ONLINE APPENDIX TO

“INNOVATION OVERLOAD?”

Online Appendix Figure 1
Survey Design

We randomly select twenty papers that are in the top *Readability* quartile ("high readability papers") and twenty papers that are in the bottom quartile ("low readability papers"). We then assign these papers to finance PhD students and ask them to rate the readability of the introduction section. We focus on the introduction section, as reading the entire paper would require too much time for the PhD students. Moreover, the readability of the introduction section and the readability of the full paper are highly positively correlated. In our random subsample, the average *Readability* of the introductions of high readability papers is -5.68; the average *Readability* of the introductions of low readability papers is -8.71; the difference is -3.04 (*t*-statistic = -9.01).

To ensure that our sample of papers represents all areas of finance, we adopt the following procedure: Of the twenty randomly chosen high-readability papers (low readability papers), five are from the pool of papers that are in the area of financial markets (JEL codes: G10-G19) and are purely empirical, five are from the pool of papers that are in the area of financial markets and contain a theoretical model, five are from the pool of papers that are in the areas of Financial Institutions & Services and Corporate Finance & Governance (JEL codes: G20-G39) and are purely empirical, and five are from the pool of papers that are in the areas of Financial Institutions & Services and Corporate Finance & Governance and contain a theoretical model

Our subject pool consists of twenty-one finance PhD students from the following schools: Cornell University, Emory University, Indiana University, University of Southern California, University of Washington, and Yale University.[1] Each of the forty introductions is read by three finance PhD students. We ask the following question: "*How easy to read was the introduction? The scales are 7 ("Very easy") to 1 ("Not at all easy").*"

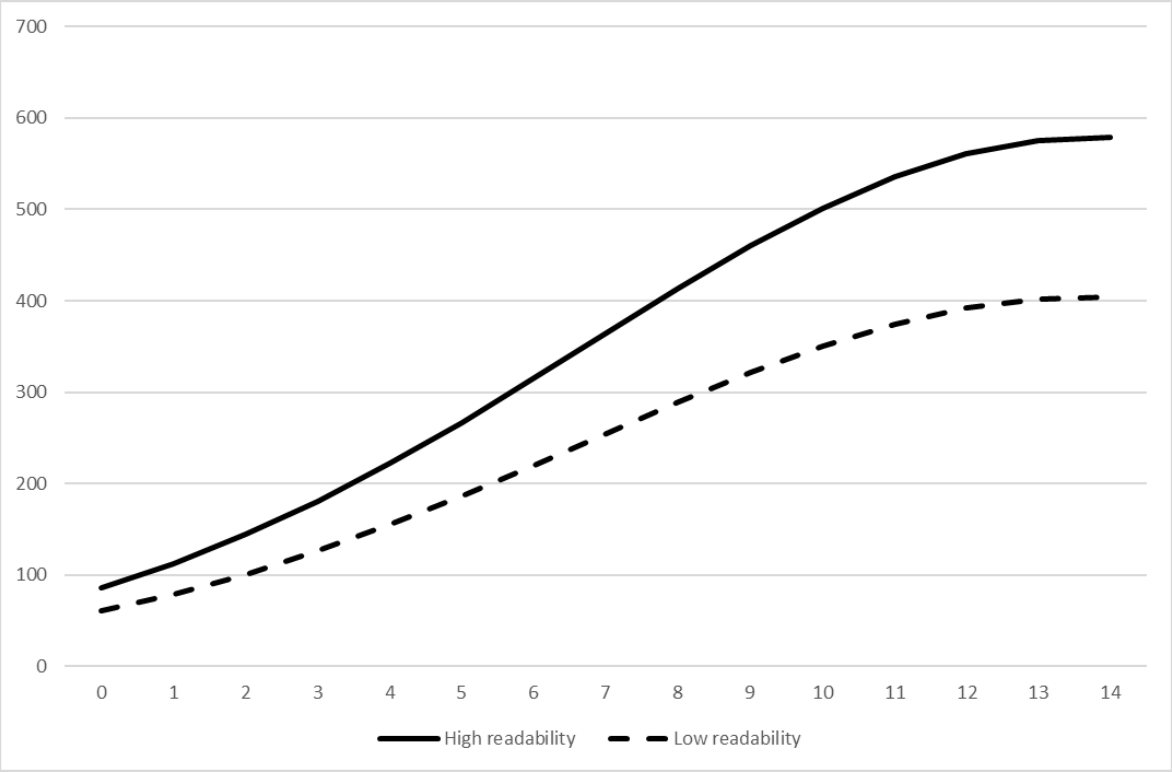
Online Appendix Table 1 reports the average response for the group of twenty high-readability papers and the group of twenty low-readability papers. Because each paper is read by three students, each of the two cells contains sixty observations. Papers that are in the top quartile based on *Readability* receive an average score of 5.38. In comparison, papers that are in the bottom quartile receive an average score of 4.70. The difference is +0.68 (*t*-statistic = 2.70). Since students generally avoided the extremes and mostly assigned scores of four, five or six, the difference

[1] We are unable to match papers with survey participants based on area of expertise. Our survey participants report that 36.67% of the papers that they were assigned to read are in their area of expertise. There is no reliable difference in this fraction between the twenty high readability papers and the twenty low readability papers.

of +0.68 is economically meaningful. The relatively strong agreement of survey participants with the outputs generated by our readability measure helps build confidence in the validity of our measure.

Online Appendix Figure 2
Readability and Predicted Number of Citations over Time

This figure plots the predicted number of citations for papers with high- and low readability since publication. The horizontal axis represents the years since publication and the vertical axis represents the predicted number of citations over years. High- and low readability papers represent papers above the 90th and below the 10th percentile in terms of their *Readability* score, respectively. The predicted number of citations is based on the regression coefficients reported in Colum 4 of Table 3. Predicted number of citations at *Years since Publication* = exp (4.731+0.133×*Readability* at 10th or 90th percentile +0.276×*Years since Publication*-0.01×*Sqr.Years since Publication*+$\Gamma' X$), where X is a vector of other control variables at their median values and Γ is a vector of estimated coefficients on the other controls. The sample includes 2,618 scientific journal articles published in the *Journal of Finance*, the *Journal of Financial Economics*, and *The Review of Financial Studies* from 2005 through 2014.



Online Appendix Table 1
Experimental Evidence on of the Validity and the Effectiveness of our Readability Measure

This table presents survey responses from Finance PhD students that are pertinent to the readability of scientific journal articles. We conduct the following experiment: We sort introduction sections of papers based on *Readability*. We randomly select twenty papers from the top quartile ("High Readability") and twenty papers from the bottom quartile ("Low Readability"). We assign these introductions to twenty-one PhD students and ask: "How easy to read was the introduction?" The scales range from 7 ("Very easy") to 1 ("Not at all easy")." Each introduction is read by three students, yielding a total of sixty observations in each of the two cells. We report the average score given by the students for the "High Readability" articles and the "Low Readability" articles. *T*-statistics, reported in parentheses, account for heteroscedasticity. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

	(1) High Readability Papers	(2) Low Readability Papers	(3) Δ High- and Low Readability Papers
"How easy to read was the introduction?" Scale: 7 ("Very easy") to 1 ("Not at all easy")	5.38	4.70	0.68*** (2.70)

Online Appendix Table 2
Readability of Scientific Journal Articles by Business and (General) Economics Journals

This table reports the average readability score, *Readability*, across all scientific journal articles published in the relevant journal in 2014.

Readability Ranking	(1) Journal	(2) Field(s)	(3) *Readability*
1	*Journal of Finance*	Finance	-5.98
2	*Journal of Financial Economics*	Finance	-6.00
3	*Journal of Political Economy*	Economics (General)	-6.02
4	*American Economic Review*	Economics (General)	-6.02
5	*Quarterly Journal of Economics*	Economics (General)	-6.12
6	*Journal of Accounting Research*	Accounting	-6.21
7	*Journal of Accounting and Economics*	Accounting	-6.40
8	*The Review of Financial Studies*	Finance	-6.43
9	*Journal of Marketing*	Marketing	-6.55
10	*Journal of Marketing Research*	Marketing	-6.56
11	*The Accounting Review*	Accounting	-6.64
12	*Management Science*	Accounting, Finance, Management, Marketing, Operations and Information	-6.65
13	*Journal on Computing*	Operations and Information	-6.68
14	*Production and Operations Management*	Operations and Information	-6.82
15	*Operations Research*	Operations and Information	-6.92
16	*Marketing Science*	Marketing	-6.95
17	*Strategic Management Journal*	Management	-6.95
18	*Journal of Consumer Research*	Marketing	-7.19
19	*MIS Quarterly*	Operations and Information	-7.20
20	*Administrative Science Quarterly*	Management	-7.22
21	*Manufacturing and Service Operations*	Operations and Information	-7.25
22	*Academy of Management Journal*	Management	-7.39
23	*Journal of International Business Studies*	Management	-7.44
24	*Academy of Management Review*	Management	-7.70
25	*Organization Science*	Management	-7.79
26	*Information Systems Research*	Operations and Information	-8.33
27	*Journal of Operations Management*	Operations and Information	-8.71

Online Appendix Table 3
Descriptive Statistics for Patent Sample

This table presents summary statistics for our main variables in the patent sample. We randomly select 1% from all patents granted between 1976 and 2010 that are in the patents database of Kogan, Papanikolaou, Seru and Stoffman (2017). Our final sample includes 12,851 patents. *Patent Citations* is the number of forward citations received by a patent as described in other patents' filing documents through 2010 (provided by Kogan et al. (2017)). *Patent Readability* is the number of writing faults in a patent description per 100 words multiplied by (-1). *Years since Granting* is the number of years since a patent has been granted (as of 2010). *Economic Value of Patent* is the estimated value of a patent based on the stock market reaction to the corresponding patent's granting (provided by Kogan et al. (2017), scaled by 100 in this paper). *Firm-Level Innovation Value* is the aggregate *Economic Value of Patent* at the firm-level over the corresponding firm's book value (provided by Kogan et al. (2017), scaled by 1,000 in this paper). *Firm-Level Number of Patents* is the number of patents granted to the relevant firm as of 2010 (provided by Kogan et al. (2017), scaled by 100 in this paper).

	N	Mean	StDev	10th Percentile	Median	90th Percentile
Patent Citations	12,851	11.621	23.060	0.000	5.000	28.000
Patent Readability	12,851	-11.308	2.314	-14.400	-11.100	-8.500
Years since Granting	12,851	12.191	9.466	1.000	10.000	27.000
Economic Value of Patent	12,851	0.122	0.358	0.001	0.037	0.263
Firm-level Innovation Value	12,851	3.887	9.112	0.013	0.518	11.503
Firm-level Number of Patents	12,851	7.049	9.450	0.170	3.010	19.850