM practices. First, they may invest in HRM practices seeking to contain *voluntary* turnover: Internal staffing, group-based pay plans, practices that foster procedural justice (e.g., a grievance procedure), practices that foster job embeddedness (e.g., employee socialization), and, with exceptions, employee training were found to relate negatively to voluntary employee turnover (see literature review by Hausknecht & Trevor, 2011). Besides a moderating effect of employee turnover on lag effects of HPWSs, it is also the effect of such HRM practices on employee turnover that may be lagging. That is, where they are first introduced (or significantly altered), if effective, they should result in changed incentives of employees to stay with their firm (again, in essence, HR-related structural change), which may require time to take effect (e.g., Nyberg et al., 2013). Consequently, changes to retention-related HRM practices may potentially serve as a leading indicator of changes in employee turnover levels.

Second, besides HRM practices containing voluntary turnover, firms may invest in

employee retention during downturns in the business cycle. Various research has found that firms laying off fewer employees during cyclical downturns, by and large, tend to have competitive advantages in the longer term (in particular given high industry differentiation) (Delery & Doty, 1996; Ji, Guthrie, & Messersmith, 2014; Kim & Ployhart, 2014). They were argued to be quicker to take advantage of market opportunities when the demand recovers and to incur lower costs of recruitment, selection, and training in the longer term. Additionally, it was argued that laid-off talent may be picked up by competing firms, improving their competitiveness, and that layoffs may affect the organizational commitment of retained employees (“survivors”) (Ji et al., 2014; Kim & Ployhart, 2014; Pfeffer, 1998).

Investments in retention-related HRM practices can also be argued to incur near-term cost effects, including bonus payments associated with group-based pay plans, management and staff time invested in practices such as socialization, training, and grievance procedures, and wage costs of trainers (Chadwick et al., 2013). Retention of a greater number of employees during cyclical downturns can be argued to be associated with higher wage and unit labor costs in the near term (being the reason that firms make employees redundant in the first place). More research would be needed on cost effects of retention-related HRM practices. Nevertheless, based on the available evidence, it can be proposed that retention-related HRM practices are associated with near-term cost effects and an increasing benefit-cost ratio over time, rendering them a third category of long-term SHC investment.

Proposition 1: HR-related structural change, the recruitment, employment, and development of qualified, capable, and skilled employees, and retention-related HRM practices are all associated with near-term cost effects and an increasing benefit-cost ratio over time—rendering them long-term investments in strategic human capital.

Agency Theory, Informed Trading by Small Blockholders, and Securities Analysts

Agency theory is concerned with interest conflicts, information asymmetry, and consequent problems of monitoring and incentivization in the relationship between shareholders and managers (Jensen & Meckling, 1976). It is particularly concerned with mechanisms that may mitigate *agency problems*, that is, actions and decisions of managers that serve their own interests at the expense of shareholder interests (e.g., relating to their pay, risk attitude, “empire building,” and, more generally, prioritization of shareholder value). Such mechanisms include incentives seeking to align management with shareholder interests (for example equity-based compensation) as well as various monitoring mechanisms (for example independent boards of directors) (see literature review by Dalton, Hitt, Certo, & Dalton, 2007). A mechanism that has received particular attention in the more recent corporate governance literature is *informed trading by small blockholders* (Admati & Pfleiderer, 2009; Edmans, 2009, 2014). This mechanism involves monitoring of firms by small blockholders (in the sense that they collect detailed information about the firm’s performance), who then do (usually) not intervene in the management of the firm directly (as boards of directors or large blockholders would do). Instead, they trade shares based on the information they collect. This affects the stock prices of firms and, given equity-based compensation, arguably creates incentives for managers to act in the interest of shareholders. That these blockholders are small matters because their smallness enables liquidity (while large blockholders cannot easily trade their shares). That they are blockholders matters in so far as it is financially viable for them to collect and analyze information about firm performance and industry trends. Hence, this corporate governance mechanism is facilitated by the prevalence of small blockholders in the US capital market (Dalton et al., 2007; Edmans, 2009).

A central actor in corporate governance through informed trading by small blockholders is the *securities analyst*. Securities analysts are employed by small blockholders to analyze and recommend stock (Ramnath, Rock, & Shane, 2008). They collect all sorts of information, including information on economic and industry trends, the financial results of firms, changes in their strategies and processes, new product launches, customer satisfaction, the hiring of management consultants, R&D investments, and the track record of the top management team (Bergh & Gibbons, 2011; García-Meca & Martinez, 2007; Lev, 2011; Ngobo, Casta, & Ramond, 2012; Rogers & Grant, 1997; Ulrich, 2015). Their information sources include annual reports, firm announcements, communications with CEOs, CFOs, investor relations specialists, suppliers, and former and current employees of the firms they cover, reports of other securities analysts, and any other sources that are relevant and accessible (Bushee, Jung, & Miller, 2013; Bushee & Miller, 2012; Lev, 2011).¹

Securities analysts process the gathered information using a method known as *fundamental analysis*. This involves two main steps. In the first step, they calculate core earnings (or “street earnings”). Core earnings are GAAP earnings stripped of transitory influences on earnings, for example one-time expenditures related to organizational restructurings.² Thus, they represent the part of GAAP earnings that is expected to recur in the longer term (Bushee, 1998; Gu & Chen, 2004). In the second step, securities analysts forecast near- and long-term earnings by taking into account various factors that may alter the recurring stream of earnings in future (Jung, Shane, & Yang, 2012). The projected flows of future earnings then provide the basis for their estimation of the firm’s net present value, the target price (i.e., the stock price they would consider fair), and stock recommendations (buy, hold, or sell recommendations) (Ramnath et al., 2008). The recommendations of securities analysts are

an important influence on the demand for, and price of, stock (Womack, 1996; Zuckerman, 1999).

Short Termism and its Effects on SHC Investments

The terms (*economic*) *short termism* and (*temporal* or *managerial*) *myopia* refer to patterns of investment decisions whereby “managers overvalue immediate results relative to delayed results” (Souder & Bromiley, 2012, p. 550; see also Miller, 2002). That is, given short termism, expected future cash flows are discounted beyond a discount rate that would correspond to the opportunity costs and the risk associated with the investment (Souder & Shaver, 2010). As a result, the firm’s resources are disproportionately allocated to investments and activities with a more immediate effect. Short termism may be caused by factors at the firm level, such as low firm performance, concern for the firm’s survival, the firm’s historic temporal orientation, and limitations in the cognitive capacity of managers (Miller, 2002; Souder & Bromiley, 2012; Souder & Shaver, 2010). Short termism may also be caused by factors related to the capital market, including firm ownership by transitory investors, dispersed shareholding, and firm coverage by securities analysts. Transitory investors (such as hedge funds) seek to obtain a return on investment in a relatively short period of time (such as 18 months). They were argued to have a preference for, and be causally related to, allocations of firm resources to resource usages that maximize returns within their investment horizon while not pursuing returns beyond it (Black, Gospel, & Pendleton, 2008; Liu et al., 2014).

Dispersed shareholding may cause short termism also where longer term investments would be in the interest of investors (i.e., where investors do not have a particularly short investment horizon). Dispersed shareholders lack incentives and means to gather (costly) information about strategies and investments of firms. Hence, their trading is based on

publically visible (current) earnings information (Edmans, 2009, 2014). This entails that the stock price, in the first instance, reflects near-term cost effects but not longer term positive effects of investments on earnings. A stock price that, in the near term, does not reflect longer term positive earnings effects of investments is one causal factor in short termism due to dispersed shareholding. The other (necessary) factor is that managers discount long-term stock-price effects beyond the discount rate that would correspond to the shareholder interest: A solution to short termism that has long been propagated is long-term incentives (equity-based compensation). Given effective long-term incentives, management decisions should not be affected by a stock price that temporarily undervalues long-term investments. Once long-term effects of investments materialize in earnings, the stock price should be corrected and managers should receive corresponding rewards in the longer term. This, however, does not take into account the sensitivity of CEO turnover to the stock price (Edmans, 2009). The likelihood that managers reap returns on investment (through their equity-based compensation) is reduced by their risk of job loss—the likelihood that shareholders reap their returns is not. Consequently, rational, wealth-maximizing managers should have incentives to discount long-term effects beyond the discount rate that would be in the interest of longer term investors. Additionally, the (already smaller) expected value of long-term effects of investments to managers should be further offset by any increases in their employment risk due to a temporarily lower stock price (affecting the net present value of their total expected future income). The argument is consistent with evidence finding that long-term incentives are not effective in mitigating short termism (Graham, Harvey, & Rajgopal, 2005; Souder & Bromiley, 2012).

Against this background, it has been argued that informed trading by small blockholders, with securities analysts as central actors, may increase the informativeness of the stock price and,

thereby, mitigate short termism where longer term investments are in the interest of shareholders (Edmans, 2009, 2014). If analysts discount transitory cost effects of, for example, R&D investments in their core earnings estimates and anticipate positive long-term effects in their earnings forecasts, it can increase incentives of managers to make respective investments (Barth, Kasznik, & McNichols, 2001; Gentry & Shen, 2013). At the same time, the coverage of firms by analysts may exacerbate short termism in relation to types of investment that are not adjusted for in their valuation models. Firms covered by analysts are exposed to greater media coverage and followed by a greater number of investors—hence, the responsiveness of the demand for stock (and of the stock price) to whatever performance measures the capital market attends to is heightened (DesJardine, 2015). Temporarily lower earnings due to long-term investments are associated with greater stock price effects, linking to the employment risk of managers. Firm coverage by analysts has also been associated with greater firm ownership by transitory investors, greater exposure to takeover attempts (which, again, links to the employment risk of managers), and a reduced ability of firms to cope with near-term performance pressure through earnings management (“creative accounting”) rather than real earnings management (efforts to boost near-term performance, for example, by cutting longer term investments) (He & Tian, 2013).

An element of the analysts’ monitoring and valuation process that is often associated with short termism is quarterly earnings forecasts. Quarterly earnings forecasts represent the analysts’ expectations of how well a firm will perform in the near term, based on the information they have gathered. To the extent analysts have made adjustments for transitory cost effects and for positive long-term effects of investments, they will be reflected in the quarterly earnings forecasts. That is, a given firm value estimate, target price, and, ultimately, actual stock price

will be associated with a lower level of (GAAP) earnings—and a lower quarterly (GAAP) earnings forecast—if long-term investments are taken into account by analysts. From the managers' point of view, quarterly earnings forecasts are experienced as performance goals (quarterly earnings *targets*) since earnings announcements below the forecasts result in stock price reductions (experienced as penalty) (He & Tian, 2013). From the analysts' point of view, earnings announcements below the forecast suggest that their valuation models were inaccurate and that they need to make adjustments, for instance, to their core earnings assumptions, entailing lower estimates of future earnings streams, lower net present value estimates, and lower target and, ultimately, actual stock prices. Thus, quarterly earnings forecasts serve as a “last minute” reality check for the analysts' firm valuation models, ahead of the announcement of actual earnings. Given stock price penalties for negative earnings surprises, managers take various last minute actions to avoid negative earnings surprises where earnings turn out below the forecasts. Such actions include earnings management, real earnings management, and communication with analysts about the transitory nature of cost effects and long-term positive effects of investments that had not yet been taken into account by them (DesJardine, 2015; He & Tian, 2013). The practice of publishing quarterly earnings forecasts may then be regarded another factor exacerbating short termism to the extent that it triggers last minute real earnings management that would not have occurred without quarterly earnings forecasts (in overvalued firms). Again, to the extent that long-term investments are adjusted for in core earnings estimates and long-term earnings forecasts (entailing that they have a near-term positive impact on the analysts' firm valuations, recommendations, and, ultimately, the stock price), they should be protected from real earnings management (see following section).

It can then be argued that the three earlier proposed categories of long-term SHC

investments may potentially be affected by short termism, unless analysts make adjustments for them in their valuation models—and the available evidence suggests that, currently, they by and large do not make (sufficient) adjustments for them (Benson et al., 2006; CIPD, 2015; Edmans, 2011). Given dispersed shareholding, monitoring by analysts who do not make adjustments for long-term SHC investments, and the publication of quarterly earnings forecasts, the stock price should, in the near term, generally err on the high (low) side to the extent firms (a) initiate fewer (more) HR-related restructurings, (b) target lower (higher) levels of qualification, capability, and skill, and (c) invest less (more) in retention-related HRM practices. Given managers discount long-term stock price effects more than longer term investors (due to their employment risk), it can then be proposed that levels of long-term SHC investment in publically listed firms will generally remain below levels that would be in the interest of longer term investors (and longer term firm performance)—constituting an agency problem.

The proposition is consistent with the available evidence in so far as Black et al. (2008) found that countries with larger, more active capital markets, such as the US, are associated with higher levels of employment volatility over the business cycle—which was found to relate, by and large, negatively to firm performance elsewhere (Ji et al., 2014; Kim & Ployhart, 2014). They also found that larger, more active capital markets are associated with higher employee turnover, consistent with a negative effect of informed trading by small blockholders on retention-related HRM practices. Research has further yielded that levels of SHC investment have remained below expectations given the evidence for the effectiveness of SHC investments (Kaufman, 2015). Finally, a large body of evidence in the strategic HRM literature implies that greater investment in SHC will generally result in better performance (Combs et al., 2006; Jackson et al., 2014). Research has, to date, not yielded any evidence of an inverted u-shaped

relationship between SHC investments and company performance, suggesting there is not a significant number of firms that are investing at or above the optimal level.

Proposition 2: Dispersed shareholding, firm coverage by securities analysts, and the employment risk of managers are causally related to long-term SHC investments that generally remain below levels that would be in the interest of longer term investors (and in the interest of longer term firm performance)—constituting an agency problem.

Accounting for Long-term SHC Investments by Securities Analysts?

Thus, while coverage of firms by securities analysts may pose a factor exacerbating short termism, their information gathering simultaneously has the potential to mitigate short termism with respect to those investments and activities that are taken into account in forecasting future earnings. Research on their treatment of other types of intangibles has yielded that analysts are particularly concerned with information about change, or factors that may bring about change, in relation to intangibles and associated future earnings streams (Ngobo et al., 2012). For example, they were found to pay attention to new product launches, changes in a firm's strategy, new investments (García-Meca & Martinez, 2007), changes in customer satisfaction (Ngobo et al., 2012), the hiring of management consultants (Bergh & Gibbons, 2011), and organizational restructurings (Rogers & Grant, 1997). The analysts' valuation models reflect their assumptions about relationships of various parameters with future earnings streams (Benner & Ranganathan, 2013). A change in, for example, customer satisfaction leads analysts to make adjustments to parameters representing customer satisfaction and/or to their assumptions about relationships between these parameters and future earnings streams.

Research in the SHC literature suggests that higher future earnings streams may also occur where firms sustain their SHC investments (e.g., continued employment of skilled employees) at times at which the competition reduce their SHC investments (e.g., making skilled

employees redundant during a cyclical downturn) (Kim & Ployhart, 2014). Thus, information about change in relation to SHC investments in one firm might potentially be used by analysts to anticipate future change in the (by definition relative) competitive positions of that firm and competitors that sustain their SHC investments. And this might lead them to anticipate consequent changes in future earnings streams across all firms in the segment. Nevertheless, it is information about SHC-related change that triggers changes in earnings forecasts across the firm segment and that, based on the available research, should be of interest to analysts.

One of the earlier proposed categories of SHC investment—HR-related structural change—implies change to the firm’s SHC and future earnings streams by definition. The investment, in this case, is a one-time intervention that alters established structures, disrupts existing processes and routines, and leads to the emergence of processes and routines that utilize the resources of the firm in a different, more effective manner. Thus, information relating to this category of SHC investment should generally be relevant for analysts.

The other two categories, by contrast, can be characterized as recurring investments, rather than one-time interventions: The recruitment, employment, and development of qualified, capable, and skilled employees involves HRM practices (such as recruitment, selection, and training practices) that need to be invested in on a recurring basis. Likewise, retention-related HRM practices (such as the operation of a grievance procedure or payment of group-based rewards) need to be invested in on a recurring basis. With respect to those SHC investment categories, analysts should then require information about *changes* to levels of recurring investment (across the firm segment). Information about levels of recurring investment as such should be less relevant (Ngobo et al., 2012). Once effects of, for instance, employing more (or less) qualified, capable, and skilled employees have materialized in earnings (and/or been

factored into the stock price), the continued employment of the same types of employees, or the continued provision of the same levels and types of training (across the firm segment), should not further impact on future earnings and the share price, all other factors being equal.³ This assumes that analysts in some ways factor in the effects of employee qualification, capability, and skill in their valuation models. If not, theoretically, respective SHC investments should be associated with a greater incidence of continuous underestimation of future earnings streams and repeated earnings surprises.

In principle, long-term SHC investments may be accounted for at two different stages of the fundamental analysis—corresponding to both constituting components of an investment, the upfront cost component and the lagging benefits component. In the first stage, analysts estimate core earnings, discounting transitory influences on GAAP earnings (Gu & Chen, 2004). In the second stage, analysts take into account various factors that may influence the stream of recurring earnings in the future (Jung et al., 2012). Since their earnings forecasts impact on the stock price (Womack, 1996; Zuckerman, 1999), their anticipation of lagging earnings effects of investments impounds them into the stock price before they materialize. Managers are aware of how analysts calculate core earnings and earnings forecasts (Baik, Farber, & Petroni, 2009; Zhang & Gimeno, 2010). Hence, to the extent that analysts discount transitory cost effects and anticipate lagging positive effects of SHC investments, it should mitigate the earlier proposed agency problem, raising incentives of managers to make long-term SHC investments. The argument is consistent with research supporting respective effects of securities analysts in relation to other types of intangibles investment (Barth et al., 2001; Benner, 2010; Bushee, 1998; Gentry & Shen, 2013; Lev, 2011).

Near-term cost effects of SHC investments can be discounted in the core earnings

estimate (and should be of interest to analysts) to the extent they are *transitory* cost effects. Adjustments cannot (and do not need to) be made for recurring cost effects (affecting future earnings streams on a continuous basis—such as higher payroll costs due to the employment of more qualified employees). Whether lagging positive effects are transitory or lasting (or how long they are lasting) should be relevant information for securities analysts, too (affecting the magnitude of the effect on future earnings streams). However, it should not influence if information is needed—the fundamental analysis method, in principle, allows for (and requires) adjustments for both transitory and lasting lag effects.

It can then be proposed that agency problems affecting long-term SHC investments will be mitigated to the extent securities analysts discount transitory cost effects in their core earnings estimates and to the extent they anticipate lagging positive effects (whether transitory or recurring) in their long-term earnings forecasts that result from changes to recurring long-term SHC investments as well as from nonrecurring interventions that alter the firm’s SHC on a lasting basis. Table 1 details some of the cost and lag effects that analysts might potentially make adjustments for. To be sure, the table seeks to specify what their information requirements in relation to SHC would be—how the information can be provided in a reliable fashion is outside the already extensive scope of this paper (see Krausert, 2015a, who adopted a signal-theoretical perspective to explore how needed information may be obtained by analysts).

Insert Table 1 About Here

Note that securities analysts may potentially make adjustments for both increases and reductions in recurring SHC investments. For example, they might pay attention to reductions in

efforts to recruit and select qualified, capable, and skilled employees and to reductions in efforts to build a skilled workforce through training and development. If the reduction can be expected to be temporary (for example during a cyclical downturn), they might conceivably treat corresponding cost savings as transitory. Hiring a few less qualified employees, or suspending a management trainee program for a short period of time, will likely not impact on longer term performance immediately. However, sometimes firms also reduce SHC investments on a more permanent basis. For example, Waddoups (2016) identified a lasting reduction in training provision by US firms between 2001 and 2004, unrelated to the business cycle. If lower standards of qualification, capability, and skill are applied to the recruitment of a greater number of employees, or if reduced provision of training persists, lower levels of qualification, capability, and skill may gradually be “rolled out” across the workforce and less effective processes and routines may emerge over time (Krausert, 2015b). Again, respective changes in some firms while other (internationally or domestically) competing firms sustain their SHC investments may potentially relate to changes in the competitive positions and, consequently, future earnings streams across the segment of firms.

Table 1 also suggests that analysts may potentially take into account lagging effects of retention-related HRM practices. If they incorporate long-term effects of the recruitment, employment, and development of qualified, capable, and skilled employees in their valuation models, they might incorporate employee turnover rates as a moderator of such effects. Research has yielded employee turnover as a factor that analysts have already been showing some interest in (CIPD, 2015). Additionally, if the introduction of retention-related HRM practices (such as group-based pay plans and practices fostering procedural justice and job embeddedness) impacts on employee turnover with a time lag—as was argued earlier—analysts

might pay attention to (changes to) such practices as leading indicators of employee turnover as well. Finally, retention-related HRM practices were argued to also encompass practices in relation to employee retention and layoffs during cyclical downturns. In that context, analysts may conceivably make adjustments for the transitory nature of cost savings associated with layoffs and their long-term effects on the competitiveness of firms in the segment.

Proposition 3: Agency problems in relation to long-term SHC investments will be mitigated to the extent securities analysts discount transitory cost effects in their core earnings estimates and to the extent they anticipate lagging positive effects in their long-term earnings forecasts (resulting either from changes to recurring SHC investments or from nonrecurring SHC-related interventions).

Differences in Securities Analysts' Skills and Incentives Across Firm Segments

A prerequisite for the analysts' taking into account of SHC investments is that they use the fundamental analysis method. Not all analysts use this method, although it has been adopted more widely since the beginning of the millennium (Bradshaw, 2009). Instead, some analysts rely on *relative valuation multiples*, such as price-earnings ratios or price-earnings-growth ratios, which they compare to industry average ratios and historic ratios (Bradshaw, 2004; Gleason, Johnson, & Li, 2013). Relative valuation multiples are considered a heuristic. They require less information, consequently less time, and they are less complex to calculate, requiring less skill than fundamental analysis (Gleason et al., 2013; Jung et al., 2012). They do reflect effects of (overall patterns of) long-term investments—as far as they have already materialized in earnings. However, they cannot capture effects of changes in investment patterns going forward. Moreover, they are considered a coarse instrument with a lower earnings predictability compared to the fundamental analysis method (Bradshaw, 2009; Gleason et al., 2013). Fundamental

analysis is more likely to be used by analysts who work for larger brokerage houses (where analysts specialize in a smaller number of firms, allowing more time for the analysis of each firm) (e.g., Whitwell, Lukas, & Hill, 2007). And it is more likely to be used by analysts listed in the prestigious All American Analyst index (which is often treated as an indicator of analyst skill) (Jung et al., 2012). Hence, it can be proposed that the analysts' accounting for long-term SHC investments is a theoretical possibility, and therefore more likely, where analysts rely on fundamental analysis, which covaries with their employment by larger brokerage houses and their listing in the All American Analyst index.

Additionally, it shall be proposed that the analysts' incentives to account for long-term SHC investments relate to the magnitude of SHC effects in their industry segment. Analysts were found to be more likely to account for R&D investments in firm segments in which R&D investments make a larger difference for firm performance (such as in pharmaceuticals) (Whitwell et al., 2007). Their career progress depends on their forecasting accuracy (e.g., Hong, Kubik, & Solomon, 2000). The greater the effect of an intangible factor on firm performance, the greater will be the forecasting error if the factor is not taken into account—hence, the greater should be the analysts' incentives to take the factor into account.⁴ On that basis, it can be argued that their willingness to learn about long-term SHC investments and to collect and analyze the necessary information should correlate with the magnitude of the performance effects of SHC investments in their industry segment. Zu Knyphausen-Aufseß, Mirow, and Schweizer (2011) furthermore reported that managers make efforts to educate analysts about the benefits of investments they consider important. That is, managers may be more forthcoming in providing information about SHC investments where their performance effects are larger, where they make more of a difference to the managers' performance-related pay awards, and where managers are

consequently keener to make them—entailing lower information costs from the analysts' point of view.

Research on differences in the magnitude of SHC effects across industries suggests that effects tend to be larger in manufacturing than in services (Combs et al., 2006; Subramony, 2009). In a sample of publically listed manufacturing firms, Datta, Guthrie, and Wright (2005) found that the magnitude of SHC effects correlated positively with labor intensity, industry growth, and industry differentiation. Chadwick et al. (2013) provided further support for a positive correlation with industry growth as well as with industry dynamism. Subramony (2009) provided tentative evidence to suggest effects may be larger in manufacturing firms operating flexible manufacturing, total quality management, or lean manufacturing systems. Ji et al. (2014) found the volatility of a firm's employment levels (reflecting the extent to which employees are laid off during cyclical downturns) to relate negatively to performance given high industry differentiation (e.g., in chemicals, electronic equipment, and business services) and positively given low industry differentiation. This suggests that securities analysts should have greater incentives to take into account the extent to which firms retain and lay off employees during cyclical downturns in differentiated industries. By contrast, given low industry differentiation, long-term positive effects of employee retention appear to be less significant for company performance than near-term cost savings through layoffs. Hence, if analysts do not take into account tradeoffs between employee retention and layoffs during cyclical downturns (that is, beyond immediate earnings effects), it will be less likely to generate inaccurate firm valuations—the analysts' incentives to make adjustments should be smaller. Overall, it can be argued that the incentives of securities analysts to make the earlier proposed adjustments for long-term SHC investments are likely to be greatest in labor-intensive, fast-growing, and

differentiated manufacturing firms. The argument is furthermore consistent with research finding that analysts are generally more likely to account for long-term investments where firms classify as growth stock (while they are more likely to focus on current earnings where firms classify as margin stock) (Baik et al., 1999; Benner & Ranganathan, 2013).

Proposition 4: Skills and incentives of securities analysts needed for them to account for long-term SHC investments are greatest among those securities analysts who are employed by larger brokerage houses, listed in the All American Analyst index, and covering manufacturing firms that are differentiated, labor intensive, and part of a dynamic, fast-growing industry.

Discussion

As a first contribution, this article has proposed an agency problem affecting SHC investments. Negative effects of the capital market on SHC investments were proposed elsewhere before (Krausert, 2014; Liu et al., 2014). The literature has also been regularly making references to agency theory, as part of typically high-level overviews of various broadly applicable theories. However, in the main, the theoretical arguments have revolved around factors such as shareholder preferences for short-term returns, firm ownership by transitory investors, shareholder preferences for employment flexibility (to minimize long-term claims against the firm), and interest conflicts in the appropriation of rents between investors and employees (Black et al., 2008; Liu et al., 2014). Additionally, the literature has covered firm-level factors not causally related to the capital market, such as low firm performance and consequent threats to firm survival (Krausert, 2014). A focus on near-term performance due to factors such as firm ownership by transitory investors or low firm performance does not constitute an agency problem in the sense of management actions that conflict with shareholder interests. Maximizing returns on investment within a relatively short time horizon is consistent

with the interest of transitory investors. Prioritizing near-term performance given low performance (and a consequent threat to firm survival) does not conflict with the investors' interest either (Miller, 2002; Souder & Shaver, 2010). Thus, the literature has essentially been suggesting that levels of SHC investment tend to be lower when it suits the interest of investors. This also implies that SHC investments should not be affected where firms are owned by investors with a longer time horizon (except due to firm-level factors). By contrast, this article has proposed a genuine agency problem whereby SHC investments may be affected not only given firm ownership by transitory investors (or short termism due to firm-level factors) and whereby SHC investments may remain below levels that would be in the interest of (longer term) investors (regardless of firm-level factors). It is conceivable that the mechanisms focused on with this paper interact with previously described mechanisms, such that dispersed shareholding and firm coverage by analysts create a baseline short termism which is moderated by share turnover and firm performance (e.g., near-term performance pressures may be intensified by transitory investors and low firm performance) (see Souder & Shaver, 2010, on effects of firm performance on short termism). The proposed agency problem then also constitutes a potential alternative explanation for findings in the strategic HRM literature of relatively low levels of HPWS adoption—the prevailing (not yet tested) explanation being that managers lack either knowledge about HPWSs or the ability to execute (Becker & Huselid, 2006; Kaufman, 2015).

The second contribution is theory about a mechanism that may potentially mitigate the proposed agency problem. Thus, securities analysts that cover firms targeted by longer term investors (e.g., analysts covering growth stock as opposed to margin stock) should have incentives to take effects of SHC investments into account in their firm valuation models. It was proposed that they may (and, to accurately forecast future earnings streams, should) account for

SHC investments at two different stages of the fundamental analysis: They may not only anticipate lagging positive effects in their long-term earnings forecasts (Benson et al., 2006; Edmans, 2011). But they may also discount a range of near-term cost effects as transitory in their core earnings estimates—where it might be argued that the discounting of more near-term, more certain transitory cost effects would likely be an easier feat than the accurate accounting for relatively less certain, longer term beneficial effects. It was further argued that the information requirements of securities analysts pertain to changes to, rather than levels of, recurring SHC investments as well as to nonrecurring, intervention-like SHC investments within segments of (internationally and domestically) competing firms. This argument is pertinent given the prior literature has been concerned with levels of recurring SHC investments, such as levels of training expenditure and the extent of adoption of various other HPWS component practices. The argument should also be relevant for the human capital disclosure literature in accounting, which has been studying how various HR-related indicators are, and should be, disclosed by firms (where, again, the focus has been on either levels of human capital, such as levels of skill, or levels of activity, for instance in relation to employee training) (e.g., Beattie & Smith, 2010). Finally, it was proposed that the skills and incentives required for analysts to account for SHC investments vary across firm segments. This relates to research suggesting that negative capital market influences on SHC investments vary across firms depending on the share turnover of firms (Liu et al., 2014). The theory developed with the current article suggests that the possibility of analysts taking into account SHC investments—mitigating short termism—is likely to vary across firms, too, depending on characteristics associated with the analysts covering the firm (the size of their brokerage house and their listing in the All American Analyst index) as well as the magnitude of SHC effects in the firm segment. The theory should then also be

relevant for researchers concerned with antecedents of SHC investments, studying factors that influence differences in, for example, the adoption of HPWSs across firms (see Jackson et al., 2014).

The third contribution is a more specific and comprehensive definition of what kind of HRM practices may be affected by short termism and may (and should) be taken into account by securities analysts. The likelihood that an HRM practice is affected by short termism was argued to relate to the magnitude of near-term cost effects as well as the extent to which the benefit-cost distribution is skewed toward the longer term. On that basis, three categories of SHC investment were proposed that may be affected by short termism. These were partially covered in the prior literature: Krausert (2014) discussed the introduction of involving forms of work organization as a type of SHC investment that may be affected by short termism (corresponding to the broader category of HR-related structural change in this paper). Black et al. (2008) studied effects of the capital market on employment change over the business cycle. Again, the corresponding SHC investment category in this paper—retention-related HRM practices—was defined more broadly, including not only employee retention during cyclical downturns but also HRM practices seeking to contain voluntary employee turnover. The recruitment, employment, and development of qualified, capable, and skilled employees had not been covered as a category of SHC investments that may be affected by short termism in the prior literature. Liu et al. (2014) focused on HPWSs as the broadest conceivable category of SHC investments while (like Black et al., 2008) not making any arguments relating to near-term cost or lag effects. The current article then also introduced the distinction between recurring and nonrecurring, intervention-like SHC investments to further characterize the HRM activities that should be of interest to securities analysts. And it made suggestions concerning specific transitory cost effects (which

may potentially be discounted in the analysts' core earnings estimates), specific recurring cost effects (which should not be discounted), and specific lag effects (which may potentially be anticipated in long-term earnings forecasts) for each of the three SHC investment categories. A final argument that had not been made elsewhere before was that analysts may potentially make adjustments for transitory beneficial effects and lagging negative effects of SHC-related decisions, too.

This article has practical implications for managers, HR managers, securities analysts, and other actors in corporate governance. It made specific propositions about future-oriented HRM activities that are at risk of being underinvested in and, thus, require corporate governance attention (Propositions 1 and 2). Higher levels of sustainable performance should be facilitated if managers and securities analysts were able to communicate meaningfully about transitory and lagging effects of SHC investments such as the ones specified in Table 1. Communication about such effects is in the interest of managers as much as of securities analysts (Jacobs, 2015; Krausert, 2015a). For example, managers may want to communicate to analysts about transitory costs and lagging effects of SHC investments when at risk of missing a quarterly earnings target (Zhang & Gimeno, 2010) as well as where SHC investments make a bigger difference for company performance and, consequently, for the managers' performance-related pay awards. Beyond instrumental motives, many managers may want to do what is right for their firms and employees while under pressure to deliver short-term results. Communication about long-term SHC investments with securities analysts may enable them to do that without sacrificing their job security, career opportunities, or financial rewards.

A potential issue may be insufficient information about the effects (in particular long-term effects) of SHC investments also within the firm. The advent of "big data" as well as

activity-based costing systems might facilitate the collection of data that can support the provision of needed information (Fulmer & Ployhart, 2014). This article offers guidance on what kind of data would need to be collected (see Table 1). Communication about SHC investments between managers and securities analysts might furthermore be facilitated by a greater integration of HR with investor-facing functions within the firm. It is typically CEOs, CFOs, and investor relations specialists that communicate with securities analysts. A closer working relationship among HR, corporate finance, and investor relations functions might help develop necessary knowledge about the firm's SHC investments among the firm's representatives vis-à-vis investors. Vice versa, senior HR managers might develop a better understanding of the information requirements of investor representatives. Theoretically, it would be conceivable, too, that chief HR officers become directly involved in communications with investor representatives when firms make significant long-term SHC investments. Greater attention to SHC in firm-investor communications might then also be an opportunity for HR to gain a "seat at the table" and improve their status in the firm.

A number of issues could not be included in the already broad scope of this paper, which should be examined by future research. First, securities analysts appear to have difficulty attributing value to factors that are unique, novel, or otherwise do not fit their valuation models (Benner & Ranganathan, 2013; Zuckerman, 1999). This might possibly be an issue when it comes to their accounting for long-term SHC investments that deviate from the common practice in an industry segment. Second, the arguments of the paper would need to be examined further from a signal-theoretical perspective, so as to determine how needed information can be relayed from firms to the capital market reliably. Analyst efforts to take SHC investments into account might potentially be thwarted by fake signaling. Furthermore, reallocation of resources (so as to

boost signals attended to by the capital market) may be an issue if the capital market attends to signals that are contaminated or deficient (Krausert, 2015a). Another potential issue is that managers may be reluctant to divulge SHC-related knowledge that differentiates their firm in the competition (Ndofor & Levitas, 2004). Thus, further research will be required to examine how the proposed SHC-related information can be communicated effectively. Third, this article focused on informed trading by small blockholders as a corporate governance mechanism. Other corporate governance mechanisms, such as monitoring and intervention by boards of directors, may potentially complement or substitute monitoring by small blockholders (Rediker & Seth, 1995). For example, it is conceivable that independent boards of directors intervene to encourage long-term SHC investments where they are not being monitored by analysts. Future research should examine the effectiveness of other corporate governance mechanisms as well as the effectiveness of different bundles of mechanisms in mitigating agency problems related to SHC.

The article furthermore highlights the need for more research on costs and cost patterns associated with various types of SHC investment—both to better understand which HRM activities are at risk of being sacrificed given near-term earnings pressure and to facilitate the accounting for transitory cost effects of HRM practices by analysts. A longer term research goal might be to study relationships between patterns of cost effects and patterns of beneficial effects over time (and, on that basis, benefit-cost ratios and how they change over time). As a first step toward that goal, future research on HRM-performance effects might seek to replace survey-based measures with cost-based measures of HRM activity as independent variable. One might conceivably rely on activity-based costing systems to determine how much time employees spend on different types of HRM activity (capturing indirect in addition to direct cost effects).

Apart from that, the article also draws attention to a need for more research on the effects of (temporary as well as lasting) reductions in recurring SHC investments on outcomes such as productivity, firm adaptability, and the firm's cost structure over time. Given securities analysts specialize in one industry segment (Whitwell et al., 2007) and given significant differences in HRM-performance effects across industry segments (Ji et al., 2014), such research could be industry-specific to yield findings that are more reliable and valid for the purposes discussed here. According to the earlier arguments, research conducted in manufacturing industries that are differentiated, fast-growing, and labor-intensive should be particularly relevant.

Finally, it needs to be emphasized that the proposed theory includes both positive and normative elements. Based on the (limited) available evidence, it is probable that, currently, securities analysts pay only sporadic attention to SHC investments (Benson et al., 2006; CIPD, 2015; Edmans, 2011; Hendry et al., 1999). Given a budding interest in SHC in the capital market, it may then be argued that large-scale quantitative research is likely not a suitable method to evaluate Propositions 3 and 4—until analysts attend to SHC on a broader basis. In the meantime, experiments and case study methods may be more suitable to identify “cutting edge” firms and analysts that communicate about SHC investments ahead of the mainstream.

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Notes

1. Stock market regulations enacted at the beginning of the millennium require that information provided to investors and securities analysts by firms is provided publically (Regulation Fair Disclosure, NASD Rule 2711, NYSE Rule 472, Global Research Analysts Settlement).

However, various research has shown that firm and investor representatives continue to exchange private information (e.g., Bushee et al., 2013).

2. GAAP stands for Generally Accepted Accounting Principles.

3. The argument applies in the same way to retention-related HRM practices, including employee retention during cyclical downturns. That is, logically, it should be decisions to lay off (rather than retain) employees during downturns that (negatively) affect the firm's SHC, its capability to turn higher levels of demand into profits, and, consequently, future earnings streams (as well as, potentially, the relative positions of competitors in the market). Theoretically, analysts should make adjustments to their models in response to layoffs of employees, rather than decisions to retain them.

4. Theoretically, their incentives should not only depend on the magnitude of lagging positive effects but also on the magnitude of transitory cost effects of SHC investments: The greater their magnitude, the greater will be the forecasting error if they are treated as recurring instead of transitory.

Table 1: Potential Information Needs of Securities Analysts in Relation to SHC Investments

<i>Category of long-term SHC investments</i>	Transitory cost effects (which may potentially be adjusted for in core earnings estimates)	Recurring cost effects (which should not be adjusted for in core earnings estimates)	Lagging effects (which may potentially be adjusted for in long-term earnings forecasts)
<i>HR-related structural change</i>	<p>Disruptive effects on productivity in the near term (information needs pertain to expected magnitude and duration of disruptive effects, expected implications for costs and revenues)</p> <p>Other costs associated with change management (e.g., costs of training, layoffs, hiring, employment of management consultants)</p>	<p>Lasting changes to cost structure (e.g., altered payroll, recruitment, selection, and training costs)</p>	<p>Expected lagging positive effects via workforce productivity and adaptability resulting from altered, more effective utilization of resources (e.g., introduction of employee engagement, teamworking, or lean management practices, new incentive systems)</p> <p>(Information needs pertain to expected length of time lag, magnitude and duration of lagging effects)</p>
<i>Recruitment, employment, and development of qualified, capable, and skilled employees</i>	<p>Costs associated with irregular, nonrecurring HRM practices (e.g., exceptional recruitment drive, one-time training activity)</p> <p>One-time costs associated with the introduction of / changes to recurring recruitment, selection, training, development, and other HRM practices</p> <p>Cost savings associated with temporary reductions in recruitment, selection, training, development, and other HRM practices during cyclical downturns (information needs pertain to magnitude of cost savings, expected duration of cyclical downturn, proportion of cost savings that are expected to be transitory versus lasting beyond recovery)</p>	<p>Regular costs of recruitment, selection, training, development, and other recurring HRM practices (e.g., wage costs of trainers, reduced employee productivity during training)</p> <p>Recurring cost savings associated with efficiency improvements relating to recruitment, selection, training, development, and other recurring HRM practices</p>	<p>Expected lagging positive effects via workforce productivity and adaptability resulting from changes in recruitment and selection standards (e.g., hiring of more qualified, capable, and skilled employees)</p> <p>Expected lagging positive effects via workforce productivity and adaptability resulting from changes to training and development programs that need to be “rolled out” across the workforce successively (e.g., introduction of / changes to management trainee and apprenticeship programs)</p> <p>Expected lagging negative effects via workforce productivity and adaptability resulting from lasting reductions in recruitment, selection, training, and development efforts</p> <p>(Information needs pertain to expected length of time lag, magnitude and</p>

			duration of lagging effects)
<i>Retention-related HRM practices</i>	<p>One-time costs associated with the introduction of / changes to retention-related HRM practices (e.g., group-based pay plans, practices fostering job embeddedness and procedural justice)</p> <p>Cost savings associated with temporary reductions of retention-related HRM practices during cyclical downturns</p> <p>Payroll cost savings resulting from redundancies during cyclical downturns that can be expected to be transitory</p> <p>(Information needs pertain to magnitude of cost savings, expected duration of cyclical downturn, proportion of cost savings that are expected to be transitory versus lasting beyond recovery)</p>	<p>Regular costs associated with retention-related HRM practices</p> <p>Wage and unit labor costs that are higher compared to the competition as a result of greater employee retention during cyclical downturn</p>	<p>Expected lagging (positive or negative) effects of changes to retention-related HRM practices via employee turnover</p> <p>Expected competitive advantage during economic recovery resulting from employee retention during cyclical downturn</p> <p>Expected competitive disadvantage during economic recovery resulting from layoffs during cyclical downturn</p> <p>(Information needs pertain to expected length of time lag, magnitude and duration of lagging effects)</p>