Articles on Disclosure and Transparency by Sunita Sah for
SEC Investor Advisory Committee Meeting on December 7, 2017

1. Sah, S. (2016, July 8). The Paradox of Disclosure. *The New York Times.*

2. Sah, S. & Read, D. (2017, September 28). Missing Product Information Doesn't Bother Consumers as Much as It Should. *Harvard Business Review.*

3. Sah, S., Fagerlin, A., & Ubel, P. (2016). Effect of physician disclosure of specialty bias on patient trust and treatment choice. *Proceedings of the National Academy of Sciences, 113*(27), 7465-7469.]

4. Sah, S., & Loewenstein, G. (2014). Nothing to declare: Mandatory and voluntary disclosure leads advisors to avoid conflicts of interest. *Psychological Science, 25*(2), 575-584.

5. Sah, S., Loewenstein, G., & Cain, D. (2013). The burden of disclosure: Increased compliance with distrusted advice. *Journal of Personality and Social Psychology, 104*(2), 289-304.

6. Hwong, A., Sah, S., Lehmann, L. (2017). The effects of public disclosure of industry payments to physicians on patient trust: A randomized experiment. *Journal of General Internal Medicine, 32*(11), 1186-1192.

7. Sah, S., & Read, D. (2017). Disclosure and the dog that didn't bark: Consumers are too forgiving of missing information. *Academy of Management Best Paper Proceedings*.

8. Loewenstein, G., Sah, S., & Cain, D. (2012). The unintended consequences of conflict of interest disclosure. *Journal of the American Medical Association, 307*(7), 669-670.

9. Sah, S. Conflict of interest disclosure and appropriate restraint: The power of professional norms. *Working Paper*

10. Sah, S., Malaviya, P., & Thompson, D. Conflict of Interest Disclosure as an Expertise Cue: Differential Effects of Automatic and Deliberative Processing. *Working Paper*

11. Rose, S., Sah, S., Dweik, R., Schmidt, C., Mercer, M., Mitchum, K., Karafa K., Robertson, C. A randomized field experiment of patient responses to physician disclosures of industry conflicts of interest. *Working Paper*

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Working articles are available from the author at Sunita.sah@cornell.edu.

Abstracts of the empirical articles follow.

Abstracts

3. Sah, S., Fagerlin, A., & Ubel, P. (2016). Effect of physician disclosure of specialty bias on patient trust and treatment choice. *Proceedings of the National Academy of Sciences, 113*(27), 7465-7469.]

   This paper explores the impact of disclosures of bias on advisees. Disclosure—informing advisees of a potential bias—is a popular solution for managing conflicts of interest. Prior research has focused almost exclusively on disclosures of financial conflicts of interest but little is known about how disclosures of other types of biases could impact advisees. In medicine, for example, physicians often recommend the treatment they specialize in; e.g., surgeons are more likely to recommend surgery than nonsurgeons. In recognition of this bias, some physicians inform patients about their specialty bias when other similarly effective treatment options exist. Using field data (recorded transcripts of surgeon–patient consultations) from Veteran Affairs hospitals and a randomized controlled laboratory experiment, we examine and find that disclosures of specialty bias increase patients' trust and their likelihood of choosing a treatment in accordance with the physicians' specialty. Physicians in the field also increased the strength of their recommendation to have the specialty treatment when they disclosed their bias or discussed the opportunity for the patient to seek a consultation with a physician from another specialty. These findings have important implications for handling advisor bias, shared advisor–advisee decision-making, and disclosure policies.

4. Sah, S., & Loewenstein, G. (2014). Nothing to declare: Mandatory and voluntary disclosure leads advisors to avoid conflicts of interest. *Psychological Science, 25*(2), 575-584.

   Professionals face conflicts of interest when they have a personal interest in giving biased advice. Mandatory disclosure—informing consumers of the conflict—is a widely adopted strategy in numerous professions, such as medicine, finance, and accounting. Prior research has shown, however, that such disclosures have little impact on consumer behavior, and can backfire by leading advisors to give even more biased advice. We present results from three experiments with real monetary stakes. These results show that, although disclosure has generally been found to be ineffective for dealing with unavoidable conflicts of interest, it can be beneficial when providers have the ability to avoid conflicts. Mandatory and voluntary disclosure can deter advisors from accepting conflicts of interest so that they have nothing to disclose except the absence of conflicts. We propose that people are averse to being viewed as biased, and that policies designed to activate reputational and ethical concerns will motivate advisors to avoid conflicts of interest.

5. Sah, S., Loewenstein, G., & Cain, D. (2013). The burden of disclosure: Increased compliance with distrusted advice. *Journal of Personality and Social Psychology, 104*(2), 289-304.

   Professionals often face conflicts of interest that give them an incentive to provide biased advice, and disclosure (informing advisees about the conflict) is frequently proposed as a solution to the problem. We present 6 experiments that reveal a previously unrecognized perverse effect of disclosure: Although disclosure can decrease advisees' trust in the advice, it can also increase pressure to comply with that advice if advisees feel obliged to satisfy their advisors' personal interests. Hence, disclosure can burden those it is ostensibly intended to protect. Beyond demonstrating the effect, we show that this increased pressure to comply with advice is reduced if (a) the disclosure is provided by an external source rather than from the advisor, (b) the disclosure is not common knowledge between the advisor and advisee, (c) the advisee has an opportunity to change his/her mind later, or (d) the advisee is able to make the decision in private.

6. Hwong, A., Sah, S., Lehmann, L. (2017). The effects of public disclosure of industry payments to physicians on patient trust: A randomized experiment. *Journal of General Internal Medicine, 32*(11), 1186-1192.

   BACKGROUND: Financial ties between physicians and the pharmaceutical and medical device industry are common, but little is known about how patient trust is affected by these ties.
   OBJECTIVE: The purpose of this study was to evaluate how viewing online public disclosure of industry payments affects patients' trust ratings for physicians, the medical profession, and the pharmaceutical and medical device industry.
   DESIGN: This was a randomized experimental evaluation.
   PARTICIPANTS: There were 278 English-speaking participants over age 18 who had seen a healthcare provider in the previous 12 months who took part in the study.
   INTERVENTIONS: Participants searched for physicians on an online disclosure database, viewed payments from industry to the physicians, and assigned trust ratings. Participants were randomized to view physicians who received no payment ($0), low payment ($250–300), or high payment (>$13,000) from industry, or to a control arm in which they did not view the disclosure website. They also were asked to search for and then rate trust in their own physician.
   MAIN MEASURES: Primary outcomes were trust in individual physician, medical profession, and industry. These scales measure trust as a composite of honesty, fidelity, competence, and global trust.
   KEY RESULTS: Compared to physicians who received no payments, physicians who received payments over $13,000 received lower ratings for honesty [mean (SD): 3.36 (0.86) vs. 2.75 (0.95), $p < 0.001$] and fidelity [3.19 (0.65) vs. 2.89 (0.68), $p = 0.01$]. Among the 7.9% of participants who found their own physician on the website, ratings for honesty and fidelity decreased as the industry payment to the physician increased (honesty: Spearman's $\rho = -0.52$, $p = 0.02$; fidelity: Spearman's $\rho = -0.55$, $p = 0.01$). Viewing the disclosure website did not affect trust ratings for the medical profession or industry.
   CONCLUSIONS: Disclosure of industry payments to physicians affected perceptions of individual physician honesty and fidelity, but not perceptions of competence. Disclosure did not affect trust ratings for the medical profession or the pharmaceutical and medical device industry.

7. Sah, S., & Read, D. (2017). Disclosure and the dog that didn't bark: Consumers are too forgiving of missing information. *Academy of Management Best Paper Proceedings*.
   Abstract of working paper:
   A central premise of information disclosure is unraveling: the principle that marketers who can disclose information credibly should do so, lest consumers interpret the missing information as the worst it could possibly be. On the contrary, in seven experiments, we show that marketers typically withhold information and consumers are generally unresponsive to information gaps. Specifically, consumers tend to judge service providers as average, rather than the worst possible, when they consider the missing information, and to select such providers just as often as those providers who disclose all information. These reactions by consumers are attributable to (1) a failure to understand that the provider has deliberately withheld information (strategic naiveté), and (2) interpreting the absence of information in an unduly positive light (charitable effect). We examine an array of interventions designed to increase consumers' deliberation on absent information and encourage them to behave in keeping with unraveling predictions. We find that although consumers respond differently to distinct, but theoretically equivalent framings aimed at increasing the salience of non-disclosure, most interventions left consumers' responses short of full unraveling. Only when the non-disclosure was highly salient and consumers could compare multiple profiles side-by-side did they align closer to unraveling predictions. These findings suggest a different equilibrium for voluntary disclosure than unraveling would predict that is likely to be costly for consumers.

9. Sah, S. Conflict of interest disclosure and appropriate restraint: The power of professional norms. *Working Paper*

Conflicts of interest present an incentive for advisors to give biased advice and disclosure is a popular remedy. Prior research, however, suggests that advisors who disclose their conflicts give more biased advice than those who do not. Across a series of experiments, using monetary incentives to create real conflicts-of-interest, I show that disclosure can cause advisors to either increase or decrease bias in advice based on their role and the (perceived) professional norms of the context in which the advice is provided. For people placed in an advising role, perceptions of stereotypical advisors' professional norms prompt disclosure to increase bias in settings in which self-interested advice is deemed to be the norm (for example, for financial advisors) and decrease bias in settings in which placing advisees first is deemed to be the norm (for example, medical advisors). However, practicing (financial and medical) advisors often have professional norms that emphasize prioritizing the interests of advisees: thus, disclosure can have the beneficial effect of decreasing bias in advice. These findings advance previous assumptions regarding conflict-of-interest disclosures by highlighting the importance of professional norms when examining the potential and pitfalls of disclosure.

10. Sah, S., Malaviya, P., & Thompson, D. Conflict of Interest Disclosure as an Expertise Cue: Differential Effects of Automatic and Deliberative Processing. *Working Paper*

Disclosure—informing advice recipients of the potential bias of an advisor—is frequently used to remedy the effects of conflicts of interest. However, conflict of interest disclosures usually compete with a host of other information that is important, relevant or interesting to the advisee. Across six experiments and one field study, we examine the effect of conflict of interest disclosures in a realistic and context-rich setting (online blogs) in which the disclosure is short, clear and conspicuous (as desired by many regulatory bodies) but embedded in the context of other competing information. Our findings show that, in contrast to prior research on conflict of interest disclosures, recipients who read a blog post containing a conflict of interest disclosure report increased trust in the blogger and evaluate the blogger, the blogger's recommendation, and the sponsoring organization more favorably than recipients who read a post with no disclosure. The effect is driven by disclosure acting as a heuristic cue to infer greater trust in the blogger's expertise and consequently greater persuasion. The inference of greater expertise and its effect on persuasion are mitigated when recipients are encouraged to deliberate on the disclosure, particularly for recipients predisposed to higher levels of deliberation. We discuss implications of these findings for organizations, advisors, consumers and policy makers.

11. Rose, S., Sah, S., Dweik, R., Schmidt, C., Mercer, M., Mitchum, K., Karafa K., Robertson, C. A randomized field experiment of patient responses to physician disclosures of industry conflicts of interest. *Working Paper*

Disclosure is a popular remedy for physician-industry financial conflicts of interest (FCOI). The effect of these disclosures needs investigation. We mailed an appointment-reminder letter to 1903 patients prior to their visits with physicians who had received >$20,000 from industry in the last year. Patients were randomly assigned to one of five groups. In four intervention groups, the letter disclosed the physicians' FCOI, and potential risks of FCOI (or not) and potential benefits of FCOI (or not). The control group received only the appointment-reminder letter. After their appointments, patients were surveyed to measure trust in their physician and the hospital, their knowledge of physicians' FCOI, and disclosure preferences. Electronic health records were used to check for missed or cancelled appointments. Sixty-eight percent (n=867/1276) of patients completed the survey. Patients who received disclosures were more aware of their physicians' FCOI (392/693; 57%) compared to the control group (15/163; 9%), P<0.001. There were no significant differences in patients' self-reported trust in their physician (P=0.48) or the hospital (P=0.87), nor in missed or cancelled appointments (P=0.56), compared to the control group. Risk and benefit variations did not significantly affect any outcomes. Nearly half of all patients (409/853; 48%) reported that they would want FCOI disclosures, yet most (526/863; 61%) reported that the information was not important to their medical care. Mailed FCOI disclosures are effective in communicating physician-industry financial relationships to patients, and do not substantially affect patients' trust in their physicians or the hospital.