

Application for IFREE Small Grants Program

Date Aug 15, 2014		Total Budget \$10200	Amount Requested from IFREE \$9000	
Proposal Title Paying for Advice: An Experiment in Conflict of Interest			Proposed Start Date 10/15/2014	Proposed End Date 12/15/2015
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IFREE affiliations of PI <input type="checkbox"/> Graduate Student workshop. Date: _____ <input type="checkbox"/> Pre-doctoral or post-doctoral fellow Date: _____ Institution: _____ <input type="checkbox"/> Visiting scholar Date: _____ Institution: _____ <input type="checkbox"/> Other Explain: _____				
IFREE welcomes proposals from any scholar affiliated with any research institution, regardless of geographic location or prior IFREE affiliation. However, preference will be given to individuals with a prior affiliation.				
Co-PI Name(s)		Co-PI Position / Title	Co-PI Institution	
Simon Halliday		Assistant Professor	Smith College, USA	
Project summary (250 word limit. Must be in non-technical language that is appropriate for a general audience): <p>We propose an experimental investigation of conflicts of interest. When an expert has to recommend an action to a client, sometimes the expert has interests that do not align with the client's. For example, a doctor may recommend a treatment not because it is the most beneficial for the patient, but because the doctor profits financially from it. When such a dilemma cannot be avoided, it is common to disclose the conflict in order to allow the client to take it into account when making decisions. However, recent research indicates that clients often fail to discount potentially corrupted advice appropriately while experts may actually become more likely to give in to tainted incentives.</p> <p>In this context, we examine how payment systems affect both the trustworthiness of the expert's advice and the client's trust in the advice. The underlying hypothesis is that the absence of direct payment frames the consultation as a social interaction whereas direct payment frames it as a market transaction. We assume that clients are more likely to feel social pressure to trust the expert's advice when they perceive their relationship as social. Additionally, direct payment may make the advisor's obligation to provide honest advice more salient to him and thereby increase the trustworthiness of the advice.</p> <p>Our experiment employs a stylized investment decision where the expert player receives a more precise signal about the true state of the world, but may have incentives to misrepresent this information to coax the investor player into a suboptimal investment.</p>				
Expected benefits and broader implications (250 word limit. Must be in non-technical language that is appropriate for a general audience): <p>We hope that our investigation provides some insight into how payment systems should be structured in order to minimize the negative effects of conflicts of interests on consumers. In many situations, e.g., when making financial investments or healthcare decisions, consumers are in a severely disadvantageous position due to their limited specialist knowledge. When such information disparity cannot be alleviated, it is important to use other means to improve the consumer's situation. If certain payment systems indeed make experts more trustworthy and clients more prudent, variations in payment systems can potentially be used as "nudges", i.e., subtle, non-intrusive ways to coax people into making better decisions and increase social welfare without infringing on their freedom of choice. Ideally, this project will be the starting point of a series of studies on how the negative consequences of conflicts of interest can be mitigated. In that case, the long term goal would be to eventually translate the academic findings into the market design of real-world institutions in the financial and healthcare sector.</p>				

Proposal

Title: Paying for Advice: An Experiment in Conflict of Interest

**Investigators: Simon Halliday (Smith College) and
Björn Hartig (Royal Holloway, University of London)**

1. Motivation

Conflicts of interest have played an important role in the financial crisis of 2008 (Sikka, 2009; di Florio, 2012), in the fall of Enron (Benston & Hartgraves 2002; Sims & Brinkmann 2003), or in the increase of health care costs (Kassirer 2005). Consequently, a variety of voices in the media and academia have begun to interrogate more closely the conflicts of interest operating in finance and healthcare, leading to changes in both financial legislation (e.g. the Sarbanes–Oxley Act of 2002 and the Dodd-Frank Act of 2010) and in healthcare laws (Lo & Field 2009). Unanimously, these initiatives call for more transparency in order to bring the hidden incentives of decision makers to light.

In general, when people confront difficult decisions, yet possess limited specialist knowledge, they often turn to experts for advice. Most people believe that, given their expertise, experts are more likely to choose the best available option for their clients. However, the experts' interests and their clients' interests may not always align. Healthcare, for example, requires expertise to diagnose a disease and expertise to assess successful treatment, yet the most beneficial option for the patient may not be the most lucrative one for the doctor, for the insurance company, or for the pharma industry. Healthcare therefore is subject to conflicts of interest between patient and doctor, doctor and insurer, insurer and legislator. Likewise, in the financial sector, a conflict of interests is present, for instance, when a financial advisor arranging a client's portfolio receives higher commission for assets that do not best align with the client's investment goals.

Economists call this misalignment of incentives in principal-agent (here: client-expert) relationships "moral hazard". Ideally, moral hazard is solved by simply removing the conflict of interest, i.e. by realigning the expert's incentives to match the client's or by turning the decision over to a non-conflicted third party. However, when incentives cannot be aligned, the predicament is typically addressed by disclosing the potentially corrupting motivation (Taha, 2004; Marietta & McGuire, 2009). According to theory, the client will then take the conflict of interest into account and discount the expert's advice appropriately.

A recent line of research (Cain et al., 2005; D. M. Cain & Detsky, 2008), however, suggests disclosure can actually detrimentally affect the client's outcome. The researchers found that while experts tend to give in more to corrupting incentives when conflicts of interest are revealed – possibly because they anticipate discounting by the clients – clients do not change their behaviour enough to compensate. Consequently, clients receive worse outcomes with blanket disclosure than when conflicts of interest remain undisclosed. The result profoundly questions whether a blanket disclosure policy enhances social welfare and we believe the problem warrants greater attention.

2. Research Question

Our primary research interest is to examine how the client's outcome in client-advisor relationships with a disclosed conflict of interest can be improved. In particular, in this study we want to focus on the role of the payment system between client and advisor. Many client-advisor relationships, such as in financial or medical counselling, are characterized by indirect compensation for the advisor. For example, doctors are usually paid through insurance companies and not directly by the patients. Likewise, financial advisors often receive commission from their employer instead of a fee from their customers. We hypothesize that the form of payment can potentially function as a “framing” of the relationship as a social interaction or a market exchange. Following Heyman & Ariely (2004), individuals’ considerations may change depending on whether they view the consultation more as an economic market interaction or as a non-market social interaction, potentially affecting both the advisor’s willingness to provide unbiased advice as well as the client’s inclination to take the conflict of interest into account and discount advice appropriately.

Our project is motivated by two strands of literature. First, Loewenstein et al. (2011) have identified *insinuation anxiety* – discomfort from turning down advisors’ recommendations because this could signal distrust – and the *panhandler effect* – pressure to help an advisor satisfy his or her personal interests – as potential causes for the detrimental effects of disclosure. This suggests that detrimental effects of disclosure for the advisee are due to psychological factors inherent in the social relationship with the advisor. Directly compensating the advisor with a monetary payment is likely to move the perception of a consultation towards market transaction, so the aforementioned psychological factors should matter less, freeing the advisee from the “burden” of social considerations so that he allows himself to become less trustful. As a result, he should take the misaligned incentives of the advisor more into account and make more prudent decisions.

Second, with respect to the advisor, his advice is in any case directly tied to his payment, so we expect that he is unlikely to react much to the different framing. However, the advisor is potentially affected by a direct transfer on two levels. Although we do not give the advisee the choice whether to pay for the advice or not, the payment might nevertheless elicit a reciprocal reaction from the advisor.¹ Additionally, the direct payment may make it more salient to the advisor that the advisee (rightfully) expects a valuable service in return than when payment is indirect (e.g., through an insurer) and that biased advice negatively affects the advisee’s payoff. This increased awareness of his obligation and of the negative consequences should make advisors less likely to give in to self-interest. Such a finding would be in line with the results of Mazar et al. (2008), who find that people tend to cheat less as consequences are experienced more directly.

3. Relevance

We believe that our research question is highly relevant because it potentially has important policy implications. Although other conditions have been identified when disclosure works mostly as intended, e.g., when reputation matters or sanctions are available (Church & Kuang 2009), in reality, these conditions may not always be present or feasible to establish. Payment,

¹ Making the payment by the advisee optional is a possible extension of the experiment, even though it seems rather obvious that advisors will give more truthful advice to those advisees who make the payment than to those who do not as this would be very similar to the findings of Fehr et al. 1993.

however, is ubiquitous (“no free lunch”), even if it sometimes is so indirect that it becomes almost unnoticeable. Restructuring payment systems may keep monetary flows effectively unchanged, but can create psychological “nudges” (Thaler & Sunstein 2003; Thaler & Sunstein 2008) that improve clients’ outcomes and overall welfare. For example, banks could be legally prohibited from offering free financial advice and obligated to collect a small, even symbolic, fee for their services (which they could give back to their clients through lower monthly account fees).

Naturally, there are limitations to the extent that our results could be generalized. Besides the general issue of external validity, changing payment systems might very well have further consequences on behaviour not captured in our experiment. For example, if patients have to pay a small fee when visiting their doctor, they might be more likely to skip or delay visits than when consultations are free (like in Germany or the UK), which would likely affect social welfare negatively. Nevertheless, despite these caveats, we feel that our research question is both important and interesting because our proposed mechanism is not self-evident, yet potentially powerful. Our proposed experiment could become an important first step in establishing this particular line of research and motivate several complimentary follow-up studies in the future. Eventually, the results from our research could potentially be used to enhance the market design of real-world institutions in the finance and healthcare sector.

4. Experimental Design

Unfortunately, it is very difficult to analyse conflicts of interest in the field, let alone control the relevant variables to conduct field experimental research. Not only can researchers often not observe the expert's actual incentives – e.g. because commissions are confidential – they may also lack the expertise to judge whether a recommendation was given in the client's best interest or not.

We therefore propose the following laboratory experiment to test our hypothesis: Two subjects – one advisor and one advisee – engage in a stylized investment decision. The advisee is endowed with a budget which he can invest as desired in two projects A or B which give the same potential return. There are two possible states of nature, α and β . Project A yields a return in state α and project B in state β . The advisee has no information about the true state of the world, so risk averse advisees should allocate their budget equally between both projects. The advisor receives a meaningful, but imprecise signal about the true state of the world. However, the advisor cannot invest into the projects himself. Instead, the advisor's payoff depends on the investment choice of the advisee, i.e. the advisor receives more money the more is invested into a certain project. Thus, we have a conflict of interest when, e.g., the advisor profits from investments in project A although her signal suggests the true state is β .

In order to make the decision situation relatable and avoid confronting subjects with probabilities and abstract concepts, we plan to implement a procedure that looks like a highly stylized version of pinball or ball in the hole: a ball dropping through a grid determines the state of the world (see figure 1 and 2). At each node, the ball is equally likely to drop to the left or to the right until it ends up either in the light or the dark box at the bottom. The advisee only sees the ball in its starting position (figure 1), but the advisor can observe it at a lower level (figure 2). If, for example, the advisor observes the ball in the position depicted in figure 2, the ball is twice as likely to end up in the dark box. With this information, the advisor sends his recommendation (e.g., “dark”, “light”, or “equal”) to the advisee. Then, the

advisee makes his investment decision by allocating his budget between the two boxes, receiving back twice the amount allocated to the box where the ball ends up and losing the amount allocated to the other box. In contrast, the advisor is paid depending on how much the advisee allocates to one particular box, irrespective of where the ball ends up.

We decided on this particular design because it gives an objective standard against which the advisor’s advice can be measured. Some previous designs in related studies suffered from the problem that the advisor had to base his recommendation on a subjective evaluation. Although this is more representative of most real-life situations, it does not allow to distinguish whether biased advice is due to deliberate misinformation of the client or due to (unconscious) self-serving biased perception.

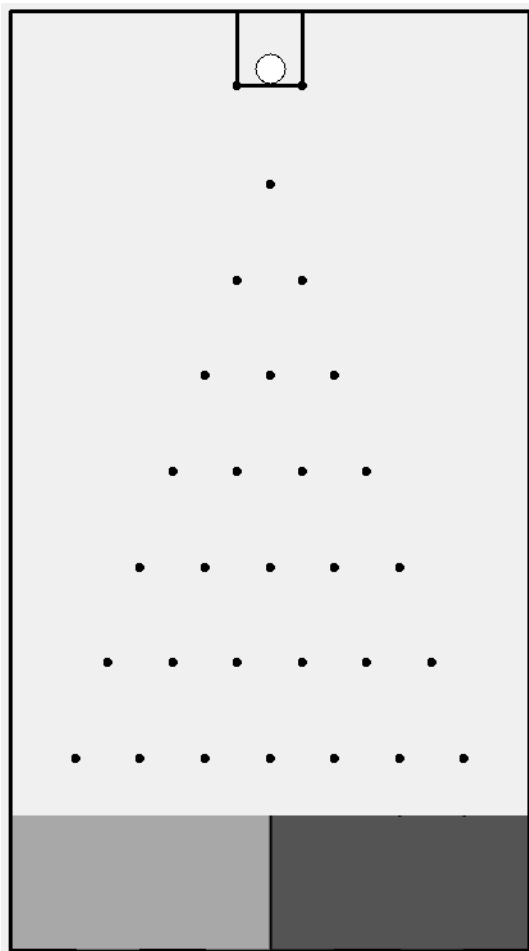


Figure 1 – The Random Mechanism in its Starting Position

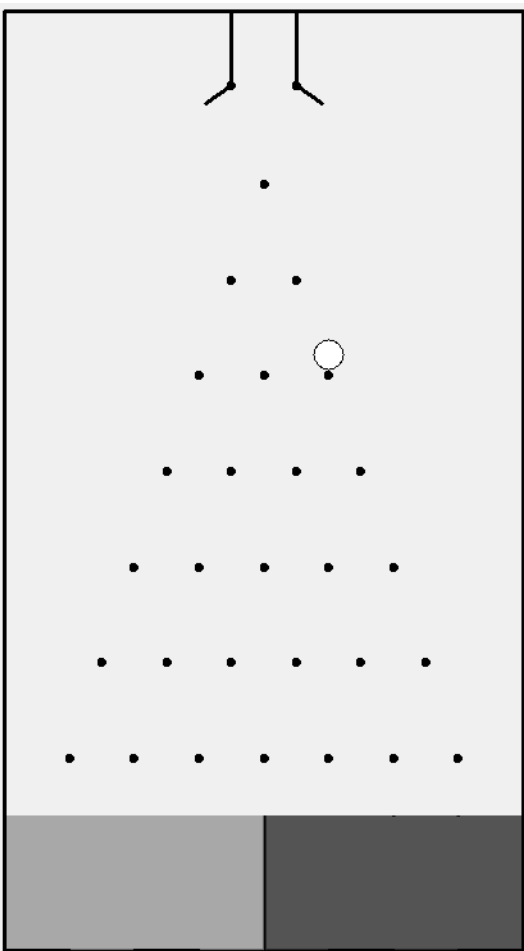


Figure 2 - Advisor’s View (Example)

Given this setting, we propose three treatment variations each on two levels: information and payment².

- Information Condition I: Advisees are not informed about the advisor's conflict of interest.
- Information Condition II: Advisees are informed that the advisor will be paid for how much money they allocate to a particular box and about which box it is.
- Payment Condition I: There is no direct payment from the advisee to the advisor.
- Payment Condition II: The advisee pays a fixed fee to the advisor for the advice.
- Payment Condition III: The advisee pays a fee for the advice, but the fee is not added to the advisor's account (i.e., it is paid to the experimenter).

This would result in a 2x3 design with six treatments, although due to financial limitations, we will limit ourselves to four of the possible six treatments as indicated in table 1. This still allows us to address our main research question as we are primarily interested in situations when the client is aware of the conflict of interest.

		Information Condition	
		I	II
Payment Condition	I		x
	II	x	x
	III		x

Table 1 – Proposed Treatments

In addition to the main treatment, we plan to elicit the subjects' risk aversion (Holt & Laury 2002), their beliefs about the behavior of the other subjects in general (e.g., "how many advisors give honest advice", etc.), and their general attitude toward trust in addition to the usual demographic data.³ Ideally, this should allow us to identify the determinants of heterogeneity among subjects (in any).

² Subject's payoffs will be chosen in such a way that effective monetary incentives will be identical among all treatments. For example, when the advisee pays a fixed fee to the advisor, he will receive a higher initial endowment to compensate for the fee.

³ Other measures may be added following feedback from behavioural economics and psychologists.

Statement on Consistency with IFREE's Mission

IFREE's mission highlights the role of markets, institutions, and non-market interactions in experimental economics research. The experiment we wish to implement examines a variety of features that are salient to IFREE.

First, in order for a choice that increases a consumer's subjective welfare to be freely made, that is, without coercion or fraud, we typically assume that a consumer must have access to all information about conflicts of interest that may exist. But, the institutions governing exchanges in the context of conflict of interest may greatly affect whether or not the choice is truly free of conflict or fraud. We wish to understand whether varying payment institutions – the rules of the game for conflictual interactions – affect how people make choices when dealing with a conflict of interest. Second, when asking for advice in a social context, people may treat the request for advice as a reciprocal and moral act rather than a purely market transaction, which may affect the choices they make about the accuracy of the information they provide. Third, given varieties of institutions and moral motivations, we need to understand which rules are best in which contexts. For example, would a rule that applies to healthcare apply equally to finance? Or, in our context, is blanket transparency always and everywhere the best rule? Lastly, recognizing how policies are currently changing in the United States and elsewhere, it is crucial to test-bed policies that would deal with new conflicts of interest that arise from these new policies. In our initial approach we hope to examine conflicts between doctors and patients as advisors and advisees. In future research we plan to expand this to broader conflicts of interest that emerge on markets or as a consequence of government policy.

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Budget

The main cost of our research project is the payment of student subjects. At Royal Holloway, the lab guidelines demand an average hourly wage similar to a regular student job, which is currently around £10 (approx. \$17). We expect that a typical experimental session for our project will last approx. 60 minutes. However, because payments in our experiment are the result of a random mechanism, there is a natural degree of uncertainty. Therefore, we allow for an excess of 20%, i.e. a maximum average payment of £12.

We are planning to conduct 3 sessions with 24 participants per treatment so that we have 36 observations per role and treatment. Since we are currently planning to conduct four different treatments, this amounts to 288 participants in total. Furthermore, it is necessary to run pilot sessions in order to calibrate the parameters of the experimental design. We expect that up to four such sessions with 16 participants could be necessary. Additionally, we need to insure ourselves against uncontrollable circumstances such as technical failures of computer equipment, fire alarms, sudden illness, and non-compliance of participants during an experiment session. These could potentially lead to data loss and might require additional sessions. Although we will take every possible precaution to avoid such complications, some acts of nature are beyond our control.

In addition to the payment of participants, we require a research assistant to support Dr. Hartig during the experimental sessions. It is good practice not to run sessions with just one experimenter present as this helps to keep session duration short and to manage any complications that could arise. The hourly wage of a PhD-student is around £20.

Therefore, we arrive at the following costs calculations:

- 3 Sessions x 4 Treatments x 24 Participants = 288 Participants
- 4 Pilot Sessions x 16 Participants = 64 Participants
- 2 Additional Sessions x 24 Participant = 48 Participants
 - Total Participant: 400
 - Total Sessions: 18
- Total Participant Payments: 400 Participants x £12 = £4800 (approx. \$8240)
- Total Assistant Costs: 18 Sessions x £20 = £360 (approx. \$620)
 - Total Costs: £5160 (approx. \$8860)

To allow for exchange rate fluctuations and smaller expenses for consumables needed for the experiment (e.g. paper, pens, etc.), we apply for a total of **\$9000**.

Please note that Dr. Halliday will also be employing an undergraduate Research Assistant to do reading and initial statistical work and to consult on future experimental design. Smith College promotes undergraduate research through a variety of methods. Dr. Halliday will apply for internal grants at Smith College for the research assistant to work on the project during the summer of 2015. Smith College is also dedicated to providing research work for female students in anticipation of them pursuing graduate study in economics or related fields.

Project Timeline

- Before Oct 15 2014
 - Coding the treatment in zTree.
 - Conducting an extensive literature review that broadens and expands on the initial literature consulted for this proposal.
 - Obtaining IRB/ethics clearance from Royal Holloway, University of London.
 - Deciding on the relevant content of post-treatment questionnaires on conflict of interest, risk attitudes, and basic demographic characteristics.
- Before Dec 15 2015
 - Conducting pilot experiments run at the RHUL EconLab.
 - Preliminary presentation of experimental design and pilot results at relevant conferences, workshops and seminars.
- Before April 30 2015
 - Final experiments run with a large pool of subjects.
- Before June 30 2015
 - Conducting additional sessions (if necessary).
 - Conclusion of preliminary data analysis of experimental results and responses to questionnaires.
- Before Sep 30 2015
 - Presentation of preliminary results at relevant conferences, workshops and seminars.
 - Re-analysing data based on feedback from professional meetings, conferences, workshops, etc.
- Before Dec 15 2015
 - Final edit of working paper and begin of submission process of the paper to the relevant journals.
- Before March 30 2016
 - Final report to IFREE.

Qualifications of Applicants

Simon Halliday, PhD, is an assistant professor of economics at Smith College, Northampton, MA where he has been working since July 2013. Prior to that, before and immediately after completing his PhD at the University of Siena, Italy, he worked as a lecturer at Royal Holloway, University of London in the Economics Department until June 2013. While Simon completed his Masters degree in Economics and his Masters in Creative Writing at the University of Cape Town, he worked as an adjunct in the School of Economics at the University of Cape Town, South Africa and as a researcher at the Southern Africa Labour and Development Research Unit (SALDRU). At SALDRU, he was the assistant project manager of a national survey of land reform, the Quality of Life Survey, commissioned by the World Bank and the South African Department of Land Affairs. Simon has published a chapter 'Global Public Goods' with the Open University Press in *Governing the Economy*. He has done experiments in South Africa and the United States and he currently has two papers based on experiments in South Africa under submission ('Risk-taking in the Classroom') with co-authors Justine Burns and Malcolm Keswell and a sole-authored paper ('Don't Take What Isn't Yours: Punishment of Taking in Third-Party Punishment Games' – supported by a grant from Economic Research Southern Africa). He has on-going experimental work including 'Control Aversion and Self-Determination: An Experiment' with Gabriel Burdın and Fabio Landini (supported by a grant from the Cowan Fund, the Santa Fe Institute) and 'Reviewing as Costly Punishment' with Jonathan Lafky.

Bjoern Hartig, PhD, is the experimental laboratory officer at Royal Holloway, University of London (UK) since September 2011. He completed his PhD under the supervision of Prof. Dr. Axel Ockenfels at the University of Cologne (Germany) where he held a scholarship at the Cologne Graduate School of Management, Economics, and Social Sciences. He also holds a diploma in Economics and a Master of Arts in Sinology, both from the University of Bonn (Germany). In 2010, Bjoern received the *Heinz-Sauermann-Grant* for Experimental Economics from the German Society for Experimental Economics together with his colleague Felix Koelle. Bjoern current projects include an experiment on conditional cooperation in public good games with Prof. Dr. Bernd Irlenbusch and Dr. Felix Kölle (currently R&R at the *Journal of Behavioral and Experimental Economics*), an experimental and theoretical investigation on academic tenure with Prof. Dr. Andrew Seltzer and Prof. Dr. Steffen Huck, and an experiment on information acquisition with psychologists Dr. Ryan McKay and Leslie van der Leer (currently under submission at *Psychological Medicine*).

Facilities Available for Research

Experimental sessions will be conducted at the Royal Holloway Laboratory for Experimental Research in Social Sciences (ExpPreSS Lab).⁴ The laboratory is located within the Department of Economics at the University's main campus in Egham. The lab is equipped with 32 client computers and one server for the experimenter. The lab's subject pool contains more than 2000 individuals. As the lab manager, Dr. Hartig has full access to all functions of the laboratory at no additional costs.

Statement of Compliance

Dr. Bjoern Hartig and Dr. Simon Halladay hereby declare that all research will be conducted in accordance with all ethical guidelines and protocols of Royal Holloway, University of London.

⁴ For more information, please visit www.royalholloway.ac.uk/economics/expresslab/expresslab.aspx