increase with firm size, or that costs decrease with firm size, or both. Also, some researchers argue that larger firms are under greater pressure from analysts and investors to distribute their financial results quickly. For example, large firms typically release earnings announcements more rapidly than small ones [2]. Large firms also post their 10-Ks/annual reports more quickly at their Web sites [6]. Thus we expect larger firms will update their IR Web pages more rapidly. The association of firm size with both Newest and Oldest Content should be negative. "Firm Size" is measured as the natural logarithm of total assets, obtained from Compustat.

Firms having worse financial results to report, such as a lower return on sales, are slower to post their 10-Ks/annual reports at their Web sites [6]. We anticipate that firms in worse financial condition have more pressing IR problems than keeping their IR Web pages updated. We expect firms in poorer financial health will be slower to update their IR Web sites. The content of all IR Web pages is a much broader construct than is the provision of one 10-K/annual report. Therefore we employ as explanatory variable a broader measure of financial condition than the return on sales measure used in [6]. Our measure of "Financial Health" is the well-known Altman's Z score (modified[1]), obtained from the Compustat database. The Z-score is a continuous measure associated with the firm's likelihood of entering bankruptcy within the next year. Higher scores suggest better financial health, so we expect the association of Financial Health with both Newest and Oldest Content should be negative.

Firms that access the capital markets are more likely to engage in voluntary disclo-

Panel A: Dependent Variables

Variables	Measurement / (Data Source)
Newest Content	Equals the number of days between our Web site visit and the most recently dated material in a firm's IR Web site (Determined by Web crawler software)
Oldest Content	Equals the number of days between our Web site visit and the oldest dated material in a firm's IR Web pages (Determined by Web crawler software)

Panel B: Explanatory Variables

Variables	Measurement / (Data Source)
Firm Size	Natural logarithm of total assets ($ millions) at 12/31/01. (Compustat)
Financial Health	Modified Altman's Z-score at 12/31/01 (Compustat). It equals 'zero' for Z-scores less than 1.81 (corresponding to a high probability of bankruptcy); equals 'one' for Z-scores greater than 3.00 (corresponding to a low probability of bankruptcy). Otherwise = $(Z\text{-score} - 1.81)/(3.00 - 1.81)$
N Pages	Total number of content pages in the corporate IR site, including clear text pages (html, asp, js, txt, etc.) that contained targeted terms, and file formats that typically contain content but could not be searched (pdf, xls, rtf, and doc). File types that have low informational content were excluded (gif, jpg, zip, etc.)
N File Types	Number of different file extensions (.doc, .xls, etc.) found in IR Web pages. (Determined by Web crawler software)
Sell stock	Equals 'one' if stock is sold during 2000 and 2001, and 'zero' otherwise (Compustat, statement of cash flow data)
% Bad Home Links	Percentage of bad links found in IR Web pages hosted on domains under direct control of the firm (Determined by Web crawler software)
% Local Control	Percentage of IR Web pages that are locally controlled (hosted under the firm's domain). (Determined by Web crawler software)

Table 1. Summary of variables, data sources, and expected relationships.

Terms dealing with Corporate IR Issues		Ensure capture of IR related URLs
10 K	Investor Headquarters	Corporate-IR.net
10K	Investor Home	InvestorRelations
10 Q	Investor Information	ir.ccbn.com
10Q	Investor Relations	ir.zhtml
Analyst	Investor Resources	ireye
Annual Report	Investor Site	/ir.
Calendar	Proforma	/ir/
Conference Call	Proxy	/ir_
Earnings Estimate	Quarterly Report	_ir/
Earnings Forecast	SEC Filing	
Earnings Forecast	Shareholder	Forces processing of Framed Sites
Financial Releases	Stock Information	<frame
Financials	Webcast	

Figure 1. Targeted keywords used by Web crawler software.

sure [9]. Managers have obvious incentives to disclose favorable information prior to a security offering. However, they also might disclose negative information if the market interprets not doing so even more unfavorably. Firms issuing new common stock equity in 1996 and 1997 disclosed more financial information at their Web sites in 1998 [5]. It is plausible that firms selling common stock will supply more timely information as well as a greater quantity. We expect equity issuance to be associated with more rapid updating of IR Web pages. Therefore, the association of an equity issuance variable with both Newest and Oldest Content should be negative. Our "Sell Stock" variable is coded "one" if a firm is a net issuer of common equity in 2000 and 2001, and "zero" otherwise.

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[1] A modified Altman's Z-score was used, where negative Z-scores were set to zero.