Abstract

Using textual analysis software, we examine whether and how the tone of the question and answer (“Q&A”) portion of earnings-related conference calls varies with the time of day. We find that the tone of the conversations between analysts and managers becomes significantly more negative as the day wears off. This continuous, hour-by-hour change is likely the result of mental and physical fatigue gradually and imperceptibly setting in. The same pattern holds for textual uncertainty, increasing as the day wears off, the conversational tone is more wavering and less resolute. We document that conversational tone has economic consequences; more negatively toned conversations are associated with more negative abnormal stock returns during the call period and immediately thereafter. Notwithstanding the negativity associated with later day calls, firms exhibit significant “stickiness” in their choice of call time; having initiated the earnings conference call in the afternoon in the prior quarter is the most significant determinant of their doing so in the current quarter, dominating the sign of the earnings news and alternative measures of the firm’s need for equity capital. Analysis of post-call (50 days) returns indicates that there is an initial negative overreaction to bad news earnings information and, incrementally, to calls initiated in the afternoon, that eventually reverses. In contrast, the negative impact of tone deterioration on stock returns, documented here, does not reverse. To the best of our knowledge, this is the first study to document the effects of human physiological and mental factors on corporate communications with investors.