Citizens' Response to Government Corruption:
Experimental Evidence from Australia, Singapore, and the United States

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Knowledge-Net for a Better World

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Abstract

How do citizens respond to government corruption? Specifically, do citizens engage in collective action to demand government accountability for corruption? We consider that citizens' strategic interactions underlie collective action and use experimental research to clarify conditions under which it occurs. The results show participants engage in collective action across various conditions, particularly: (a) when they lose from corrupt actions; and (b) when informed that others demand accountability. This paper makes three contributions: first, the findings highlight conditions under a theoretical model, the stag-hunt, predicts collective action to underpin social action. Second, relatedly, the results clarify the effects of two critical conditions – loss from corruption and information about other participants' behaviors – that consistently motivate respondents to pursue collective action. The finding of information is highly relevant, given the increasing interconnections through social media. Third, the findings provide evidence-based research across a range of regime-types and cultures to fill a huge gap in policy understanding, and carry substantial implications for domestic and international policymaking, policy reforms, and political and social stability.

"CORRUPTION IS PUBLIC ENEMY NUMBER 1," THE PRESIDENT OF THE WORLD BANK, DR. JIM YONG KIM, proclaimed, as he launched the reorganization of the institution – the first in almost 20 years – to dedicate a new department for tackling corruption (World Bank press release, December 19, 2013). Do citizens respond as vehemently against corruption in the government? In particular, are citizens galvanized into collective action to form "the necessary political will" to stamp government corruption (Grey and Kaufmann 1998:9)? When citizens act in concert, their demands

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are not easily discounted: in particular, the collective action surmounts free-ridership problems that weaken the credibility of citizens' demands. Equally important, citizens' collective action against corruption may be highly potent, as the 2013-2014 protests in Thailand and the Ukraine, and across the Philippines, Indonesia, and South Korea in 2012-2014 show. Indeed, a growing literature points out governments, even those of less-democratic countries, will accommodate citizens' credible demands for accountability to remain in office (Haggard and Kaufman 1997; Gang 2007; Mason and Clements 2002; Robinson 2006; Howard and Roessler 2006; Yap 2005; Gandhi 2008). Clearly, citizens' demand for government accountability of corruption – particularly in the form of collective action – is a significant complement to the fight against corruption and highly pertinent to political, social, and economic developments and stability. It is surprising, then, that studies note the large literature on corruption has overlooked citizens' demands, perhaps expecting formidable coordination is required for collective action (Tucker 2007; Chang et al 2010; Anduiza et al 2013; Manzetti and Wilson 2007).

This project provides a theoretical framework that shows such coordination is achievable; further, it uses experimental study to clarify the conditions under which citizens act in concert to demand government accountability of corruption. Corruption refers broadly to the failure of the government to exercise impartiality of authority (Andersson and Heywood 2009: 748-751; Rothstein and Teorell 2008; Kurer 2005). This conception underscores the general agreement within and across societies on what counts as corruption, and it includes "particularistic practices such as clientelism and patronage" (Linde 2011: 413; Rothsten and Teorell 2008; Kurer 2005). It may also underlie the global ignition of citizens' collective action against government corruption. In general, citizens' demand for government accountability of corruption occurs when citizens withdraw support from the government – such as through protests, demonstrations, or electoral setbacks – to penalize the government or demand recourse over corruption. The term citizens denote non-government voters who are resource-owners, i.e., it includes labor, the middle-class, farmers, investors, and opposition groups.

Specifically, we draw on the stag-hunt theoretical framework, which captures a conflict between "considerations of mutual benefit and . . . personal risk" (Skyrms 2001: 3), to evaluate for conditions under which citizens coordinate successfully. Thus, we consider that citizens' collective action to demand government accountability for corruption is based on strategic interactions with other citizens. Strategic interaction treats players' choices to achieve political, social, or economic goals as subject to the constraints of each other's preferences and behaviors and the structure of the game (Jackman and Miller 1996; Bates et al 1998; Mason and Clements 2002; Guo 2007). This strategic interaction treatment, then, is an alternative to decision-theory perspective; the latter treats players' behaviors as motivated primarily by their own preferences and wants. Importantly, the stag-hunt set-up – described in detail in section 2 – has two equilibria: one where all hunt stag (the payoff-dominant strategy), and another where all hunt hare (the risk-dominant strategy). By the stag-hunt set-up, then, citizens may coordinate successfully for the payoff-dominant equilibrium. This contrasts against the coordination failure typified by the prisoner's dilemma, which reveals "a conflict between individual rationality and mutual benefit" (Skyrms

2001: 3). That is, under the prisoner's dilemma, the individual benefits more by choosing to not act even though the aggregation of such individual choices is socially, economically, and politically detrimental. As a result, the equilibrium outcome under the prisoner's dilemma is that citizens act in self-interest and do not undertake the costs of demanding for punishment; in the aggregate, citizens' demands are weakened and not credible.

Methodologically, we assess for four critical conditions – the effects of information, penalties-rewards, how corruption affects payoffs, and costs of making the demand – that lead to the stag-hunt payoff-dominant outcome, using experiments in Australia, Singapore, and the United States (US). The countries are ideal for study in four ways. First, the countries vary widely on the individualism-collectivism scale. Thus, for instance, Hofstede et al (2010) provides a score of 91 and 90 for the US and Australia respectively (on a 1-120 individualism-collectivism scale) to denote that individualism is very high in these countries; in contrast, Singapore has a score of 20 on the same scale. Scores on the individualist end of the spectrum generally indicate disinclination to engage in collective action, as opposed to scores on individualist end. The extent to which the results hew to this individualist-collectivist spectrum, then, provides important insights into citizens' demand. Second, the comparison spans a mix of cultures: Eastern-dominant (Singapore) and Western-dominant (the United States and Australia) ones. Studies note that corruption erodes citizens' trust even in countries with norms of gift-giving, such as in East and Southeast Asia (Chang and Chu 2006; Kang 2002; Seligson 2002; Treisman 2000; Anderson and Tverdova 2003). The assessment here, then, provides useful information across cultures to fill the gaps in understanding. Third, the countries also vary with regards to regime types: mature democracies and one-party dominant rule. Citizens' responses may be influenced by the regime-types; this study, then, provides important information about citizens' collective action for government accountability in relation to regime-types. Fourth, there is variance between the countries in terms of public sector corruption; for instance, popular indices for capturing public sector corruption – such as the Transparency International's Corruption Perception Index – report that Singapore and Australia have low levels of public sector corruption (86 and 81, respectively, on a 100-scale in 2013) while US falls in the middling range (73 in 2013). Here, again, the results will provide information on consistency of citizens' responses across different levels of public sector corruption. Experiments are particularly useful: they fill in for the lack of variation, controls, or substantive overlap that exists empirically to analytically separate simultaneity and interrelationships (Azfar and Nelson 2007; Olken 2007; Ostrom et al 1994; Duch et al 2010; Goodin et al 2007). Experiments, then, are useful in this study since the "treatment" may be controlled to evaluate its effect on citizens' response whereas in real world observations, citizens' response may be inextricable from treatment.

The results from the experiments show that participants choose collective action across a variety of conditions. Thus, participants demand accountability if they lose through corrupt government action; however, they also make demands for accountability when the outcomes from corruption do not lead to their individual loss. These choices are contrary to expectations from collective action problems, which suggest that citizens who lose generally fail to make demands

(because it is difficult for penalized groups to turn the tables) and citizens who do not lose also generally fail to make demands (because of costs and asymmetric payoffs). Further, participants engage in collective action when provided information that others participate. This is also contrary to expectations based on collective action problems, which suggest that free-ridership or coordination problems are compounded as size increases. Finally, while the results do not show consistently that rewards-penalties motivate citizens' collective action, the descriptive assessments based on participants' self-reported reasons for pursuing collective action against government corruption show overwhelmingly that they are motivated by the unfairness of the corrupt action towards favored groups.

This paper makes three contributions to the literature. First, it provides a theoretical model to undergird the study of citizens' concerted action for government accountability of corruption to facilitate empirical evaluation and theory-building. In doing so, it addresses the neglect in the literature on corruption regarding citizens' role to treat citizens as the important complement in the anti-corruption efforts. Second, the results are consistent in several regards across Australia, Singapore, and the United States. In particular, the results show that information regarding other participants' actions, and losses from the corrupt action are strong predictors of participants' choice to pursue collective action; further, although the results from rewards-penalties are less consistent, they are highly suggestive that rewards-penalties are also significant predictors of citizens' choice to pursue collective action against government corruption. Third, more generally, the paper provides evidence-based research of citizens' responses across a range of regime-types and cultures to fill the current gap in policy understanding. In particular, the systematic assessments across the different countries offer vital information to enrich theoretical and empirical study of citizens' responses to government corruption that carry substantial implications for domestic and international policymaking, policy reforms, and political and social stability.[1]

In the following, we lay out the theoretical framework regarding citizens' collective action, describe the experiment, present the results and conclude with a discussion of the findings.

Stag-hunt Theoretical Framework of Citizens' Collective Action

Do citizens overcome coordination and collective action problems to demand government accountability and responsiveness? Recent protests in East and Southeast Asia indicate that they do. Theoretically, we draw on studies of strategic interaction – in particular, the stag-hunt game – to

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[1] While several studies establish that experiments in the lab have both internal and external validity – see, for instance, Alatas et al (2009), Armantier and Boly (2012), and Crawford (1997) – we note that the manipulation of contexts to ensure the separation of simultaneity and interrelationships in experiments compromises external validity. We thank an anonymous reviewer for the reminder that a 'multitude of extraneous variables" may weaken the credibility of citizens' demands. Martel and Wantchekon (2010), Gaines et al (2007) and Crawford (1997) emphasize that external validity – i.e., generalizability of experimental findings – is enhanced through replication, multiple treatments, and theoretical grounding.

undergird and instruct the set-up of the research. With this approach, we clarify the conditions under which citizens strategically interact with other citizens to make concerted demands for government accountability, and also those conditions when coordination or free-ridership problems weaken citizens' demands and allow them to be discounted, i.e., when demands are not credible (Haggard 2004; Gandhi 2008; Guo 2007; Yap 2012). In the following, we specify citizens' preferences to map the equilibria outcomes under the stag-hunt set-up.

What are citizens' preferences? Citizens prefer to stamp out corruption, given that corruption inflicts social, political, and economic costs that reduce citizens' payoffs. However, making demands for punishment involves time, effort and resources, i.e., it is costly. In particular, withdrawing or threatening to withdraw support from the government – such as through protests, demonstrations, or electoral overthrow – so that government penalizes officers or representatives for corruption is costly. What are citizens' choices? Citizens may choose to demand punishment, or not demand punishment. If they demand punishment in concert, then their demand is credible and complements and motivates government action on corruption. If they fail to act in concert, then their demand is weakened and may be discounted.

What are the likely outcomes from strategic interaction, given these preferences and choices? Two competing models inform expectations regarding how citizens behave in such interactions: the prisoner's dilemma and the stag-hunt game. According to Skyrms (2001), the prisoner's dilemma reveals "a conflict between individual rationality and mutual benefit" while the stag hunt shows a conflict between "considerations of mutual benefit and . . . personal risk" (3). Thus, the equilibrium outcome of prisoner's dilemma is that citizens act in self-interest and do not undertake the costs of demanding for punishment; in the aggregate, citizens' demands are not credible. With the stag-hunt game, there are two equilibrium outcomes: the risk-dominant strategy where citizens fail to make demands, and the payoff-dominant strategy where the citizens' demands are credible. The main obstacle to the payoff-dominant strategy is coordination, not a conflict.

Briefly, the stag-hunt game is one where two or more sets of players choose between hunting hare or stag. A successful hare hunt is independent of the other player's actions while a successful stag hunt depends on the other players to cooperate to hunt stag. The payoff from successfully hunting stag is significantly higher than hunting hare. Consequently, unlike the typical free-rider problem in collective action, there are two equilibria in the stag hunt: one where all hunt hare (the risk dominant strategy), and another where all hunt stag (the payoff dominant strategy). Under the stag-hunt set-up, each player knows that if she fails to join in, the other players are unlikely to be successful; given the payoffs of a successful hunt, the main obstacle to achieving the payoff-dominant equilibrium is coordination. Importantly, studies report that achieving the payoff-dominant outcome requires "little" in terms of strategic assessments or observation of others' actions (Skyrms 2001, 2008). Figure 1 depicts the stag-hunt set-up. Under the stag-hunt game, citizens may coordinate successfully and make credible demands for punishment to achieve the higher payoff. Assessing the conditions that frame the coordination is the focus in this paper. Next, we describe the experiment and treatments to make the assessment.

Figure 1: Strategic Interaction between Citizens

☐ = Choice Nodes

⬚ = Information set to capture A & B's simultaneous moves

Payoff ordering: W>X≥y
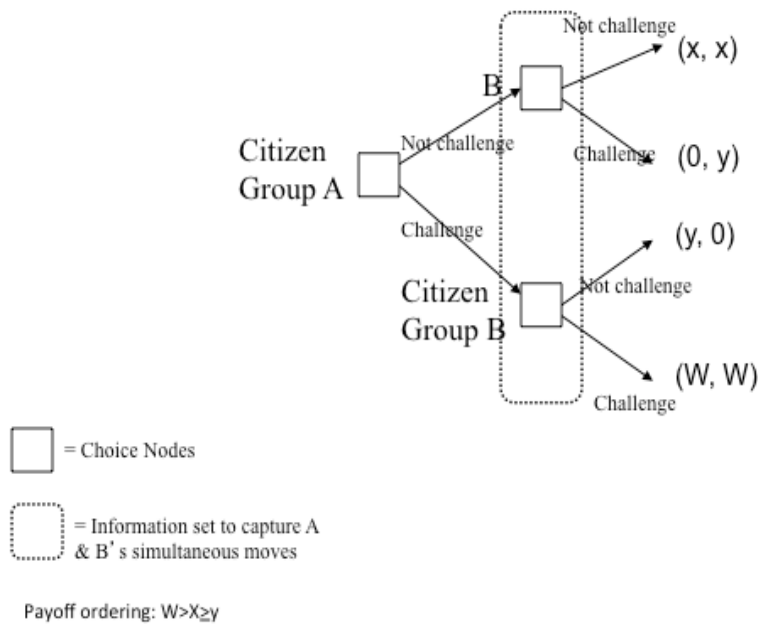
Stag Hunt Set-up

		A Stag	A Hare
B	Stag	W, W (eg., 2, 2)	0, y (eg., 0, 1)
B	Hare	y, 0 (eg., 1, 0)	X, X (eg., 1, 1)

Two equilibria (B; A):

(W, W) = payoff-dominant equilibrium

(X, X) = risk-dominant equilibrium

Experiment Design, Treatments, and Procedures

Methodologically, we rely on experiments: the experimental setting is particularly useful where the lack of variation, controls, or substantive overlap exist empirically. The experiments are conducted with undergraduate and graduate students in university campuses in the US (University of Kansas), Australia (the Australian National University), and Singapore (Nanyang Technological University). A total of 564 participants across the three countries are recruited via faculty an-

nouncements across various fields of study and undergraduate and graduate levels. Participants are randomly assigned to the different treatments to ensure unbiased findings; their responses are captured through experimental-surveys that they complete following a video presentation that shows an individual portraying a government official who fails to exercise impartial authority. Four treatments are applied to evaluate participants' choices:

1. Payoffs from play: participants' payoffs are varied so that their payoffs are increased, not affected, or decreased as a result of the corrupt act;

2. Information of others participants' choice: participants are informed that a majority will demand, less than a majority will demand, or not told one way or another about what others will do;

3. Rewards-penalties from demand: participants' expected rewards are varied so that they may be rewarded, not affected, or penalized for demanding government accountability;

4. Costs of play: the costs for demanding government accountability are differentiated so that there is no mention of costs versus some costs.

The experiment lasts no more than 15 minutes and proceeds as follows. Participants are placed in a lecture room, given a survey at the beginning of the session and advised to watch a government official distributing vouchers to six groups. To evince true, sincere responses, the value of the vouchers is tied to salient, real-world situations (Camerer and Hogarth 1999; Morton and Williams 2012). For the US and Australia, the real-world situation captured is tertiary subsidy-caps, where the vouchers capture a test-program to delay the imposition of a new policy – per public demands – that caps education-subsidies for tertiary students.[2] The vouchers each capture a time-delay of three months and are distributed to university students assigned into one of six groups. Thus, receiving one voucher translates into 3-month delay before the education-subsidy caps apply to the participant; two vouchers means the participant receives a 6-month delay, and so on. In Singapore, the vouchers may be used towards internship-interviews on a Career-Day Fair held by multinational corporations (MNCs) and international agencies such as Google, Apple, and the Asian Development Bank at the university; this ties to the competitive employment

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[2] Specifically, the governments of the state of Kansas and Australia have, respectively, cut aid and subsidies to higher-education, or reviewed existing policies with a view towards such cuts. Thus, in Kansas, US, the Republican-dominated legislature, under the leadership of Republican Governor Sam Brownback, has made significant cuts to education across public- and tertiary-levels, eliciting a constitutional challenge on public education funding. See, for instance, http://www2.ljworld.com/news/2014/may/01/higher-education-funding-still-pre-recession-level/ <last accessed May 11, 2014> and http://www.nytimes.com/2014/01/08/opinion/whats-the-matter-with-kansas-schools.html <last accessed May 11, 2014>. In Australia, the Liberal Coalition government put to review government subsidies to higher-education following their victory at the polls in September 2013, prompting speculation and restiveness regarding higher education policy. See, for instance, http://the-scan.com/2013/12/15/policy-directions-in-higher-education/ <last accessed may 11, 2014> and http://www.abc.net.au/news/2014-04-14/university-students-to-pay-extra-fee-after-government-review/5387182 <last accessed May 11, 2014>

market that university graduates in Singapore face as a result of the government's foreign talent policy.[3] In this instance, one voucher translates means that the participant may choose to use the voucher towards one interviews at an MNC or international agencies, two means two interviews at selected MNCs or international agencies, and so on.

At the start of the experiment, participants are read the following statement: participants will watch a video showing a government official distributing vouchers to six groups comprising university students. Each participant is randomly assigned to one of these six groups; a number on the top right-hand corner of the survey shows the group to which each participant is assigned. If the participant's group receives one voucher, then the participant receives the same; if the participant's group receives two vouchers, and so on. The vouchers are to be distributed evenly over the six groups; when there are less than 6 to distribute, the remaining is distributed via a lottery. Participants are advised that they may request a review of the official's conduct by indicating so on one of the questions in the survey. The review is conducted if more than 50 percent of the participants request a review. Participants are reminded that there may be costs to request review, and to pay attention to discussions delineating costs and etc. The participants then watch the video where the official distributes vouchers unevenly as follows: groups 2 and 4 have one of their allocated vouchers given to group 6, groups 1, 5 are unaffected, and group 3 receives an additional allocation through the lottery. On completion of the distribution, groups 2 and 4 have three vouchers each, groups 1 and 5 have four vouchers each, group 3 has five vouchers, while group 6 has seven vouchers.

Next, we discuss the results from the experiment.

Results and Findings

We are interested in the conditions that lead citizens to engage in collective action and demand government accountability of corruption. To inform expectations, we adopt the stag-hunt theoretical framework. Under the stag-hunt set-up, participants weigh between personal risk and mutual benefit, knowing that if she fails to join in, the other players are unlikely to be successful; further, there is a significantly higher payoff for coordinating successfully. Accordingly, we apply four treatments to experiments conducted in Australia, Singapore, and the United States to assess for critical conditions that influence citizens' choice to engage in collective action to demand for government accountability of corruption: (a) the effect on corruption on the individual's payoff; (b) information of other participants' choices; (c) rewards-penalties; and (d) costs. In particular, by the stag-hunt, we expect the individual's choice is based on assessment between personal risk

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[3] The Singapore government's encouraging migration policy for foreign workers to take up residence and citizenship in the country has led to a highly competitive employment market that is an underlying source of some political and social tensions in the country. See, for instance, http://www.businessweek.com/news/2011-08-15/singapore-tightens-foreign-worker-rules-after-poll-backlash.html <last accessed May 11, 2014> and http://www.oecd.org/dev/asia-pacific/Singapore.pdf <last accessed May 11, 2014>

Table 1. Participants' choices by group number and payoffs

Group No (Number of vouchers)	Australia Demand review	Not de-mand review	Singapore Demand review	Not demand review	United States Demand review	Not de-mand review
Group 1 (4 vouchers)	26	12	9	10	22	16
Group 2 (3 vouchers)	21	9	15	7	24	10
Group 3 (5 vouchers)	16	15	11	7	26	19
Group 4 (3 vouchers)	29	9	13	5	25	17
Group 5 (4 vouchers)	15	12	12	8	27	18
Group 6 (7 vouchers)	19	20	8	13	19	20
Subtotal	77	126	68	50	143	100
Total	203		118		243	
Proportion review (2 & 4, lose)	73.5 %		68.3 %		64.9 %	
Proportion review (1 & 5, no loss)	65.7 %		53.9 %		59.5 %	
Proportion review (3, no loss)	51.6 %		61.1 %		56.4 %	
Proportion review (6, gain)	48.7 %		38.1 %		48.7 %	
Proportions test, lose vs no loss (probability)	-0.63 (0.53)		-1.22 (0.22)		-0.81 (0.42)	
Proportions test, no loss vs gain (probability)	1.95 (0.05)**		1.41 (0.16)		0.43 (0.67)	
Proportions test, loss vs gain (probability)	2.77 (0.01)***		2.28 (0.02)***		.68 (0.09)*	

• Note: Probabilities of the t-scores exceeding 0.05 indicate that the proportions are not statistically different

and mutual benefit that is calibrated to the individual's payoff from play. Further, information that other participants choose to demand review government accountability of corruption will lead the individual to make the choice. Also, rewards-penalties are more likely to weigh on the individual's choice rather than costs. If the results support the stag-hunt set-up, then respondents are likely to demand review of the government official's conduct across the different treatments.

In general, the results support these expectations: in particular, across the three countries, participants who did not benefit from the corrupt action are more likely to choose collective action than those who did benefit. Further, per the stag-hunt set-up, participants who are informed that other participants will demand a review are more likely to make a similar demand. And, importantly, although the results do not provide strong support for the effects of rewards-penalties, they suggest that rewards-penalties – rather than costs – influence the participant's choice to demand review of the official's conduct.

Table 1 reports the results of participants' choice to demand review in terms of their payoffs across the three countries. In general, the results indicate that – except for participants in Group 6, which received more than the fair distribution of vouchers – more respondents demand review of the official's conduct across the groups rather than not make the demand. Thus, evaluations of respondents by groups, based on whether participants' payoffs are reduced, not affected, versus increased as a result of the corrupt distribution, show the highest proportion demanding review are for participants in groups 2 and 4, i.e., those who lose, across Australia, Singapore, and the US (73.5 percent, 68.3 percent, and 64.9 percent respectively). Further, among those who do not lose, a majority also chooses to demand review of the official's conduct across the three countries (65.7 percent, 53.9 percent, and 59.5 percent respectively). Perhaps surprisingly, a large number of those who gain from the corrupt act also choose collective action though they fall below a majority (48.7 percent in Australia, 38.1 percent in Singapore, and 48.7 percent in the US). What do these numbers mean? Difference-in-proportions tests show that there are statistically significant differences between those who demand review if their payoffs are reduced versus those who demand review if their payoffs are increased from the corrupt distribution (probabilities of 0.01, 0.02, 0.09 respectively). Also, the results are not statistically different between the countries, so that the responses are generalizable across the countries. These results corroborate that participants who did not benefit from the corrupt action are more likely to choose collective action than those who benefit, per assessments of personal risk and mutual benefit that is calibrated to the individual's payoff from play.

How does information of other participants' choices affect the participant's choice? Table 2 presents the frequencies, proportions, and results from proportions analyses. In general, those who are told that less than 50% of the other respondents will demand review are less likely to demand review, compared against those who are not told or who are told that 50% of other participants will demand review. In particular, for Singapore and Australia, the consistent statistical significant difference lies between participants who are told that less than 50 percent of other participants will demand review versus those who are told that 50 percent of other participants will demand review across all the countries, while the results for the US are fairly close to statistical sig-

nificance. This means that those who are told less behave differently from those who are told that 50 percent will demand review. These results are instructive given the increasing socially-connectedness across and within countries: in particular, they underscore the relevance of information on respondent's choice to pursue collective action, where information that more will participate motivates the respondent's participation.

Table 2. Participants' choices, given information about other participants' behaviors

Given information about other participants' behaviors	Australia		Singapore		United States	
	Demand review	Not demand review	Demand review	Not demand review	Demand review	Not demand review
Told that less than 50% of other participants will demand review	26 (48%)	28 (52%)	14 (42%)	19 (58%)	50 (55%)	41 (45%)
Not told of other participants' behaviors	46 (59%)	32 (41%)	29 (58%)	21 (42%)	46 (56%)	36 (44%)
Told 50% of other participants will demand review	54 (76%)	17 (24%)	25 (71%)	10 (29%)	47 (67%)	23 (33%)
Proportions test, toldless vs nottold (probability)	-1.23 (0.22)		-1.39 (0.17)		-0.23 (0.82)	
Proportions test, nottold v told50 (probability)	2.22 (0.03)**		1.27 (0.21)		1.27 (0.21)	
Proportions test, toldless v told50 (probability)	3.22 (0.001)***		2.42 (0.02)***		1.51 (0.13)	

• Note: Probabilities of the t-scores exceeding 0.05 indicate that the proportions are not statistically different

To assess how rewards-penalties and costs affect participants' choice, we use logit tests. This allows for assessing their effects that also takes into account the effects of information as well as participants' payoffs; in addition, the logit controls for characteristics such as gender, income, marital status, age, and satisfaction with the government that were used in the experimental

Table 3. Logit regression of likelihood to demand review in the US and Australia

Dependent Variable: Participant's choice to demand review (demand=1; not demand=0)	Australia (standard errors)	Singapore (standard errors)	US (standard errors)
Information of other participants (-1=told less than 50%; 0=not told; 1=told 50% will demand review)	0.58*** (0.22)	0.59** (0.30)	0.21 (0.18)
Cost (0=not told; -1=low costs; -3=high)	0.05 (0.25)	1.41 (1.28)	-0.24 (0.27)
Rewards (-3=penalty; 0=no mention; 3=rewards)	0.14** (0.07)	0.06 (0.12)	0.24 (0.21)
Gender (Male=0, Female=1)	-0.36 (0.32)	-0.004 (0.56)	-0.47* (0.28)
Age (Categories)	-0.29 (0.20)	1.45 (1.28)	-0.001 (0.14)
Marital status (Categories)	0.05 (0.17)		-0.06 (0.38)
Years in School (Categories)	0.31* (0.17)	-0.08 (0.58)	0.05 (0.08)
Income (Categories)	0.10 (0.09)	-0.15 (0.13)	-0.05 (0.07)
Satisfied with the government? (Scale, 1=highly dissatisfied; 5=highly satisfied)	-0.12 (0.16)	-0.54* (0.24)	-0.20 (0.15)
Constant	0.54 (0.79)	2.38 (2.12)	1.04 (0.73)
Pseudo R^2	0.10	0.12	0.05
LR Chi^2 (probability)	26.33*** (0.003)	18.84** (0.03)	14.90 (0.14)
N	192	113	239

• $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

survey. Table 3 tabulates the results, which shows only Australia with statistically significant find-ings of the effects of rewards on the individual's choice to demand review. Of the other variables, effect of the corrupt distribution on payoff is consistently significant in explaining the respond-ent's choice to demand review across the three countries, while information of other participants' choice to demand review is statistically significant in Australia and Singapore in explaining the respondent's choice. The overall fit of the model is good for Australia and Singapore (probability at the 0.05 level).

What do these results mean? On the one hand, they do not provide strong, consistent results in support of rewards-penalties or costs on the individual's choice to demand review of govern-ment action. On the other, the significant number of respondents demanding review across the three countries may underscore that participants consider unfair, corrupt practices hurt their so-cieties and make them worse places to live; consequently, their collective action captures rewards from redressing the unfair distribution. To evaluate for the possibility, table 4 reports the results of participant's self-reported reasons for pursuing collective action to demand review. They show that of those who do not demand review, about 40 percent make the choice due to concerns of losing more vouchers, which suggests that penalties are a deterrent. Among those who choose to demand review, the overwhelming reasons are the unfairness of the distribution or the pointed reference to Group 6, which received vouchers that designated for other groups. These results provide greater nuances to the findings in Table 3 to suggest that the effects of rewards-penalties may be more important than indicated in the logit findings.

To summarize, the results of the experimental analyses report that consistently high numbers of respondents demand government accountability of corruption. In particular, the different analyses – difference in proportions tests, logit analysis, and descriptive assessments – reveals some critical conditions that influence citizens' choice to pursue collective action to demand for government accountability, particularly if they lose but also if they do not gain as a result of the corrupt action and if they have information that other participants will demand review. The ef-fects of rewards-penalties and costs are less clear: on the one hand, the physical rewards-penalties have statistically significant effects only in Australia; on the other hand, the proportion of re-spondents who explain their choice of collective action as based on unfair practices or the bias towards Group 6 suggests there may be rewards to respondents from redressing an unfair, cor-rupt distribution.

Table 4. Distribution of Participants by self-reporting reasons for Making Demand versus Not Making Demand

	Australia	Singapore	United States
Reasons for not demanding review			
Risk losing more	24	22	38
No loss, so not demanding	32	24	45
Frequency (proportion of total not submit)	56/61 (92%)	46/48 (96%)	83/90 (92%)
Reasons for demanding review			
Unfair, need review	57	49	78
Group 6 got more, need review	26	12	28
Frequency (proportion of total not submit)	83/96 (86.5%)	61/65 (94%)	106/131 (81%)

Conclusion

Citizens' collective action against government corruption captures a "political will" to undergird efforts to tackle corruption (Grey and Kaufmann 1998:9); further, as the 2013-2014 protests across many countries show, these collective action may be highly potent. Given the significance, it is surprising that the study of corruption has overlooked citizens' pursuit of collective action against corruption. Insights from studies of collective action appear to justify the neglect: first, the coordination needed in order to lead to credible, collective demands against government corruption – such as protests or electoral setbacks – is significant; second, the individual benefits more by choosing to not act even though the aggregation of such individual choices is socially, economically, and politically detrimental. These insights fuel the expectation that citizens generally failure to act collectively so that their demands for government accountability of corruption is credible. However, the recent protests show that there are conditions under which citizens overcome the coordination problems to demand government accountability.

In this paper, we provide a theoretical framework that shows such coordination is achievable; further, using experimental study, we clarify the critical conditions under which citizens act in concert to demand government accountability of corruption across three countries: Australia, Singapore, and the United States. The results from the experimental analyses show a high number of participants demand government accountability of corruption; further, information that other

participants will demand government accountability is statistically significant in motivating individuals to participate in the collective action to do so. The effect of information, in particular, corroborates that respondents are engaging in collective action. The finding of information is also highly relevant, given the increasing interconnections through social media.

The results also show that those who lose from corrupt actions are statistically more likely to pursue collective action against government corruption. This is instructive: studies of coordination failure suggest that a deterrent to collective action is that those who lose generally fail to demand government accountability because it is difficult for penalized groups to turn the tables on those who gain. The results here indicate otherwise, to emphasize that government needs to pay attention to those who lose from government corruption for political, social, and economic stability.

Importantly, these results highlight conditions under which a theoretical model, the stag-hunt, predicts successful coordination to underpin social action. The consistent findings across a range of regime-types and cultures, then, fill a huge gap in policy understanding with substantial implications for domestic and international policymaking, policy reforms, and political and social stability. Indeed, the findings from this study elucidate how citizens' demands may be harnessed to complement existing efforts to control corruption in East and Southeast Asian countries and also informs the process of institution-building and strengthening going on in democratizing Asia. ■

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