

Strategic Solicitations: Explaining When Requests for Political Donations Are Persuasive

by

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Dedicated to everyone that indefatigably offered support and advice

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CHAPTER I

Introduction and Overview

Each year, millions of individuals donate billions of dollars to political parties, interest groups, and campaigns. Many of these donations are small, amounting to less than \$200. In the past two presidential elections, for example, small donations accounted for between one-third to one-half of all funds raised by major party candidates.¹ These donations are a critical source of funding for political organizations facing spiraling campaign costs. They are also a central avenue through which Americans express their political preferences.

This raises a key question: Why do so many people make these small donations? By and large, a major factor influencing people's decisions to donate is the simple fact of receiving a persuasive request for money. Indeed, a majority of people who make small donations report that they donated upon receiving a persuasive solicitation (Graf et al. 2006). But what makes a solicitation persuasive?

A common argument is that solicitations are persuasive when they mention issues that people care about and are targeted at people who believe that the organization shares their issue positions. In this dissertation I challenge these claims. In the first part I argue that mentioning issues that people care about in a donation solicitation can actually *decrease* their willingness to donate. This situation arises when the issues

¹See Malbin 2009; statistics refer to donations by individuals from January 2003-August 2004 and January 2007-August 2008.

that people care about remind them of their personal financial struggles. Examples of such issues include unemployment, inflation, the cost of health care, and the cost of education. Examples of recent donation solicitations mentioning such issues are plentiful:

“I’m in this race for everyone who needs a champion. For the hardworking families who are losing sleep over gas prices and grocery costs and mortgage payments and medical bills—but who never lose that American can-do spirit and optimism.” (Hillary Clinton e-mail, 2008)

“I believe the time is right for change. When families are struggling to pay their bills working at jobs that do not pay enough and when kids do not have health insurance, something is wrong.” (Tim Mathern homepage, 2008, adjacent to “Contribute” button)

“It’s time to stop making middle-class families work harder for less while paying more and more for health care, college, and all the necessities of life.” (John Kerry homepage, 2004, adjacent to “Contribute” button)

The issues raised in these statements are some of Americans’ most common issue concerns.² They are also some of the most common issues to appear in donation solicitations, as I show in Chapter 5. Despite their importance and prevalence, I show that mentioning issues like these decreases people’s willingness to donate by making it difficult to justify spending money on a donation. This effect occurs even if people are willing to engage in other non-monetary political actions such as volunteering time.

In the second part of the dissertation I build upon the results of the first part to derive new arguments about who should be solicited for money. I argue that under certain conditions political organizations have an incentive *not* to contact their core supporters but instead contact people who do not believe that they share the organization’s issue positions and priorities. This situation arises when two conditions

²Geer (2006) and Budge and Fairlie (1983) show that issues related to personal financial struggles such as unemployment and inflation are the most common issues mentioned in a variety of campaigns.

are met. The first condition is that core supporters care about issues that remind them of their personal financial struggles, and therefore solicitations mentioning these issues will not be persuasive. The second condition is that organizations can signal their credibility to non-core supporters using costly endorsements and issue-specific language.

Before continuing, it is important to note the scope of my arguments. My arguments apply to impersonal donation solicitations aimed at individuals. By “impersonal” I mean any solicitation that is not between personal acquaintances, such as direct mail, telephone requests, and Internet requests (e.g. by email or on an organization’s website). In addition, I am focusing on individuals, the ultimate source of the large majority of campaign funds (Brown et al. 1995, Francia et al. 2003, Ansolabehere et al. 2003; also see Malbin 2009 for figures from the 2004 and 2008 presidential campaigns). I am not focusing on the donation decisions of intermediaries such as political parties and political action committees (PACs), nor the decisions of the candidates themselves to either self-finance their campaigns or help finance colleagues’ campaigns.³

Importance of Impersonal Solicitations in Political Campaigns

Studying when impersonal solicitations are persuasive is important because they are responsible for a significant share of the total funds raised by parties, interest groups, and campaigns. They are, in short, a key determinant of these organizations’ ability to have their voices heard in our political process. To demonstrate this point, I draw upon two pieces of evidence. First, I describe how small donations account

³For interested readers, there are voluminous literatures on how these organizations decide to donate funds to individual campaigns. On the role of political parties in collecting and distributing funds, see, e.g. Jacobson 1980. On the role of PACs in collecting and distributing funds, see, e.g. Sabato 1984, Sorauf 1988, Wright 1985, Biersack, Herrnson, and Wilcox 1994. Also, for work on how candidates themselves either finance their own campaigns or contribute to other candidates via personal PACs and campaign committees, see, e.g. Corrado 1992.

for a significant share of funds for many political organizations. Second, I present evidence that supports my claim that many people who make small donations do so in response to an impersonal solicitation.

The first point is that small donations are an important source of funds for political organizations. By “small” donations, I mean any donation that is \$200 or less. I adopt this threshold because it is the threshold for disclosure under federal law. It is also the threshold adopted in most other work on this topic (e.g. Malbin 2009, 2010). Two developments have made small donations an important component of political fundraising. The first development applies to any political organization involved with electing people to national office. In this case, passage of campaign finance reform – especially the Federal Election Campaign Act (FECA) in 1971, its amendments in 1974, and the Bipartisan Campaign Reform Act (BCRA) in 2002 – has placed strict limits on the amount that political organizations can raise from any one individual. For example, prior to 1974, campaigns often depended primarily upon a few donors who could write very large checks for tens of thousands of dollars. Since 1974, individuals face strict limits on the amount they can donate to a campaign. These limits started at \$1,000 for each phase of the election, and have since only been increased to account for inflation.⁴ They still remain far below the average donation prior to reform, which necessitates that organizations broaden their donor bases. In addition to these limits, campaign finance laws give presidential candidates the option to receive public matching funds for all small donations up to \$250 during the primaries. If they accept these funds, then candidates will have their small donations doubled, which in turn gives them greater incentive to solicit small donations. Taken together, both of these changes give campaign organizations strong incentives to rely upon a broader set of donors making much smaller contributions than in the past. To be sure, this does not mean that they are relying exclusively upon donations less

⁴Limits of different amounts also apply to parties and political action committees.

than \$200,⁵ but it does mean that the incentive for raising these small donations has significantly increased.

The second development applies to all political organizations regardless of their goal. This is the rise of the Internet as a means for raising money. In the past, organizations that wanted to raise small sums from large groups of people had to rely upon direct mail and telemarketing. These methods of fundraising entailed large fixed costs and often yielded low return rates (Godwin 1988, Brown et al. 1995). In contrast, Internet-based fundraising through websites and e-mail allows organizations to more easily and cheaply reach a very broad set of citizens (Wilcox 2008).

Given these regulatory and technological changes, political organizations now have both the incentive and relatively inexpensive means to finance their operations via small donations. Indeed, the effect of these trends is borne out in the pattern of participatory behavior in recent years.⁶ For example, in the 1999-2000 election cycle, 21 million individuals donated \$2.4 billion out of a total \$3 billion raised by political parties, candidates, and political action committees (Ansolabehere et al. 2003). The average contribution among these individuals was quite small—only \$115—and well below the maximum allowed under federal law.

Small donations are particularly important for presidential campaigns. As noted at the beginning of the chapter, in 2004 and 2008 both major-party presidential candidates raised between one-third and one-half of their funds via donations less than \$200 (Malbin 2008). The results for all leading primary candidates in the 2008 campaign appear in Table 1.1.⁷ This table shows that for all candidates except one, over one-quarter of their total receipts from individuals came in the form of donations

⁵Indeed, another important component of fundraising since campaign finance reform is via personal-acquaintance networks in which well-connected people persuade their friends and colleagues to donate. See Brown et al. 1995 and Francia et al. 2003 for good discussions of how these networks operate.

⁶In what follows I describe the important role of small donations for a variety of political organizations in recent years. These figures by no means cover all political organizations that depend upon small donations.

⁷This table is adopted from Malbin 2008.

Table 1.1: Importance of Small Donations during the Primary Season from January 2007-August 2008

Candidate	Total Amount Raised from Individuals (in \$mil)	Percentage of Total in Amounts \$200 or less
Clinton	180.5	37
Edwards	35.2	39
Giuliani	55.2	8
Huckabee	15.8	43
McCain	203	31
Obama	410.6	53
Paul	34.2	63
Romney	63.3	26

less than \$200. For five of the eight candidates, this proportion was over one-third. For two of these candidates—Barack Obama and Ron Paul—it was over one-half. For Obama, one estimate is that 2.5 million people made small donations of \$62 on average (Malbin 2008).

For political parties, small donations are also critical. The two national party committees raised 46% of their total receipts in the form of donations less than \$200 in 2003-2004 and 39% of their total receipts from such donations in 2005-2006 (Malbin and Cain 2007). For congressional candidates, small donations are important but less so than with presidential candidates and parties. From 2003-2006, Senate candidates raised 16% of their total receipts from small donations, and House candidates raised 12% (Malbin and Cain 2007). Many prominent political advocacy groups rely upon similar funding sources.⁸ Taken together, the above statistics provide significant supporting evidence for my first point: small donations from individuals account for a significant share of political fundraising.

⁸For example, MoveOn.org's federal PAC reports that a majority of its funding comes from people who donate less than \$100 (Source: www.moveon.org/about). Similarly, US PIRG (a 501(c)(4) organization) reports that a majority of its citizen contributions (which comprised 43% of their annual budget in 2008) come in the form of small contributions (Source: US PIRG 2008 Annual Report, Personal Communication with Membership Services Office, May 10, 2010). Lastly, the conservative Club for Growth PAC also reports that approximately 30% of its total receipts during the 2010 election cycle (as of March 31, 2010) came in the form of individual donations less than \$200 (Source: FEC Data and Personal Communication with Main Office, May 10, 2010).

The second point is that many people who make small donations do so in response to a persuasive impersonal solicitation. The basis for this claim comes from a series of studies based on individual-level surveys of political participation. The first two, by Rosenstone and Hansen (1993) and Verba, Schlozman, and Brady (1995), show that the overwhelming majority of donations are made in response to solicitations, and that many of these solicitations are impersonal. For example, Verba et al. (1995; Figure 5.1) found that 37% of requests for money arrived impersonally, a figure that was over 50% higher than requests for every other form of political participation.

More recently, Graf et al. (2006) also studied the conditions under which people make small donations.⁹ They examined how and when people were asked to donate, and in particular the circumstances surrounding their first donation. Regarding what prompted it, 46% received a letter in the mail from their candidate or party, 17% received an e-mail, and 15% received a telephone call. These numbers dwarf the 2-6% of people who gave in response to a personal solicitation or anything they viewed in the mass media (Table 15, page 21). Looking beyond the first contribution, a majority of donors said that they donated in response to a solicitation (page 18).¹⁰

Taken together, these findings demonstrate that impersonal solicitations affect people's decisions to make small donations. Combined with the fact that small donations are a significant share of political fundraising, it is clear that impersonal solicitations are an important source of funding for candidates, parties, and interest groups. Thus, understanding the conditions under which solicitations are persuasive has important ramifications for how much money organizations can raise and, more broadly, political outcomes.

⁹Note that they break up their data in terms of the total amount that people gave, rather than the size of each donation.

¹⁰It is possible that these solicitations are simply persuading people to donate who would have donated anyway. However, as Grant and Rudolph (2002) found, controlling for the factors that lead people to donate in the first place, being asked to donate significantly increases the likelihood that people donate. Thus, at least part of the power of solicitation is its ability to stimulate new contributions that would not otherwise have occurred.

Prior Research

As with all forms of political communication, a persuasive solicitation must say the right thing and be sent to the right people. In this section I describe prior research that addresses both of these points. This research is drawn from two separate literatures. The first literature is on political participation and the factors that mobilize people to take part. The second literature is on candidate rhetoric, and focuses on how campaigns design their communications to achieve desired ends (including, but not limited to, persuading people to donate money). Although both literatures have evolved independently of one another, both are important starting points for my analysis because their arguments bear directly on the two central questions of this dissertation: 1) What content will persuade people to donate? and 2) Who should be solicited for money?¹¹ After describing this work, I challenge two of their central claims and offer an alternative theory about when solicitations will persuade people to donate money.

Political Participation

A key question in the literature on political participation is what prompts people to donate money. Focal citations include a series of studies finding that people who receive a solicitation are far more likely to donate than those that do not (Jones and Miller 1985, Godwin 1988, Sorauf 1992, Rosenstone and Hansen 1993, Verba et al. 1995, Brown et al. 1995, Brady et al. 1999, Burns et al. 2001, Grant and Rudolph 2002, Francia et al. 2003, Graf et al. 2006). Given the importance of these requests, many scholars have advanced arguments about what attributes of a solicitation make it successful. A common argument is that requests are more persuasive when they

¹¹Some scholars have also analyzed related, but distinct, questions related to solicitations. One question is about the effect of the direction of policy change on people's willingness to donate (Miller and Krosnick 2004). Another is the effect of different modes of contact on voter mobilization (e.g. Gerber and Green 2000). In both cases, however, this work does not directly address the key questions of this dissertation, and so will not be discussed in detail.

mention issues that the recipient cares about. As Brown, Powell, and Wilcox (1995:61) write, “[political organizations] hope to attract contributors based on their package of issue positions.” Graf et al. (2006:17-18) stress the advantages of highly personalized solicitations so that “a request can be tied to an issue important to the prospective donor.” Similar arguments appear in other work as well (e.g. Godwin 1988, Francia et al. 2003). The implication of these arguments is that if, for example, public opinion polls show that citizens are concerned about economic issues such as unemployment, the price of gas, and the price of food, then organizations have an incentive to mention them in their solicitations. According to this view, mentioning economic issues like these, as well as any other issues that citizens care about, will increase people’s willingness to donate money.

Scholars in this area have also examined who should be solicited for money. In this case, a key argument is that political organizations stand to gain the most from contacting people who believe that the organization is credible (i.e. believes that the organization shares their issues positions and priorities). Francia et al. (2003:78-81) exemplify this point of view:

The keys to success in [political fundraising] are a good donor list and a compelling sales pitch on script. The list should be composed of individuals who are sympathetic to the organization, agree with his or her issue positions, and have a history of contributing to campaigns or other political, social, or economic causes.

This means that, if given the choice between requesting money from people that believe the group is credible and requesting money from people that do not have such a belief, organizations have an incentive to contact the former.

Rhetorical Strategy in Campaigns

Scholars who study rhetorical strategy have also examined what makes some communications more effective than others. A central question is which issues candidates

choose to mention in their speeches, solicitations, and other forms of communication whose goal is to persuade citizens to take actions favorable to the candidate.¹² Choosing the right issues is important because these are the issues that can form the basis of citizens' decisions to donate, vote, volunteer, and so on.¹³

A common argument is that candidates stand to gain the most from mentioning issues that they know are important to their audience (Budge and Fairlie 1983, Ansolabehere and Iyengar 1994, Simon 2002, Sigelman and Buell 2004, Druckman et al. 2004, Kaplan et al. 2006). Using public opinion polls, candidates ascertain what issues are important and what positions people hold on those issues (Jacobs and Shapiro 1994; Geer 1996, Druckman et al. 2004). Then, by focusing their rhetoric on these issues, "candidates are more likely to be seen as concerned, responsive, and informed", and therefore stand to "gain the most" (Ansolabehere and Iyengar 1994:336-7).¹⁴ Indeed, some authors have gone even further, suggesting that not only do candidates stand to gain from mentioning such issues, but they simply cannot afford *not* to mention them. For example, Jerit (2008:3) contends that candidates will "try to establish their credentials on subjects of important public concern" because failure to do so "can lead to a loss of credibility in the eyes of the public." Empirical studies of candidate strategy find that campaigns' decisions follow these arguments

¹²While this argument was initially formulated in the context of persuading people to vote a certain way, the logic of the argument applies equally well to persuading people to engage in any action that benefits the candidate such as donating money, volunteering, and so on. In fact, more recent work in this area has done precisely that – expanded the focus to include outcomes other than voting (e.g. Jerit 2008).

¹³The name given to this process is priming, in which the issues that candidates and other political actors choose to focus on can affect the considerations the citizens use in their political decisions. An extensive literature exists on the theory and empirical study of this process. See, e.g., Berelson et al. 1954, Page 1978, Iyengar and Kinder 1987, Johnston et al. 1992, Austen-Smith 1993, Hammond and Humes 1993, Jacobs and Shapiro 1994, Riker 1996, Petrocik 1996, Sellers 1998, Carsey 2000, Simon 2002, Petrocik et al. 2003, Druckman 2004, Druckman et al. 2004, Sides 2006, Hillygus and Shields 2008.

¹⁴They refer to this strategy as "riding the wave", whereby political actors focus on issues that are already salient in people's minds. To be certain, in their experiments they do not find as strong evidence for the "riding the wave" hypothesis as they do for alternative hypotheses. But, at the end of the article they speculate that the reason is due to a unique feature of their experimental design and not a shortcoming in the "riding the wave" hypothesis.

(e.g. Jacobs and Shapiro 1994, Druckman et al. 2004).

To be sure, other authors have focused on alternative criteria for issue selection. For example, in a series of influential papers Petrocik argues that candidates should mention issues that the candidate’s party “owns”—that is, issues on which the party has a reputation of handling the issue better than its competitors (Petrocik 1996, Petrocik et al. 2003; also see Miller and Krosnick 2000). As Petrocik (1996: 826) writes, parties have “a history of attention, initiative, and innovation toward these problems, which leads voters to believe that one of the parties (and its candidates) is more sincere and committed to doing something about them.” Others have argued that candidates have an incentive to mention issues on which the public supports the candidate’s position on that issue (Riker 1996, Simon 2002). In both of these cases, however, even these authors acknowledge that candidates often stand to gain from responding to salient issues of the day. For example, Simon (2002:135) writes that “circumstance...shrinks the number of dimensions available for discussion” (also see Petrocik 1996, p. 829).

Considered overall, then, a central idea in this literature mirrors that of the political participation literature: candidates stand to gain from mentioning issues that their audience cares about. Returning to the example from the previous section, and applying these arguments in the context of donation solicitations, this means that if public opinion polls reveal that citizens are concerned about economic issues like unemployment and the price of gas, then candidates stand to gain from mentioning these issues when they request money.

Overview of my argument

Taken together, arguments in both the political participation and rhetorical strategy literatures point in the same direction. Regarding solicitation content, political organizations stand to gain from mentioning issues that their audience cares about.

Regarding who to target, political organizations do better by contacting people that already believe they are credible rather than those that do not. In this dissertation I challenge both of these arguments.

In the first part I argue that mentioning issues people care about in donation solicitations can *decrease* their willingness to donate money. To show when and why, I build a psychological theory of how people decide to contribute. This theory synthesizes two ideas from consumer psychology and behavioral economics: (1) people spend money when they are able to justify the expenditure to themselves (e.g. Shafir et al. 1993), and (2) highly discretionary purchases, such as political donations, are hard to justify when people are reminded about their personal financial struggles (e.g. Okada 2005). I combine these two ideas to show that mentioning issues that people care about in donation solicitations increases their willingness to donate only if these issues do not remind them of personal financial struggles. When the issues do prime financial concerns, then mentioning them will actually decrease people's willingness to donate.

Note that this demobilizing effect is limited to money-based participation: mentioning issues that remind people of their financial struggles makes it difficult to justify spending money on a donation. It does not, however, make it difficult to justify doing other things, such as spending time volunteering for a political organization. In fact, because people do not treat time and money interchangeably (e.g. Leclerc et al. 1995), the same issue that decreases someone's willingness to donate money will not necessarily decrease his/her willingness to donate time.

The implication of these findings is that mentioning the exact same issue can have a divergent effect on people's participatory decisions. This means that the appropriate solicitation depends critically upon an organization's desired participatory outcome. Mentioning issues that people care about is a good approach for certain audiences and when trying to achieve certain participatory goals, but when trying to achieve

other goals with other audiences it can be entirely ineffective.

In the second part of the dissertation I build upon the conclusions of the first part to derive new hypotheses about who should be contacted for money. Here I challenge the argument that organizations stand to gain the most from contacting people that initially perceive them as credible, by which I mean that they perceive the organization as sharing the same issue positions and priorities as they do. I argue that under certain conditions a political organization can actually do better by contacting people that initially do *not* believe that it is credible. This situation arises when two conditions are met. The first condition is that people who view it as credible care about issues that remind them of their personal financial struggles, and therefore solicitations mentioning these issues will not be persuasive. The second condition is that the organization can signal its credibility to people who do not initially view it as credible using costly endorsements and issue-specific language.

To be clear, this argument does not necessarily imply that, for example, Focus on the Family will be able to persuade staunchly pro-choice Americans to donate money. Rather, a more likely scenario is as follows. Suppose that Republican Candidate Smith favors retraining programs for unionized workers who have lost their jobs. Although his commitment to this issue is well-known among union leaders and unionized workers, he is virtually unknown among professionals who also care a good deal about retraining programs. Moreover, mentioning unemployment and retraining programs does not remind these professionals of personal financial struggles like it does for the union workers. Further suppose that professionals use a partisan cue such that they only believe that Democrats share their issue positions when it comes to this issue. In other words, their initial belief is that Candidate Smith is not credible.

In this example, using impersonal solicitations to raise money among union workers could be problematic, as Candidate Smith will essentially need to remind them about personal financial struggles in order to mention issues that they care about,

which in turn will make it difficult for them to justify donating money. In addition, because the professionals do not initially perceive Smith as credible, they are not necessarily willing to donate either. This situation mirrors that described by Francia et al. (2003:79):

The fact that a candidate shares a group's position does not ensure a good return rate. Environmentalists may be happy to join the Sierra Club or subscribe to *National Geographic* and many gun owners are pleased to pay dues to the NRA or buy a subscription to *Guns and Ammo*, but most of these same individuals are unwilling to contribute to an unfamiliar candidate who claims to champion environmentalist or anti-gun-control positions.

In this case, Candidate Smith needs some way to signal his credibility to the professionals. One way to do so is to gather costly endorsements from well-known union leaders. So long as professionals are certain that the endorsers would only endorse candidates who are actually credible (i.e. it would be too difficult for candidates who do not support retraining programs to gather such endorsements), then the mere fact of receiving the endorsements will signal Smith's credibility. This signal, in turn, provides a reason for the professionals to donate to him. Another potential signal is to use issue-specific technical language and imagery that Smith would only be familiar with if he were actually credible (and that, if he were not credible, he would not find it worth his while to take the time and energy to learn). Here, again, the use of this language and imagery signals his credibility to the professionals, thereby providing a basis for their donations.

Plan of the Dissertation

The plan of the dissertation is as follows. The first part of the dissertation—Chapters 2 through 5—addresses the question: “What content will persuade people to give?”. In Chapter 2, I build a theory about how people decide to contribute and how

the content of the solicitation affects this decision. This theory draws upon a series of well-established findings from consumer psychology, behavioral economics, and political science. I derive hypotheses showing how the content of donation solicitations can either increase or decrease people's willingness to donate. In addition, I show why this argument does not extend to non-monetary forms of participation such as volunteering time.

In Chapters 3 and 4, I test these hypotheses using a series of experiments. In these experiments I provide subjects with the opportunity to donate money to a real political organization while varying the issue content in the request. Chapter 3 includes the results from three laboratory experiments conducted on the University of Michigan campus. Chapter 4 reports the results from two survey experiments conducted with Knowledge Networks' nationally-representative sample of Americans. Chapter 5 tests my hypotheses using the 2004 Campaign Communication Study, a national survey that contains detailed information about the issues mentioned in donation solicitations that people received during part of the campaign.

In Chapter 6, I turn to the second part of the dissertation. Here I build upon the results of the first part to derive new hypotheses about who should be contacted for money. I build a game-theoretic model of strategic solicitation that takes into account the conclusions from the first part of the dissertation as well as a series of findings from the psychology literature on persuasion.

In Chapter 7, I conclude by discussing the broad implications of my findings. Here I focus on the particular difficulties faced by challengers raising money who generally have a greater incentive to stress problem areas (such as economic concerns) in their rhetoric. I also discuss directions for future research that build upon the theoretical framework presented here.

CHAPTER II

What Content Persuades People to Donate?

Introduction

In this chapter I explain how the content of a solicitation affects its persuasiveness. I show why mentioning certain types of issues will decrease people's willingness to donate, while mentioning other types will have the opposite effect. To derive my hypotheses, I use a series of premises based on well-replicated findings from political science, consumer psychology, and behavioral economics. Afterwards, I state the main hypotheses, and then provide a series of substantive examples that demonstrate these ideas.

Premises

1. Consumers classify goods according to how discretionary they are.

Psychologists and economists have shown that people organize, evaluate, and keep track of their financial activities using a set of mental accounts (Kahneman and Tversky 1984, Thaler 1985, 1999, Shefrin and Thaler 1988, Heath and Soll 1996). These accounts are a way in which people characterize their expenditures. The overriding purpose is to make cognitively efficient purchasing decisions (Thaler 1999). More

specifically, they serve two goals. First, they help people organize their expenditures and give them a framework for making trade-offs among expenses. Second, they facilitate self-control. They help people to resist short-term consumption pressures when they arrive by making it psychologically costly to use money not for its budgeted use. Thaler (1999:202) succinctly sums up these two goals: “Mental accounting procedures have evolved to economize on time and thinking costs, and also to deal with self control problems.”

One common way that people characterize their expenditures is in terms of how discretionary they are (Thaler 1985; Batra and Ahtola 1990; Voss et al 2003). Given scarce resources, goods that are considered relatively less discretionary are purchased prior to goods that are considered highly discretionary. In what follows, I assume that political contributions made in response to impersonal solicitations are considered highly discretionary.¹

2. When faced with a decision, people come up with reasons for and against taking each course of action.

When faced with a decision in which the “correct” choice is non-obvious (i.e. a situation in which one alternative is not completely preferred over another), people look for reasons to choose one option versus another. These reasons provide a basis for justifying to oneself (and others, if applicable) why one option should be chosen over other available options (Slovic 1985; Shafir, Simonson, and Tversky 1993; Kivetz and Simonson 2002). As Shafir et al. (1993:33) write, “[w]e often search for a convincing

¹Note that it is certainly possible that conditions might arise such that someone would feel that they *must* make a donation. If this occurred, then an individual might classify a donation as a non-discretionary purchase. For this to happen, though, the individual must be motivated to make that classification. A question arises, then, as to the conditions under which such motivation might be present. A major source of such motivation in the context of political donations is social pressure from a friend, boss, parent, or whomever. My assumption, however, is that when people receive impersonal solicitations in the privacy of their own homes, this form of social pressure is not present, and thus there is little, if any, motivation for classifying political donations as non-discretionary goods.

rationale for the decisions that we make, whether for inter-personal purposes, so that we can explain to others the reasons for our decision, or for intra-personal motives, so that we may feel confident of having made the “right” choice.” This need to justify one’s choice is particularly enhanced as the number of choices increases, even if just from one to two (Bazerman et al. 1998).

3. It is more difficult to justify spending money on a highly discretionary good than a less discretionary one.

Goods differ in their degree of justifiability—the ease or difficulty with which people are able to come up with reasons for spending money on that good. It is harder to justify spending money on goods that are considered highly discretionary than those that are considered less discretionary (Thaler 1985, Prelec and Loewenstein 1998, Kivetz and Simonson 2002, Okada 2005). This means that if people are faced with a direct comparison between the two, people will have an easier time generating reasons to support purchasing the less discretionary item rather than the more discretionary one.

4. Information contained within the decision context affects the reasons that come to mind when choosing a particular option.

Considerations brought to mind in the immediate decision context affect the decisions that people make. When people are given the opportunity to make a decision, such as whether they would like to donate money, the content of the question makes certain considerations accessible in one’s mind (Lynch et al. 1991, Zaller and Feldman 1992). These considerations, in turn, affect how people answer the question. As Shafir et al. (1993:34) note, “[d]ifferent frames, contexts, and elicitation procedures highlight different aspects of the options and bring forth different reasons and considerations that influence decision.”

Taken together, Premises 2-4 indicate that persuasion requires that the solicitation does not prevent people from being able to justify spending money on a donation. If the solicitation provides a reason why someone should not spend money on a solicitation (and instead should save it or spend it on another good), then people will be unwilling to donate money. In the next set of premises, I consider how information contained within common donation solicitations can provide just such a reason.

5. Issues related to personal financial struggles are a common political concern and a common theme in political campaigns.

Many issues that people care about remind them of personal financial struggles. For example, Geer (2006) and Budge and Fairlie (1983) show that economic issues such as cost of living, unemployment, social security, and inflation are the most common issues mentioned in campaign advertisements and party statements, respectively. Hillygus and Monson (2008) come to the same conclusion in their examination of direct mail in the 2004 presidential race. Moreover, from 1974 to 2000, these issues were the most commonly mentioned “most important problem” facing our country (ANES Cumulative Data File).

6. Donation solicitations that mention issues that remind people of their personal financial struggles cause people to compare spending money on a donation to spending money on less-discretionary goods.

Donation solicitations that mention these issues remind people that there are non-discretionary items that either are difficult to afford or could be difficult to afford in the near future. Sometimes these reminders are specific, such as rhetoric referring to the rising cost of less-discretionary goods such as gas, food, medical care, or education,

whereas other times they are more general, such as rhetoric about unemployment that reminds people about an overall constrained monetary budget. In either case, people are primed to compare spending money on a donation with less-discretionary goods. Decision situations that provide multiple ways to spend money lead people to evaluate each alternative in comparison with each other (Lynch et al. 1991; Okada 2005).

Based on Premises 1-4, once people make such a comparison, it is hard to justify spending money on a highly discretionary good such as a political donation. For example, when a donation request has just reminded someone that gas and food are increasingly expensive, it is hard to justify spending money on a donation rather than just saving the money to spend on the increasingly-expensive gas and food. This is just an example – the important point to stress is that what matters theoretically is not that a particular issue or set of issues is mentioned, but only whether the content resonates with the audience’s personal financial struggles. After all, mentioning the rising cost of gas to someone who is wealthy or someone who never drives will not necessarily remind that person of a personal financial struggle.

Hypotheses

The joint implication of Premises 1-6 is as follows. When faced with a decision between various options, such as whether to donate money or not, people look for reasons to justify choosing a particular option. The ability to justify choosing the donation option depends upon which issues are mentioned in the solicitation. If the issues mentioned remind citizens about their personal financial struggles, even if they find the issues to be important, then people will have a difficult time justifying spending money on a donation. This interaction between consumer psychology and the political solicitation context leads to the following hypothesis:

Hypothesis 1: Mentioning issues that people find important, yet remind

them of personal financial struggles, decreases their willingness to donate money.

The next hypothesis comes directly from the conventional wisdom on this topic (as described in the Introduction chapter), albeit with the qualification implied by my theory:

Hypothesis 2: Mentioning issues that people find important, and do not remind them of their personal financial struggles, increases their willingness to donate money.

Note that the effects described above solely refer to people's willingness to donate money, and not their willingness to engage in other forms of political participation. It is quite possible, for example, that mentioning issues that people care about but remind them of personal financial struggles will not decrease their willingness to engage in non-monetary forms of participation, such as volunteering time. The reason is that people do not treat time and money interchangeably. For example, people are willing to spend 20 minutes to save \$5 on a \$15 purchase but not on a \$125 purchase (Tversky and Kahneman 1981:459; Thaler 1999). Similarly, people are twice as willing to pay \$2 to save 15 minutes off their total travel time when their travel time is one hour versus five hours (Leclerc et al. 1995).

Hence, reminding people about a monetary budget constraint does not automatically remind them about a temporal budget constraint as well. In a political context, this means that mentioning an issue that people care about that also reminds them of personal financial struggles will not make it more difficult for them to justify spending time volunteering for a political organization. This logic leads to my third hypothesis:

Hypothesis 3: Mentioning issues that people find important, yet remind them of personal financial struggles, will have divergent effects on people's willingness to donate money versus volunteer time.

Note that the term “divergent” here just refers to a situation in which mentioning such issues decreases people’s willingness to donate money but will not decrease their willingness to donate time. Hypothesis 3 suggests why political actors’ optimal rhetorical strategy may crucially depend on what they want other people to do.

Substantive Example

To demonstrate the implications of my hypotheses, I next consider three hypothetical scenarios involving three different citizens, Bob, Mitch, and John. Each scenario takes place in the midst of a national recession. All are concerned about the state of the economy, but for Bob the recession resonates particularly strongly.

Bob’s wife Sue lost her job in the past two months, and has been furiously (yet unsuccessfully) looking for a job since then. As a result of her job loss, family finances have been hit hard, and they’ve had to cut back on many discretionary and non-discretionary purchases. In the past they were regular donors to a number of political causes, and in particular many candidates for office. As a result, they regularly receive many requests for donations. This year Bob and Sue have received many solicitations in which campaigns and other political organizations inform them that they understand the economic circumstances facing families just like theirs and have plans to solve the problem. While these communications undoubtedly convey a sense of sympathy and importance, they also serve as a salient reminder to Bob and Sue about their personal financial struggles. As a result, they find themselves in a situation in which it is difficult to justify spending money on a political donation when they have dwindling financial resources to pay for necessities like the mortgage, food, clothing, and transportation. But, because Bob and Sue do not treat money and time interchangeably, mentioning these issues in a volunteer request would not necessarily decrease their willingness to volunteer.² Thus, a solicitation for money

²Note that this is true not only for Sue, who may have a lower opportunity cost of time since

that mentions their top issue priority will be *less* effective than one that doesn't (and instead simply mentions other issues that they care about and/or makes a general statement that invokes a cue such as partisan identification that will resonate with them), but a solicitation for volunteers that mentions their top issue priority will not have this effect.

Mitch shares the same issue concerns as Bob and Sue, but his personal finances have not been hit hard by the recession. He believes that his job is relatively safe, and in fact has been able to take advantage of the many sales that are trying to entice consumers like him to spend money. He does, however, have many friends that are struggling financially, either because they've lost their jobs or been asked to work unpaid days. Knowing what they're going through, he would really like to see the country pull out of the recession as quickly as possible. Similar to Bob and Sue, many political organizations know that the economy is Mitch's primary concern and would like to persuade him that they share this concern. Thus, they send the exact same solicitations mentioning economic issues to Mitch that they do to Bob and Sue. The difference, however, is that these solicitations do not remind Mitch about his personal financial concerns, and so do not have the same demobilizing effect on his willingness to donate money that they do for Bob and Sue.

Lastly, John's primary concern is with foreign policy. Although he, too, is concerned about the health of the broader economy, this concern is not as important as making sure that the United States is safe from enemies abroad. He favors political organizations and candidates that have the same ideas that he does for how to ensure a safe country. Knowing this, ideologically-similar organizations try to persuade John to donate money by mentioning national security related issues. These solicitations thus mention an issue that he cares about and has nothing to do with financial struggles whatsoever. His situation is therefore similar to Mitch's—solicitations that

losing her job, but also for Bob, for the reasons mentioned above.

mention the issue he cares about the most increases his willingness to donate money.

Conclusion

In this chapter I have used a set of premises informed by research in political science, consumer psychology, and behavioral economics to derive a set of hypotheses about the effect of issue information on people's willingness to donate money. I have argued why issues that remind people about their personal financial struggles decreases their willingness to donate money, even if they find the issue to be important. I have also argued why mentioning these same issues in requests for volunteers does not have this same demobilizing effect, because people do not treat time and money interchangeably.

CHAPTER III

Three Laboratory Experiments

Introduction

In this chapter I describe three laboratory experiments that tested my hypotheses. The full derivation of these hypotheses appears in Chapter 2. To reiterate, my hypotheses are as follows:

Hypothesis 1: Mentioning issues that people find important, yet remind them of their personal financial struggles, decreases their willingness to donate money.

Hypothesis 2: Mentioning issues that people find important, and do not remind them of their personal financial struggles, increases their willingness to donate money.

Hypothesis 3: Mentioning issues that people find important, yet remind them of personal financial struggles, will have divergent effects on people's willingness to donate money versus volunteer time.

The experimental decisions provide meaningful choices to subjects that impose tangible costs. In the experiments that test Hypotheses 1 and 2, I give each subject a certain amount of money (i.e. an endowment) and then the opportunity to donate money to a real organization. Subjects keep any money that they do not donate. The experiment testing Hypothesis 3 asks subjects to take costly actions involving time, also related to a real organization.

One argument that can be raised against using this design to test hypotheses about donation behavior is that subjects act differently because the endowment is given to them at the beginning of the experiment versus taken out-of-pocket. People might view this money as a windfall, which means that their marginal propensity to spend it might be higher than otherwise (Thaler 1999). This is a very real possibility, but to the extent that it occurs it will not affect the inferences drawn because this tendency will be randomly distributed across all treatments. Moreover, the experiments in this chapter as well as the next take specific measures to show that the results are robust to subjects treating the endowment as a windfall or not. Following Arkes et al. (1994:342), who noted that “a defining characteristic of a windfall gain seems to be its unanticipated status,” the experiments differ in terms of whether subjects anticipated receiving an endowment. In the laboratory experiments described in this chapter subjects were told in advance that they would receive money for completing the experiment (with the amount depending upon the decisions they make), whereas in the survey experiments described in the next chapter subjects learned about this money only when they began the experiment.

The laboratory experiments are organized as follows. The first study was a preliminary experiment that tested a key component of the theoretical mechanism: whether thinking about things that one either can or cannot afford has a differential effect on donation behavior. The second experiment was a complete test of Hypotheses 1 and 2. It tested whether explicitly-political issue information that reminds people of their personal financial struggles has a similar effect on donation behavior. The third experiment tests Hypothesis 3 as well as an alternative explanation for the results in the second experiment.

For each experiment in this chapter and the next, I will present the results in terms of two variables of interest: the average response in each treatment group,¹

¹I use standard *t*-tests and Wilcoxon-Mann-Whitney tests to compare these average responses. The latter is important in my case because the distribution of responses in similar experiments is

and the proportion of people who opt into the donor pool, regardless of the size of their donation. Both are interesting depending upon the goal at hand. The first compares the net resources associated with using certain rhetorical strategies. The second is important if we are interested in measuring people's decisions to opt into the donor pool, on the idea that the act of donating (regardless of size) makes people more engaged and active in our political process (Graf et al. 2006).²

First experiment: A preliminary test using non-political stimuli

In my first experiment subjects – undergraduate students at the University of Michigan – were given \$10 to use in a decision-making task when they entered the laboratory.³ In total, 165 people participated in this experiment. Subjects were recruited via posters placed around campus and the resulting sample broadly reflects the wider undergraduate community.⁴

They were then randomly assigned to engage in one of two directed-thinking

generally skewed toward zero, and thus not normally distributed. Evaluating the standard t -test requires that the test statistic follows a t -distribution, which in turn depends upon the normality of the original data. Because my cell sizes are fairly large, the central limit theorem guarantees that the test statistic will be approximated by a t -distribution (Wooldridge 2002). But, to verify that the non-normality of the data has no bearing on my inference, I also performed the non-parametric Wilcoxon-Mann-Whitney test. Note that some scholars have analyzed donation decisions using a tobit specification, which assumes that the dependent variable is censored at zero (see Sigelman and Zeng 1999 for examples within political science). Using a tobit specification to analyze such data assumes that, in principle, the dependent variable can take on negative values. In terms of an individual's decision process, this is akin to assuming that people consider making a negative donation. I believe that, in the experiments considered here, subjects do not contemplate such preferences and for that reason a tobit specification is inappropriate.

²Note that a third variable might be of interest, which is the amount donated conditional on opting into the donor pool. Estimating the effect of the treatment on this variable is problematic, however, because doing so requires selecting on a post-treatment variable. Thus, while I certainly have the data to calculate this variable, I omit such calculations because the interpretation is ambiguous. Wooldridge 2002, following arguments by Heckman 1979, describes in detail the conditions that would have to be satisfied to interpret this variable as a treatment effect. In practice, this is very difficult due to severe multicollinearity. In the cases described here, the data do not include any variables that would allow us to satisfy the exclusion restriction (i.e. that only predict selection into the pool but not amount donated, the outcome variable of interest).

³This was in addition to a \$10 show-up fee.

⁴For example, 35% were male and 65% were female, and 33% were in the first year of college, 24% were in their second, 23% were in their third, and 20% were in their fourth.

tasks (similar to those in Kunda et al. 1993 and McGuire and McGuire 1996). In one treatment, subjects were asked to list three things that they wanted but could not afford to buy. By priming people to think about things that they want and cannot afford to purchase, this treatment was designed to elicit thoughts associated with financial need, saving money to finance future purchases, and resisting any new discretionary spending like a donation. Henceforth, I refer to people who received this treatment as the “unaffordable thoughts” group. In the second treatment, subjects were asked to list three things that they wanted and could afford to buy. The goal here was to elicit thoughts that would favor spending money and not saving it for later purchases. I refer to people who received this treatment as the “affordable thoughts” group. The precise wording was as follows:

Students often find that there are many things on which they want to spend money, such as various forms of entertainment, travel, food/drink, clothing, etc. Being as specific as possible, please list up to 3 things that you want and feel like you [can/cannot] afford to buy.

Below this prompt were numbers (1), (2), and (3). I conducted a series of twenty cognitive interviews prior to the experiment to ensure that subjects in both groups could actually list three things. Ensuring that this was the case was important because if people had trouble listing items for either prompt, then such difficulty could trigger countervailing thoughts that would negate the impact of the manipulation. This is especially a concern for the “unaffordable thoughts group”, in which being unable to list things that they wanted and could not afford could have the opposite of the intended effect: it could actually elicit thoughts associated with spending money on discretionary spending rather than with avoiding such spending (see Kunda et al. 1993 for a similar logic).

After the directed-thinking task, subjects were given the opportunity to donate to an on-campus organization whose activities benefit a nearby hospital that treats ill children. I chose this organization because my pretests showed that most students

perceived it as credible and positively evaluated its mission. It was important to choose an organization with these characteristics because otherwise it is likely that no one would have been willing to donate anything.

Subjects were informed that they could donate anywhere from \$0 to \$10 in increments of \$1.⁵ In this experiment, as with the other two laboratory experiments, it was especially important to guarantee anonymity when subjects made their donation decision so that the experimental conditions closely matched the conditions specified by the theory.⁶ Specifically, the theory assumes that people receive impersonal requests for donations and make their decisions without the in-person social pressure that often accompanies requests from personal acquaintances. To satisfy this assumption, I took three steps. First, the experimenter was not in the room with subjects when they made their donation decisions. Second, the experimental materials explicitly reminded subjects that the decision was entirely anonymous. Third, subjects never handed any materials directly to the experimenter. Instead, they dropped them into a box in the hallway of the laboratory, a common procedure in dictator games.

Lastly, before they made their decision, subjects were reassured of three facts: the organization was real, the experimenter was not affiliated with the organization in any way, and that there was one and only one decision-making task in the entire experiment. This last statement was important because I found in my cognitive interviews that without this statement people would hold back money under the (mistaken) belief that there would be another donation opportunity later in the experiment. Finally, after their donation decision, subjects completed a short questionnaire in which they answered a variety of demographic questions such as their gender and year in school.

The results appear in Figure 3.1, which shows that subjects who were reminded

⁵When they entered the laboratory the \$10 that they received to use in the decision task was provided in ten \$1 bills.

⁶To be clear, “anonymity” here means that I did not match names with donations. I did, however, match donations to a short demographic questionnaire using a numbering system.

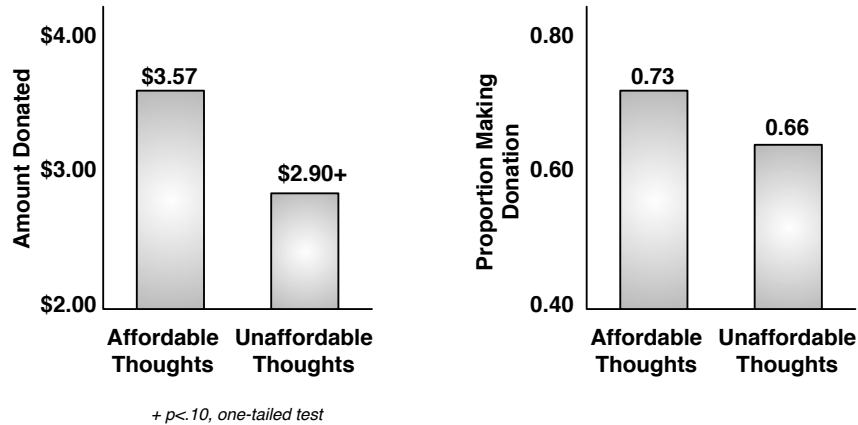


Figure 3.1: Lab Experiment 1 Results

about things they could not afford gave significantly less than those who were reminded about things they could afford. People in the “affordable thoughts” group donated \$3.57 on average, whereas people in the “unaffordable thoughts” group donated \$2.90 on average. This 20% difference is statistically significant at $p < .10$.⁷ A similar, though slightly weaker, pattern emerges when just comparing people who opted into the donor pool versus those that did not.

To summarize, this first experiment tested a key component of the proposed theoretical mechanism: being reminded of things that you cannot afford depresses people’s willingness to spend money on a donation. The next step is to see whether explicitly-political statements that mention issues reminding people of personal financial struggles have the same effect.

Second Experiment: A complete test of Hypotheses 1 and 2

In the second experiment subjects – undergraduate students at the University of Michigan – were given \$10 when they entered the laboratory.⁸ Subjects were again

⁷Using a one-tailed test. The result of the Wilcoxon-Mann-Whitney test is consistent with the results reported above ($z \leq .07$).

⁸As with the first experiment, they were given this money in ten \$1 bills. Unlike the first experiment, in which subjects received a \$10 show-up payment and \$10 to use in the decision-making task, in this experiment subjects were only given \$10 when they entered the lab. They then

recruited using flyers placed around campus. The resulting sample of 328 people reflected the broad undergraduate population: 39% were male and 61% were female, 26% were in their first year of college, 29% were in their second, 22% were in their third, and 24% were in their fourth.

Subjects in the full experiment were first presented with information about US PIRG, the federation of state Public Interest Research Groups. I chose US PIRG because, in addition to advancing students' interests generally, it addresses political issues that are well-suited to testing the hypotheses. Here I focus on two issues that relate to college textbooks: their skyrocketing cost and their environmental burden. This latter case refers to the fact that many textbooks require large quantities of paper to produce yet most classes do not use most of the book.

To verify that these issues satisfied the theoretical requirements (i.e. students find the issues to be important, and the issues do or do not remind them of personal financial struggles, depending upon the experimental condition), I conducted two pretests. First, I conducted a series of twenty-two cognitive interviews in which I observed that students do find these issues to be important and do believe that textbooks impose large financial and environmental burdens. Second, I conducted a pretest to verify that students generally consider "textbooks for a class you're enrolled in" to be a less-discretionary purchase and "donations to political organizations that pursue goals you agree with" to be a highly discretionary purchase. My pretest included 64 subjects who were asked about a series of items on which students often spend money. Two of these items were textbooks and political donations as described above. Subjects were asked to choose whether the items are "primarily necessary," "primarily enjoyable," or "neither necessary nor enjoyable." The wording of these response options came from previous studies that investigated how people classify

decided whether to donate any portion of it. This procedure is identical to other dictator games such as Eckel et al. 2005 in which no separate show-up fee is paid, and therefore it is possible for subjects to leave the experiment with no money.

different types of consumer goods (Batra and Ahtola 1990, Voss et al. 2003). The results showed that 94% of subjects said that they consume textbooks because they are “primarily necessary” whereas only 39% said the same thing about the political donations. In contrast, only 1% of subjects reported that they consume textbooks because they’re “primarily enjoyable” whereas 42% characterized political donations in that way. The remainder in both cases reported “neither necessary nor enjoyable.”

In the full experiment subjects were randomly assigned to be in one of three experimental groups that received different information about US PIRG: a control group, a financial issue group, and a non-financial issue group. All information was entirely accurate and based on information contained on the US PIRG website. Subjects in the “control group” received a general statement about US PIRG that said it advocated on behalf of college students and was widely viewed as effective. The text was as follows:

U.S. PIRG, the nonprofit and nonpartisan federation of state Public Interest Research Groups (PIRGs), advocates nationally on behalf of college students. In fact, US PIRG is regarded as one of the most effective advocates for issues that matter to college students. To learn more after the experiment, you may visit their website at www.uspirg.org.

This treatment was designed to include general information that served as a reasonable baseline, but not be so general that no one would donate anything because they knew absolutely nothing about the organization. Subjects in the “financial issue group” received this general statement as well as specific issue information that one of US PIRG’s policy goals is to address the skyrocketing cost of college textbooks. They were reminded that college textbooks are a huge financial burden for many students and that US PIRG supports legislation to increase the availability of low-cost textbooks. The specific text was as follows:

U.S. PIRG, the nonprofit and nonpartisan federation of state Public Interest Research Groups (PIRGs), advocates nationally on behalf of college

students. In fact, US PIRG is regarded as one of the most effective advocates for issues that matter to college students. One of its central issues is textbooks: in recent years the price of college textbooks and supplementary workbooks has skyrocketed, making them a huge financial burden. To address this issue, US PIRG supports legislation that would increase the availability of low-cost textbooks and supplementary workbooks. To learn more after the experiment, you may visit their website at www.uspirg.org.

Lastly, subjects in the “non-financial issue group” received the general statement as well as specific issue information that did not remind them of a personal financial burden. This treatment had two purposes. First, it tested Hypothesis 2: mentioning important issues that do not remind people about personal financial struggles increases their willingness to donate. Second, it was designed to rule out alternative hypotheses associated with the financial burden treatment. Specifically, it is possible that we could observe less donating in the financial issue group relative to the control group simply because the former mentioned textbooks (irrespective of any financial burden associated with them), because it mentioned a specific issue in addition to a general statement, and/or because it mentioned a specific legislative response. The text in the non-financial issue group addressed all of these points by using issue information related to textbooks and referencing a legislative response to this issue. The specific text referred to the environmental burden associated with their manufacturing process and the fact that most classes do not use the entire book. This treatment did not refer to any financial burden whatsoever, and the length and structure of the text were highly similar to the information in the financial issue group.⁹ The specific text was as follows:

U.S. PIRG, the nonprofit and nonpartisan federation of state Public Interest Research Groups (PIRGs), advocates nationally on behalf of college

⁹For the non-financial group, one could argue that the mere mention of textbooks caused people to think about their cost, even if the specific text did not refer to it. To see whether this is the case, I included a thought-listing task immediately after the donation decision. Subjects were invited to list all thoughts that they had when they were making their decision. An analysis of these thought-listing protocols reveals that only 13% of subjects referred to the cost of textbooks in the non-financial issue group, whereas 38% of subjects referred to it in the financial issue group.

students. In fact, US PIRG is regarded as one of the most effective advocates for issues that matter to college students. One of its central issues is textbooks: in recent years the amount of paper used in college textbooks and supplementary workbooks has skyrocketed, making them a huge environmental burden, even though most classes do not use the entire book. To address this issue, US PIRG supports legislation that would increase the availability of digital open textbooks and supplementary workbooks so that students could just print out and carry what they need. To learn more after the experiment, you may visit their website at www.uspirg.org.

After receiving the issue information, all subjects were given the opportunity to donate any or all of their \$10 to US PIRG, in increments of \$1. I adopted similar procedures as in Experiment 1 to demonstrate that the experimenter would not observe their decision.

The results comparing the financial issue group with the control group appear in Figure 3.2a and the results comparing the non-financial issue group with the control group appear in Figure 3.2b. As shown in Figure 3.2a, people in the control group donated 13% of their \$10 on average, whereas people in the financial issue group donated only 8% ($p < .10$).¹⁰ In addition, subjects were significantly less likely to enter the donor pool upon receiving information about the cost of textbooks ($p < .05$).¹¹

If the results for the financial issue group were solely due to the mere mention of textbooks and/or a specific issue in addition to the general statement in the control group, then we ought to see the same pattern of results when comparing the non-financial issue group with the control group. However, as shown in Figure 3.2b, we do not. Instead, we observe that people in the non-financial issue group were slightly *more* likely to donate than those in the control group, and they were significantly more likely to enter the donor pool than those in the control group ($p < .05$).¹²

¹⁰Using a two-tailed test. A Wilcoxon-Mann-Whitney test produces a similar result ($z \leq .10$, using a two-tailed test).

¹¹Using a two-tailed test. A Wilcoxon-Mann-Whitney test produces a similar result ($z \leq .05$, using a two-tailed test).

¹²Using a two-tailed test. A Wilcoxon-Mann-Whitney test produces a similar result ($z \leq .05$, using a two-tailed test).

Figure 3.2a

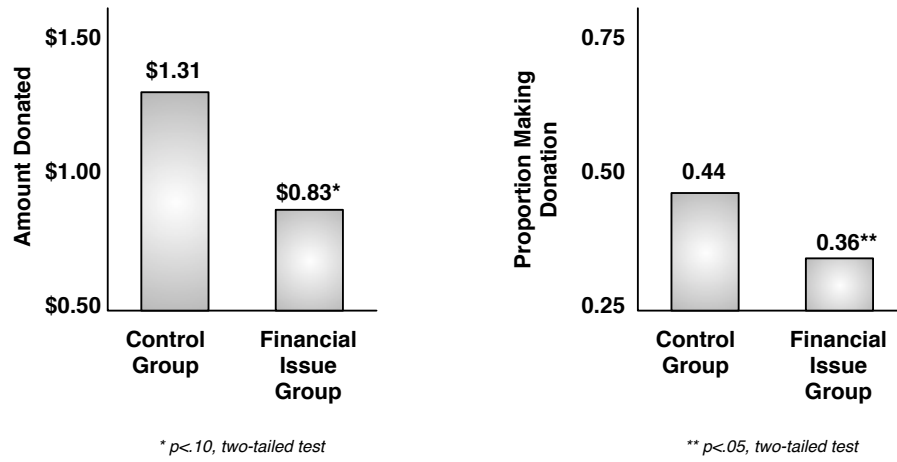


Figure 3.2b

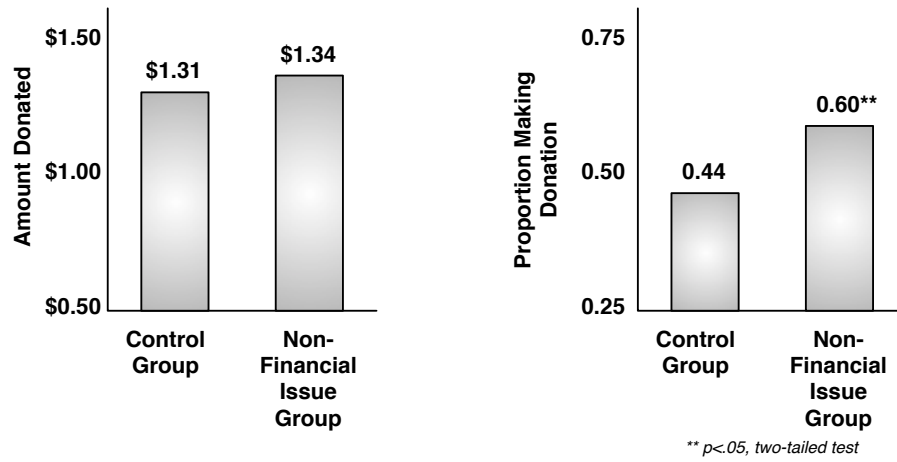


Figure 3.2: Lab Experiment 2 Results

To summarize, this experiment provides supporting evidence for both Hypotheses 1 and 2. Relative to a general piece of information, mentioning issues that people care about but also remind them of personal financial struggles reduces their willingness to donate money. Yet, mentioning issues that people care about and do not remind them of personal financial struggles does not have this effect.

Third Experiment: Testing Hypothesis 3 and Alternative Explanations

The third laboratory experiment serves two purposes. First, it provides a test of Hypothesis 3: the same issue information can have a divergent effect on people's willingness to donate money versus time to political causes. Second, it addresses two other potential alternative explanations for the decreased willingness to donate in the financial issue group in Experiment 2. It is possible that, despite the pre-tests, subjects simply did not find the high cost of textbooks to be an important issue, and thus learning that US PIRG addresses this issue gave them an unfavorable opinion of the organization. It is also possible that people in the financial issue group were simply put into a bad mood, and that this decreased their willingness to donate money.

If either of these alternative explanations holds, then we should also observe that the financial issue information would make people less willing to take other actions that benefit US PIRG, such as volunteering their time. In the case of the mood alternative hypothesis, the reason is because mood is linked with a general willingness to contribute to collective activities that benefit a group of people (Isen and Levin 1972). If, on the other hand, learning that US PIRG advocates lower textbook prices led to favorable opinions of the organization (because students do find the issue to be important), then we would not predict a lower willingness to take non-monetary actions that support it, such as volunteering. This prediction is bolstered by the

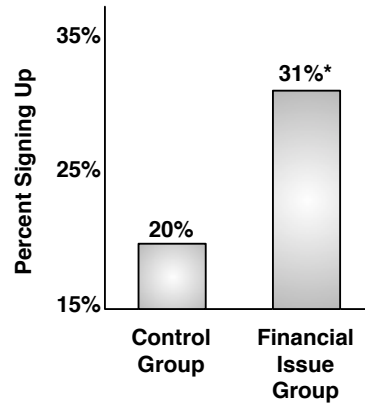
fact that people do not treat time and money as interchangeable. Being reminded of a monetary budget constraint will not automatically lead people to feel temporally constrained as well.

To test these alternative explanations, this experiment uses the exact same information manipulations for the control group and financial issue group in Experiment 2.¹³ This time, however, subjects have an entirely different participation opportunity. Instead of donating money, subjects in this study had the opportunity to sign up for the US PIRG Email Action Network to hear about volunteer opportunities. As with the donation treatments, the goal was to provide a meaningful choice with tangible costs. Giving them the opportunity to actually sign up, rather than just indicate a hypothetical willingness to volunteer in a survey question, satisfied this goal. To verify that subjects viewed this decision as costly, I conducted a series of twenty-two cognitive interviews in which I observed that when making their decisions people (a) thought about whether they would actually want to volunteer, and (b) thought about whether they would have time to read US PIRG's emails. Both of these observations support the idea that subjects viewed signing up for the listserv to be a costly and meaningful activity.

The experimental procedure was identical to that in Experiment 2, with the volunteer opportunity substituted for the donation opportunity. Subjects first indicated their willingness to sign-up in the experiment materials before receiving computer access to complete the actual sign-up via the Internet. The experiment was designed in this way in order to maximize experimental control because the sign-up page on the US PIRG website has other information about the organization that could affect people's decision.

For this experiment 195 subjects were recruited using posters around campus. The sample had characteristics similar to the subjects in Experiment 2: 39% were male,

¹³Only these two groups were used due to the experimenter's budgetary constraints. The second survey experiment described in the next chapter demonstrates this point using all three groups.



* $p < .10$, two-tailed test

Figure 3.3: Lab Experiment 3 Results

61% were female, 23% were in their first year of college, 29% were in their second, 23% were in their third, and 27% were in their fourth.

To test whether people in the financial issue group were more or less willing to volunteer their time, I calculated the number of people who signed-up in each group. The results, converted to percentages, appear in Figure 3.3. As shown in the figure, people in the financial issue group were *not* less willing to sign-up to hear about volunteer opportunities than those in the control group. On the contrary, only 20% of subjects signed up in the control group compared with 31% in the financial issue group. This difference is statistically significant at $p < .10$.¹⁴ This result does not support the alternative explanations for Experiment 2’s results that mentioning the financial burden of textbooks gave people a negative impression of US PIRG or that it put them in a bad mood. It is, however, perfectly consistent with the idea that the financial issue information had a demobilizing effect solely on people’s willingness to donate because it made it difficult for them to justify spending money on a donation.

In addition to ruling out an alternative explanation for earlier results, these coupled with Experiment 2’s results provide supporting evidence for Hypothesis 3. Taken together, we see how the exact same issue information can have divergent effects on

¹⁴Using a two-tailed t-test.

people's participation decisions. These results demonstrate why political organizations' optimal communicative strategy depends critically upon what actions they want people to take.

Conclusion

This chapter has provided three experimental tests in support of the hypotheses. Experiment 1 showed that being reminded of things that you either can or cannot afford affects people's willingness to spend money on a donation. Experiments 2 and 3 showed that political issue information can have the same effect – issues that remind people about their personal financial struggles affects their ability to justify spending money on a donation. People are less willing to donate money when they've received a solicitation that mentions an issue that they care about but also reminds them of personal financial struggles. In addition, the same exact issue information can reduce their willingness to donate money yet not have that effect on their willingness to donate time.

CHAPTER IV

Two Survey Experiments

Chapter 3 describes tests of the hypotheses using laboratory experiments conducted with undergraduate samples at the University of Michigan. In this chapter I present two survey experiments conducted over the Internet that also test the hypotheses. Relative to the laboratory experiments, these have two main advantages. First, the sample is broader: they use a random sample of adult Americans. This is important because adults are more likely to be responsible for their financial well-being than students at Michigan, and so it is quite possible that adults will be differentially sensitive to the budgetary concerns on which the theory hinges. Second, because of the broad sample, the treatments involve an issue that more commonly appears in our political dialogue: the issue of health care. The specific issue described is cancer care, in which the financial issue is its cost and the non-financial issue is the physical pain that often accompanies cancer treatment. The organization used was the American Cancer Society Cancer Action Network (ACSCAN), the nonprofit, nonpartisan advocacy affiliate of the American Cancer Society, which organizes voters and lobbies to advance national and state policies related to cancer care.

While Internet-based experiments have important advantages, they also introduce certain challenges (Anderhub et al. 2001, Eckel and Wilson 2006). First, it may be difficult to convince subjects that the payoffs are real, and that they really will

receive any money that they choose not to donate. As Eckel and Wilson (2006:55) note, “In the lab, the experimenter can show subjects a stack of cash and credibly promise immediate payment. Internet experiments conducted outside of a lab require subjects to believe that they will be issued [payment].” Second, because subjects complete Internet experiments in their own environment, they may become distracted and/or seek out extra-experimental information. To the extent that subjects are either skeptical and/or distracted in these ways, a loss of experimental control can result. Fortunately, there are ways to design Internet experiments to minimize this likelihood and to identify subjects who were skeptical and/or distracted. I discuss them in detail later in the chapter.

To reiterate, the three hypotheses are:¹

Hypothesis 1: Mentioning issues that people find important, yet remind them of their personal financial struggles, decreases their willingness to donate money.

Hypothesis 2: Mentioning issues that people find important, and do not remind them of their personal financial struggles, increases their willingness to donate money.

Hypothesis 3: Mentioning issues that people find important, yet remind them of personal financial struggles, will have divergent effects on people’s willingness to donate money versus volunteer time.

Beyond the broader sample and issue content, the structure of these experiments is almost identical to the lab experiments. They differ in only two respects: subjects are not physically given their endowment at the beginning, but instead informed about it on screen, and this endowment is \$15 rather than \$10. The first survey experiment is a direct test of Hypotheses 1 and 2, the second tests alternative explanations, and together they test Hypothesis 3. Both experiments were conducted from August 25, 2009 through September 1, 2009. Given the status of health care debates in Congress

¹For the complete derivation of these hypotheses, please see Chapter 2.

at the time, it is quite reasonable to consider mentioning health care issues as “riding the wave”. The first experiment had 640 adult Americans, whereas the second had 641 adult Americans. Both were embedded in a Knowledge Networks (KN) survey. KN uses random digit dialing techniques, callback strategies, and incentives to initiate and sustain contact with a nationally representative Internet panel of American citizens aged eighteen and above. Combined, the surveys were assigned to 2,099 KN panelists, which led to a 61% completion rate. They approximate a random sample of the U.S. adult population in many respects, including gender, race, income, and education.²

First Experiment

The goal of the first experiment was to directly test Hypotheses 1 and 2. Subjects were first informed that they were receiving \$15 for taking the study and that the purpose was to understand how people make decisions. Unlike with the lab experiments it is reasonable to believe that subjects did not anticipate this money and viewed it as a windfall because most KN studies do not provide additional compensation (above and beyond base incentives for joining the KN panel).

Then, as with the lab experiments, they were randomly assigned to receive one of three pieces of information. People in the “Control group” received a general piece of information about ACSCAN. It read as follows:

The American Cancer Society Cancer Action Network (ACS CAN), the nonprofit, nonpartisan advocacy affiliate of the American Cancer Society, is the nations leading cancer advocacy organization. It leads the fight against cancer in a variety of ways, such as supporting legislation that will expand access to mammograms and colon cancer screenings.

²Summary statistics for the first survey experiment included: 47.3% male, 74.7% white, 8.9% black, 10.3% Hispanic, 46.1% below median household income, 13.4% with below high school education, and 27.0% with at least a college degree. Summary statistics for the second survey experiment included: 49.0% male, 76.6% white, 9.5% black, 8.7% Hispanic, 34.0% below median household income (this figure is more skewed for the second survey experiment than the first), 9.4% with below high school education, and 35.1% with at least a college degree.

As you read this, cancer is affecting the lives of millions of Americans. More than 500,000 people die every year of cancer, and millions more are diagnosed with this life-threatening illness. It is critical that ACS CAN fights to ensure that legislators make cancer a national priority.

Many important decisions related to cancer are made in the halls of government around the country. ACS CAN ensures that when these decisions are made, the voices of Americans who care about cancer are heard.

People in the “Cost Group” received this same general piece of information along with information about an issue that referred to finances and would remind at least some people of personal financial struggles: the high cost of cancer care. It read as follows:

Right now, millions of Americans worry about how they will pay their bills. Every dollar matters more than ever. In these tough times, it’s natural to worry about whether you have enough money to cover an unexpected health care emergency. One such emergency that affects millions of Americans each year is cancer. Treating cancer – even for people with insurance – can lead to enormous expenses and large debt. You and your loved ones already have enough to worry about. You shouldn’t have to worry about this, too.

The American Cancer Society Cancer Action Network (ACS CAN), the nonprofit, nonpartisan advocacy affiliate of the American Cancer Society, is the nations leading cancer advocacy organization. It leads the fight against cancer in a variety of ways, such as supporting legislation that will expand access to mammograms and colon cancer screenings.

As you read this, cancer is affecting the lives of millions of Americans. More than 500,000 people die every year of cancer, and millions more are diagnosed with this life-threatening illness. It is critical that ACS CAN fights to ensure that legislators make cancer a national priority.

Many important decisions related to cancer are made in the halls of government around the country. ACS CAN ensures that when these decisions are made, the voices of Americans who care about cancer are heard.

Lastly, people in the “Pain Group” received the same piece of general information as people in the control group, but then also received a piece of information about an

important issue that did not refer to finances. As with the previous experiment, the goal of this condition was to test Hypothesis 2. At the same time, however, it was also designed to rule out potential alternative explanations. Specifically, the information that people in the pain group received was the same length as what people in the cost group received. It also included a similar wording structure and specificity. Thus, if I were to observe this group acting differently than the cost group, then I could conclude that these factors are not the reason why. The specific text that the pain group received as was as follows:

Right now, millions of Americans worry about getting ill. In these uncertain times, it's natural to worry about what will happen to your day-to-day life in case of an unexpected health care emergency. One such emergency that affects millions of Americans each year is cancer, and one of its main symptoms is pain. Pain can affect all aspects of one's life, leaving people unable to do things they love the most. You and your loved ones already have enough to worry about. You shouldn't have to worry about this, too.

The American Cancer Society Cancer Action Network (ACS CAN), the nonprofit, nonpartisan advocacy affiliate of the American Cancer Society, is the nation's leading cancer advocacy organization. It leads the fight against cancer in a variety of ways, such as supporting legislation that will expand access to preventive measures including mammograms and colon cancer screenings.

As you read this, cancer is affecting the lives of millions of Americans. More than 500,000 people die every year of cancer, and millions more are diagnosed with this life-threatening illness. It is critical that ACS CAN fights to ensure that legislators make cancer a national priority.

Many important decisions related to cancer are made in the halls of government around the country. ACS CAN ensures that when these decisions are made, the voices of Americans who care about cancer are heard.

After people received this information they were given the option to donate some of the \$15 that they received for taking the study to ACSCAN. They were told that they could donate anywhere from \$0 to \$15, in increments of \$1, and that any money they chose not to donate would be theirs to keep. They were provided with a matrix

If you donate this amount to ACSCAN...	You will be credited with...
\$0	15,000 bonus points (\$15)
\$1	14,000 bonus points (\$14)
\$2	13,000 bonus points (\$13)
\$3	12,000 bonus points (\$12)
\$4	11,000 bonus points (\$11)
\$5	10,000 bonus points (\$10)
\$6	9,000 bonus points (\$9)
\$7	8,000 bonus points (\$8)
\$8	7,000 bonus points (\$7)
\$9	6,000 bonus points (\$6)
\$10	5,000 bonus points (\$5)
\$11	4,000 bonus points (\$4)
\$12	3,000 bonus points (\$3)
\$13	2,000 bonus points (\$2)
\$14	1,000 bonus points (\$1)
\$15	0 bonus points (\$0)

Figure 4.1: Matrix of Donation and Payment Amounts

as shown in Figure 4.1 that described how their actions would map onto specific donations and payments. Half of subjects saw the matrix as shown in Figure 4.1 and half saw it in reverse order. Note that “bonus points” are the currency that KN provides to subjects that may be converted to cash and prizes.³ After making their decision, subjects received a short demographic questionnaire and then the study concluded.

Results

Before presenting the results, there are a number of considerations that must be taken into account. These relate to two issues: how the hypotheses directly translate to this study and two challenges associated with conducting Internet-based experiments.

First, in considering how the hypotheses translate into this study it is important to think about who will be reminded of personal financial struggles upon receiving information about the cost of cancer care. Relative to the undergraduate samples, we expect significant heterogeneity in a sample of adult Americans. In particular, we would not expect that mentioning the cost of cancer care will remind everyone of a personal financial struggle because covering premiums and deductibles is not a financial burden for everyone. Given that this is the case, we would expect that mentioning the cost of cancer care would remind people about a personal financial struggle if they have low income and/or do not have health insurance (or, put differently, if they have high versus low financial resources). For people with low financial resources, mentioning the cost of cancer care should reduce their willingness to donate. For people with high financial resources, the opposite pattern is predicted. The main results presented below define “low financial resources” as “below median household income in 2009 OR no health insurance” and “high financial resources”

³It is reasonable to expect that KN participants would be very used to converting these points to cash, as they frequently have the opportunity to earn points for various tasks.

as “above median household income AND health insurance”.⁴ All results are robust, however, to various definitions of financial resources, including splitting income one category above the median household income or any level below the median. They are also robust to defining financial resources solely in terms of household income rather than household income and health insurance status.

In addition, there are two challenges associated with conducting dictator games over the Internet (Anderhub et al. 2001, Eckel and Wilson 2006). Seeing as they can affect the results, I describe them in detail. First, note that in the lab experiments subjects physically received their endowment at the beginning, whereas in this experiment they were told on a screen that they were receiving money for taking the study. As a result, it is possible that some subjects were not convinced that they would actually receive money that they chose not to donate. This concern is not unique to this study; it is a more general concern with experiments involving real money. To address this issue, I followed a method similar to that used in other work to measure people’s beliefs about the veracity of the experimental procedure (Frohlich et al. 2001, Eckel and Wilson 2006). Subjects responded to the following statement by marking one of five response options from “Agree Strongly” to “Disagree Strongly”: “I am confident that I will receive bonus points credited to my Knowledge Networks account for the money I did not donate to ACS CAN.”⁵ Almost two-thirds of respondents, 65%, responded that they “agree strongly” or “agree”. As a point of comparison, in their Internet-based experiment involving real money, Eckel and Wilson (2006) found that 48% of subjects either “strongly agreed,” “agreed,” or

⁴The median household income in 2008 was \$50,303. Given the recession, we expect the 2009 figure to be slightly lower. Source: U.S. Census Bureau’s “Income, Poverty, and Health Insurance Coverage in the United States: 2008”, Table 1.

⁵This question appeared at the very end of the demographic questionnaire, thereby maximizing temporal separation from the donation decisions. The money subjects chose to keep was initially placed into their KN account as bonus points, hence the bonus points language in this question. It is reasonable to believe that subjects treated these points as cash, as they are very familiar with converting points to cash.

“slightly agreed” with the incentive structure of the game.⁶

The second challenge of conducting dictator games over the Internet is that people took the experiment on computers in their home rather than at a desk in a lab room. As a result, it is possible that people were exposed to other information about ACS CAN when making their donation decisions. This could be because they opened up a new browser window to query the group on the Internet, engaged in a conversation with a family member, or were otherwise distracted in ways that interacted with the treatments. Anticipating this possibility, I devised a method in advance to identify subjects for whom this was the case. This method is based on the idea that the longer that people took to make their donation decisions, the more likely it was that they were exposed to extra-experimental information. In order to account for this, during my cognitive interviews I timed how long people took to make their donation and volunteer decisions. These were people for whom I could verify had not been exposed to any information other than what was provided to them in the experiment. I found that, on average, people took between 60 to 120 seconds to make their decisions, and that no one took more than 220 seconds. Based on this, coupled with information from KN about how long subjects spent on the donation and volunteer screens, I calculated that 10% of subjects spent more than 220 seconds making their decision. As with the definition of financial resources, though, the results are robust to other cutoff points (specifically, increasing or decreasing the cutoff by 30, 60, or 90 seconds).

I call subjects who either did not believe the incentive structure of the experiment and/or took longer than 220 seconds to make their donation decisions *non-compliant*. In total, 44% of respondents fit into the non-compliant category. Given my definition of non-compliance, this figure is similar to that found in other work.⁷ Of those

⁶Their experiment involved matching subjects across different physical laboratories, and so for them the incentive structure refers to whether subjects agreed that their counterpart in the other location was a real person. The 48% figure refers to their “no-information” treatment, which most closely resembles the experimental procedure in this paper’s experiment.

⁷For example, using the Eckel and Wilson (2006) piece cited earlier and focusing solely on their no-information treatment, their corresponding percentage of non-compliant people would be 52%.

who were compliant, N=177 had low financial resources and N=179 had high financial resources. Of the non-compliant respondents, N=152 had low financial resources and N=130 had high financial resources. In what follows I present results separately for compliant and non-compliant people, for two reasons. First, a basic assumption of the theory is that people believe that any money that they do not donate will be theirs to spend on other goods, and so people who do not share this belief fall outside of its scope. Second, an internally valid test requires that people were only exposed to experimental information. In fact, we would expect that people who are non-compliant might act very differently than those who are compliant. In particular, given the basis of their noncompliance, these people are essentially making donation decisions without taking into account the budget-based considerations on which the theory hinges. In addition to these theoretical reasons, I also performed three statistical tests to show that noncompliance was balanced across the two key variables: information treatments and financial resources. I find no statistically-significant differences in non-compliance rates by either variable. In addition, a probit model with compliance/noncompliance as the dependent variable and information treatments and financial resources as independent variables yields a non-significant global chi-square (with $p > .47$).⁸ Given these theoretical and statistical reasons, it is reasonable to treat non-compliance as exogenous to my main analyses of interest, and therefore to analyze the results separately for compliant and non-compliant people.

Next I present the main results, first among compliant respondents and then among non-compliant respondents.⁹ Comparing the control and cost groups, Fig-

⁸If I define low and high financial resources as in the main text, then people with low financial resources had a mean noncompliance rate of .47 whereas those high financial resources had a mean noncompliance rate of .46 ($p > .79$). With respect to the treatment groups, the control group had a noncompliance rate of .48, the cost group's was .49, and the pain group's was .43. None of these pairwise differences reach conventional levels of significance, with the lowest p-value being $p < .38$. Lastly, I estimated the following probit model: $\text{Pr}(\text{Non-compliance}) = \beta_0 + \beta_1 \text{Cost Group Dummy} + \beta_2 (\text{Cost Group Dummy} * \text{Financial Resources}) + \beta_3 \text{Pain Group Dummy} + \beta_4 (\text{Pain Group Dummy} * \text{Financial Resources}) + \beta_5 \text{Financial Resources} + \epsilon_i$. The p-value for the chi-square test of global significance in this model is $p > .47$.

⁹Note that all survey experiment results use sampling weights provided by Knowledge Networks,

ures 4.2a-b shows results that are consistent with Hypothesis 1. People with low financial resources who were in the cost group donated \$5.29, whereas those in the control group donated \$7.44 ($p < .10$, two-tailed test).¹⁰ A similar pattern emerges when comparing the opt-in decisions, as people in the cost group were significantly less likely to donate anything than those in the control. The opposite pattern occurred among people with high financial resources: they donated \$9.74 in the cost group as compared with \$7.69 in the control group ($p < .10$, two-tailed test). They were also more likely to join the donor pool if they were in the cost group, though the difference is not statistically significant.

Turning to the pain group, Figures 4.2c-d shows that a qualitatively different pattern emerges. In this case, people donated more in the pain group relative to the control group regardless of their level of financial resources. They were also more likely to be part of the donor pool. These differences do not, however, meet conventional levels of statistical significance, and as a result provide weak evidence in support of Hypothesis 2. Though they do help bolster the evidence in support of the cost group's results by showing that those results were not the result of simply mentioning specific issue information in addition to a general statement.

Subjects who were noncompliant acted differently. Indeed, as proposed earlier, the results for non-compliant folks look like what we would expect if people were only taking into account the importance of the issues irrespective of any budget-based considerations. Indeed, as shown in Figures 4.3a-d non-compliant people were more willing to donate money when they received issue information that they care about, regardless of whether it reminds them of personal financial struggles. The pattern of results is also the same regardless of one's level of financial resources (though with varying degrees of statistical significance), which is again consistent with the idea that non-compliant people were ignoring budget-based considerations.

which recommends the use of such weights in order to generalize to the entire population.

¹⁰A Wilcoxon-Mann-Whitney test produces the same result ($z \leq .10$).

Figure 4.2a: Control versus Cost Group, Amount Donated

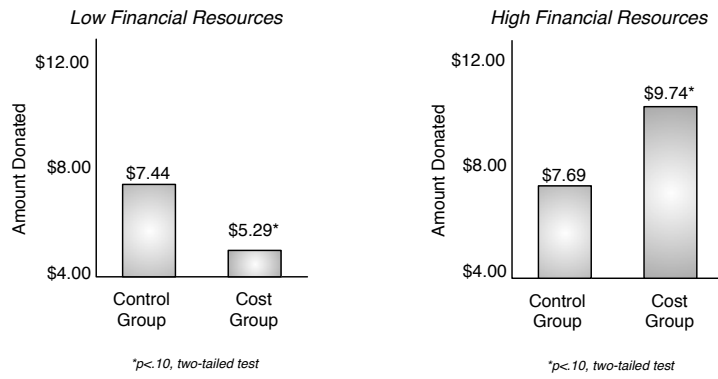


Figure 4.2b: Control versus Cost Group, Proportion Making Donation

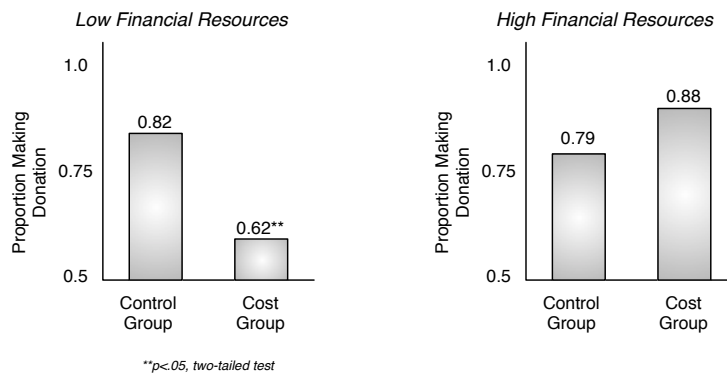


Figure 4.2c: Control versus Pain Group, Amount Donated

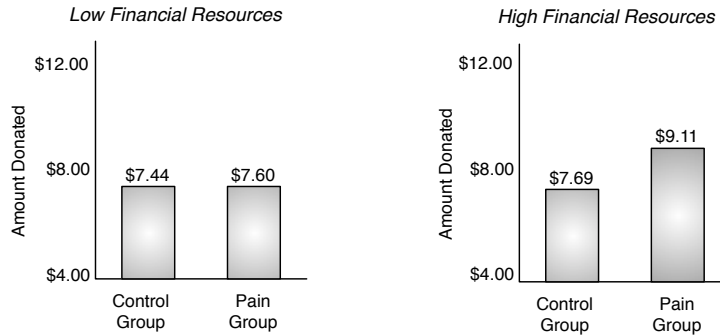


Figure 4.2d: Control versus Pain Group, Proportion Making Donation

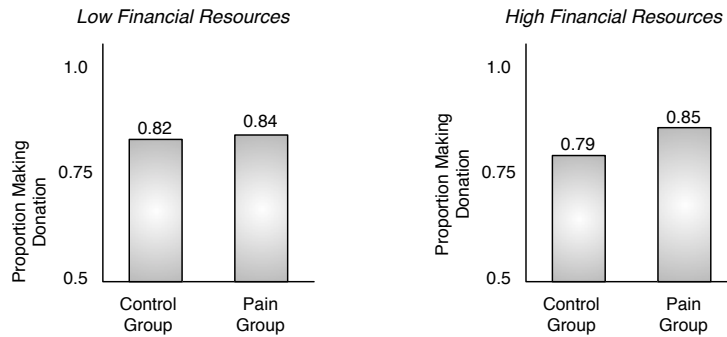


Figure 4.2: Survey Experiment 1 Results: Compliant Respondents

Figure 4.3a: Control versus Cost Group, Amount Donated

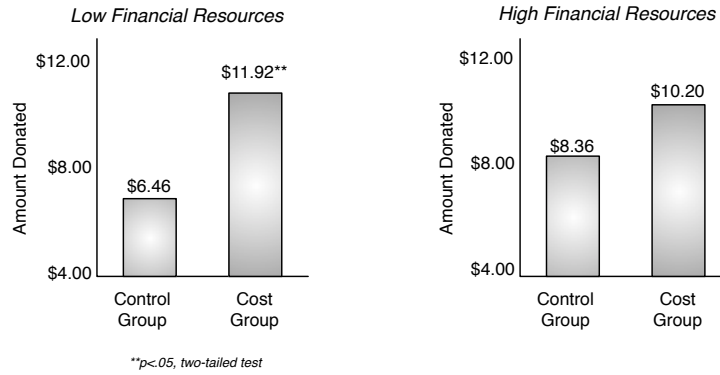


Figure 4.3b: Control versus Cost Group: Proportion Making Donation

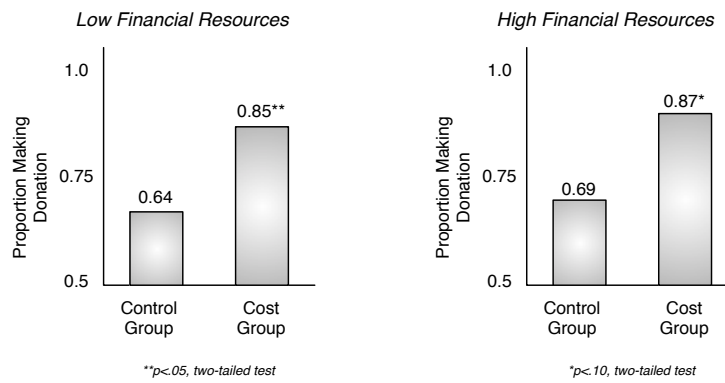


Figure 4.3c: Control versus Pain Group, Amount Donated

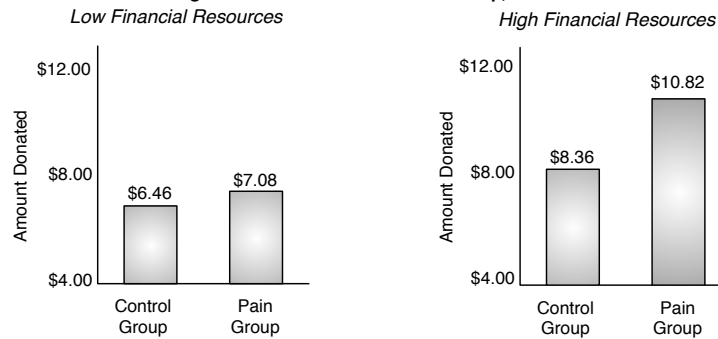
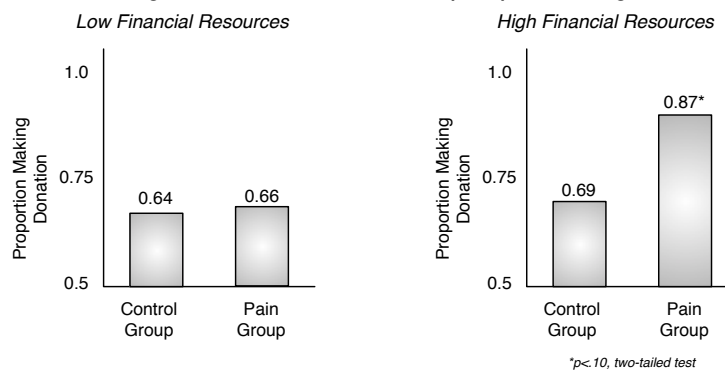


Figure 4.3d: Control versus Pain Group, Proportion Making Donation



Second Experiment

The rationale for this experiment is the same as the second lab experiment: to test the same alternative explanations and Hypothesis 3. The procedure is also identical to the second lab experiment, albeit with three treatment groups rather than two. Subjects were randomly assigned to one of three information groups that match those from the first survey experiment: a control group, a cost group, and a pain group. After reading the information, subjects were given the opportunity to sign-up for a listserv to hear about volunteer opportunities with ACS CAN. Subjects were informed that, if they chose to sign up for the listserv, then at the end of the experiment they would be given access to the sign-up page on the ACSCAN website (and would not be able to end the experiment without filling out their contact information on that page). It was not possible to include the sign-up page at the moment of decision because the sign-up page includes other information about the organization. Allowing subjects to see that page, therefore, would have threatened the internal validity of the experiment.

As with the first survey experiment, non-compliance is a concern. Because this experiment did not involve people giving away money, the only relevant form of non-compliance is whether subjects were exposed to extra-experimental information. As it turns out, only one percent of subjects – far fewer than in the previous experiment – were non-compliant under this criterion. Because this is so few people, I do not present results for them separately.

Results

The results appear in Figure 4.4. Figure 4.4a presents the results for the cost group as compared with the control group, whereas Figure 4.4b presents the results for the pain group as compared with the control group. In all cases, people's willingness to sign up to hear about volunteer opportunities is approximately the same. Importantly, we do not observe a significant decrease in anyone's willingness to vol-

Figure 4.4a

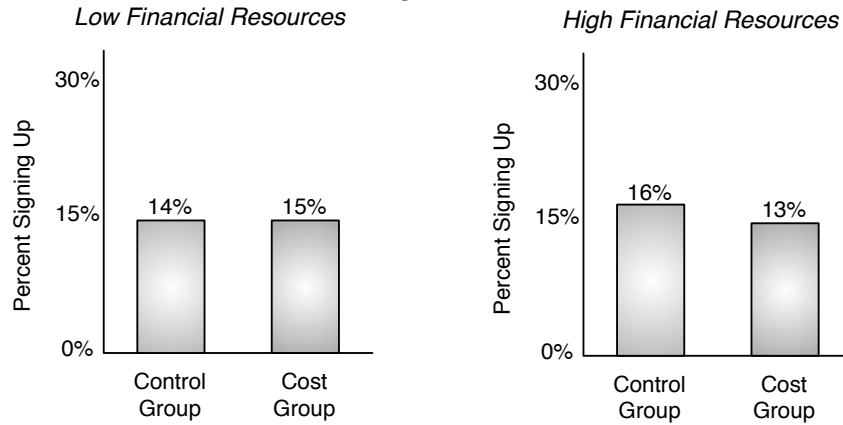


Figure 4.4b

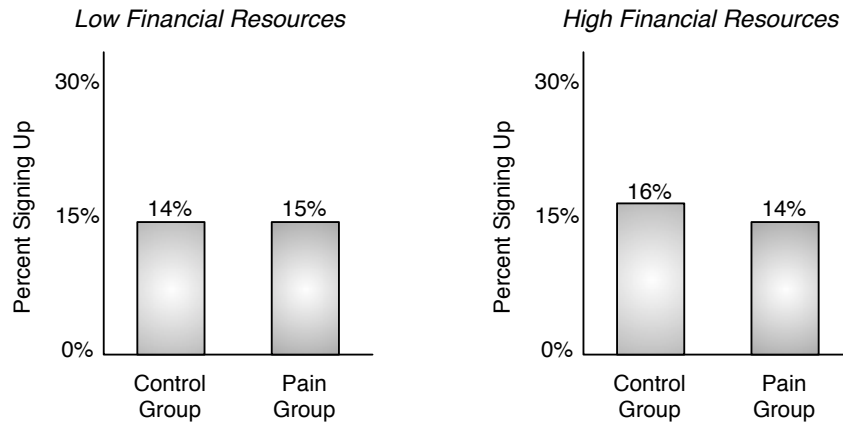


Figure 4.4: Survey Experiment 2 Results: Compliant Respondents

unter upon receiving the cost information. This experiment, therefore, provides no evidence in support of the alternative explanation for the donation results. People with low financial resources donated less in the cost group not because they did not find the information to be important or because they were displeased with a legislative response to the high cost of cancer care, but instead because they had a hard time justifying spending money on a donation. In addition, the results of the two survey experiments together provide further additional support for Hypothesis 3: the same exact piece of issue information can reduce people's willingness to donate money yet *not* reduce their willingness to engage in time-based activities.

Conclusion

Overall, the experiments in this chapter provide further support for the hypotheses. In particular, we observe strong evidence in support of Hypothesis 1: mentioning issues that people care about, but remind them of personal financial struggles, decreases their willingness to donate money. The same does not occur among important issues that do not remind people of personal financial struggles. Relative to the lab experiments in the previous chapter, these results use a broader sample and a more common political issue (that can more easily be characterized as “riding the wave”). Taken together, the lab and survey experiment results also show that the findings are robust to so-called windfall effects discussed at the beginning of Chapter 3. Thus, these experimental findings are not simply a result of the specific design.

CHAPTER V

Analysis of Donation Solicitations and Donation Decisions during the 2004 Campaign

In Chapters 3 and 4 I described experimental tests of my hypotheses. While the results in these chapters provide important evidence in support of the hypotheses, they do not show them at work in a real campaign context. Therefore, in this chapter I turn to a unique national survey with which to test them.

This dataset is the 2004 Campaign Communications Survey (CCS), a survey conducted by the Center for the Study of Elections and Democracy (CSED) at Brigham Young University. Fielded by the Social and Economic Sciences Research Center (SESRC) at Washington State University, this multi-mode study asked a national sample of registered voters to collect all pieces of fundraising mail that they received during the last three weeks of the 2004 campaign.¹ The mail came from candidates, political parties, and interest groups. In addition, respondents completed a short questionnaire over the telephone and a longer written questionnaire that included the booklet in which they logged all of the contact that they received from campaigns. This longer questionnaire included a series of demographic and political engagement

¹Because part of this study was conducted over the telephone, the population was defined as registered voters living in households with telephones, with the sample stratified based on past turnout behavior, residency in a state with a competitive US Senate race, and living in battleground states Ohio and Florida.

questions.²

Of the 2108 people in the original sample, 1606 returned the questionnaire/log booklet along with their fundraising appeals. In total, they returned 213 unique pieces of fundraising mail that were received a total of 383 times. Approximately 8% of active voters in America received at least one fundraising appeal.³ SESRC completed an initial coding of these solicitations that included an identification number and brief description. CSED then extended this coding with many other items, including the issue content. The CCS, as a result, provides a detailed content-coding of every fundraising solicitation that people received during part of the campaign, which allows me to draw inferences about the relationship between the content of solicitations and the likelihood that people donated. These inferences are more precise than what we would be able to draw with more well-known political science datasets that only ask about whether a respondent received a request for money (and, in some cases, by whom) but does not have any other information about the content of the request.

Despite the virtues of the dataset, it has two aspects that make it difficult to detect the potentially demobilizing effects of issue information that reminds people of personal financial struggles. The first is that, while we know which issues were mentioned in each solicitation, we do not have more precise information about whether the issue was mentioned in a way that would necessarily remind someone of personal financial struggles. For some economic issues, given the nature in which the issue was discussed during the campaign, it is quite likely that any mention would remind people of personal financial struggles (e.g. candidates and organizations generally talked about the *rising* cost of health care; virtually no one claimed that health care had become more affordable). For other economic issues, however, the opposite is the case. For example, while taxes are certainly a non-discretionary expense and very

²In fact, they collected all pieces of direct mail received, whether it included a fundraising appeal or not, but for my purposes I focus only on the fundraising mail. In addition, they logged all phone calls that they received as well as all in-person visits during this time.

³Active voter is defined by whether or not he voted in the general election for 2002 or 2000.

much relate to personal finances, in 2004 most Americans had experienced a tax cut in recent memory. Moreover, although Kerry sometimes advocated tax increases, his proposals were focused on an extremely wealthy slice of the population, and thus would not have reminded the large majority of Americans of a financial struggle *per se*.

The second challenge for testing my hypotheses using the CCS comes from the broader context of the 2004 campaign. While many Americans were certainly concerned about personal economic issues such as the cost of health care, the overall economy was doing quite well during this campaign. For example, the United States' gross domestic product grew 3.6 percent during 2004, the fastest rate since 2000.⁴ Bush pointed to these figures as evidence of the success of his tax cuts. Kerry reminded voters that GDP growth did not necessarily mean employment and an affordable lifestyle. Thus, while many Americans certainly felt economic pressures during the 2004 campaign, the country was not embroiled in recessionary times. For my purposes, this simply means that it will be difficult to demonstrate a demobilizing effect of fundraising mail that mentions particular issues related to personal financial struggles.

In this chapter I use the CCS data on fundraising appeals to address two main questions:

1. To what extent did candidates, parties, and interest groups mention issues that reminded people of their personal financial struggles in their fundraising appeals?
2. Did receiving solicitations that mentioned issues people cared about but reminded them of personal financial struggles make them less willing to donate?

I consider each of these questions in turn.

⁴Data from the Bureau of Economic Analysis:
<http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>.

Table 5.1: Top 5 Issues Mentioned in Fundraising Appeals in 2004

Issue	Percentage of mail pieces mentioning issue
Taxes	36
Employment/Jobs	25
Health Care	20
Abortion	20
Terrorism	20

How often did people receive solicitations that reminded them of personal financial struggles?

The ultimate goal of this chapter is to examine whether receiving solicitations that mentioned issues reminding people of their personal financial struggles reduced their willingness to donate money. Using the 2004 CCS to achieve this goal requires that people actually received solicitations that would have had this effect. Thus, this section simply documents the types of solicitations that people received.

Table 5.1 lists the five most frequently mentioned issues – taxes, jobs/employment, health care, abortion, and terrorism – all of which appeared in at least twenty percent of the solicitations. Three of these issues are economic, one deals with a social issue, and the last one deals with foreign policy and the ongoing War on Terror. As described earlier, “mentioning a particular issue” and “reminding someone about personal financial struggles” are not the same thing. Thus, in order to ascertain the prevalence of solicitations that reminded people of personal financial struggles, it is necessary to make particular assumptions about the content of these solicitations and characteristics of the individuals who received them.

I assume that, more than any other types of issues, economic issues are most likely to refer to financial constraints. Within the set of economic issues featured in solicitations, I assume that employment/jobs, health care, Social Security, Medicare, and prescription drugs were most likely to remind people of a personal financial struggle during the 2004 campaign. I refer to these five issues as “personal financial struggle

issues”. As mentioned at the beginning of this chapter, during this campaign there was little rhetoric about a decrease in the cost of health care and prescription drugs,⁵ or an increase in the financial health of Social Security and Medicare. Americans’ concerns with these issues, as well as the rhetoric surrounding them, were about financial struggles rather than financial fortune. With respect to jobs, while the overall unemployment rate decreased from 2003-2004,⁶ it was still one of Americans’ most important issue concerns, principally due to its high starting point and the so-called jobless recovery (Hillygus and Shields 2008).

Note that I do not include taxes in this previous list. The reason is because, while taxes are certainly a non-discretionary expense and very much relate to personal finances, in 2004 most Americans had experienced a tax cut in recent memory thanks to the 2001 and 2003 Bush tax cuts. Moreover, although Kerry sometimes talked about tax increases on the campaign trail, his proposed changes were focused on a very narrow and wealthy slice of the population, and thus any mention of proposed tax increases did not remind most Americans of a financial struggle per se. It is worth mentioning, as well, that over 88% of donation solicitations that mentioned taxes took positions against them (i.e. for lower taxes), further suggesting that they did not refer to a financial struggle per se.⁷

In addition to its content, whether a solicitation reminds a recipient of a personal financial constraint will depend upon context – the individual’s own economic circumstances. For people with secure jobs, healthy retirement accounts, and good health benefits, mentioning the skyrocketing cost of health care and prescription drugs or unemployment is unlikely to remind them of any *personal* financial struggle. For

⁵Due to the passage of Medicare Part D as part of the Medicare Prescription Drug, Improvement, and Modernization Act in 2003, some seniors would have lower costs for prescription drugs in the future. It is important to note, however, that this law did not take effect until well after the 2004 campaign, and only directly affected a small group of the population.

⁶Data from the Bureau of Economic Analysis:
<http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>.

⁷Data based on calculations from the CCS. Although specific content is not coded, the direction of mentions related to taxes was coded, which allows me to make the claim in the main text.

people who lack such financial security, however, mentioning these issues provides a stark reminder of financial concerns. So, if it turns out that solicitations mentioning personal financial struggle issues were only targeted at financially secure people, then we would not expect to observe them having a demobilizing effect. But, to the extent that financially-insecure people received solicitations mentioning these issues, then we would expect demobilizing effects to occur.

To address this point, I calculated the percentage of appeals that people received that mentioned each of the personal financial struggle issues.⁸ I did so separately for people with high versus low financial resources, in which resources are defined in terms of income. High income households have income above the median household income in 2004, whereas low income households have income below it.⁹ The results appear in Table 5.2.¹⁰ The key point to take away from this table is that people across the income spectrum received many solicitations mentioning these issues. Moreover, given their financial circumstances, low income people were likely reminded of financial insecurity and struggle. The question remains about what effect, if any, this had on their willingness to donate. I turn to this question next.

Analysis of Individual Donation Decisions

In this section I investigate how the content of solicitations affected the likelihood that people donated money during the 2004 campaign. Here I conduct direct tests of

⁸I restrict my analysis here only to people who actually received one or more solicitations.

⁹Note how this definition of financial resources differs from my definition in Chapter 4. There, I designed my experiments to include a question about whether people have health insurance. I believe that such a question would also be highly relevant here, but unfortunately the CCS did not include a health insurance question. The patterns in the data, and all subsequent results, are robust to lower cutoffs, as they were in Chapter 4. The median household income in the United States in 2004 was \$44,473 (Source: US Census Bureau: <http://www.census.gov/hhes/www/income/income04/statemhi.html>).

¹⁰Data are weighted to be representative of all active voters. Note that it would also be theoretically interesting to divide the sample according to either employment status and size of household, but unfortunately these variables were not available in the dataset.

Table 5.2: Percentage of Fundraising Appeals that Mentioned Personal Financial Struggle Issues, by Household Income

Issue	Percentage of appeals received by <i>low</i> income people that featured issue	Percentage of appeals received by <i>high</i> income people that featured issue
Employment/Jobs	60	27
Health Care	18	22
Social Security	7	18
Medicare	10	6
Prescription Drugs	10	8

Hypotheses 1 and 2 from Chapter 2:¹¹

Hypothesis 1: Mentioning issues that people find important, yet remind them of their personal financial struggles, decreases their willingness to donate money.

Hypothesis 2: Mentioning issues that people find important, and do not remind them of their personal financial struggles, increases their willingness to donate money.

I focus on all issues that were coded as part of the CCS, as described in Table 5.3. As noted earlier, this dataset includes measures of whether a solicitation mentioned an issue, but not specific details about the text and accompanying graphics. As a result, I do not have a precise measure for whether or not the mention reminded the recipient of personal financial struggles. Instead, I make the same set of contextual assumptions as in the previous section: that given the context of the campaign and the broader economy, certain issues were predominantly mentioned in such a way as to remind people about personal financial struggles whereas others were not.

Based on this, I classify issues into three theoretically-relevant categories. First, I classify them as either economic or non-economic. Non-economic issues include all social, law and order, education, foreign policy, and presidential/governmental issues that appear in Table 5.3. Second, I classify economic issues as either reminding

¹¹I do not test Hypothesis 3 because the CCS did not ask about whether people volunteered.

Table 5.3: Issues Mentioned in Fundraising Appeals in 2004, Organized by Category of Issue

Issue	Percentage of mail pieces mentioning issue
Economic Issues	
Taxes	36
Government Deficit/Budget	10
Government Spending	8
Minimum wage	1
Agriculture	1
Business	13
Corporations/corporate America	3
Unions	5
Employment/Jobs	25
Poverty	2
Welfare	2
International Trade/Outsourcing	5
Tort Reform	2
Transportation/Infrastructure	1
Health Care	20
Social Security	10
Medicare	11
Prescription Drugs	12
Energy	5
Social Issues	
Abortion	20
Gay Marriage	15
Homosexuality (non-marriage issues)	7
Affirmative Action	1
Race Relations	1
Gambling	1
Gun Control	7
Racial Profiling	1
Stem Cell Research	4
Civil Liberties/Privacy	5
Civil Rights	5
Voting Rights	2
Family Laws/Parental Leave Policies	2
Pledge of Allegiance	1
Flag Burning	1
Boy Scouts	1
Separation of Church and State	3
Environment	14
Immigration	2

Issue	Percentage of mail pieces mentioning issue
Law and Order Issues	
Crime	4
Criminal sentences/Three-strikes laws	2
Narcotics/Illegal Drugs	1
Death Penalty/Capital Punishment	1
Education Issues	
School Funding	8
Education Standards/Accountability	7
Vouchers	3
No Child Left Behind	4
Child Care/Day Care	2
Foreign Policy & Defense Issues	
Defense Spending	10
Department of Homeland Security	4
Weapons	6
Defense Contracts/Halliburton	1
Veterans	8
Foreign Policy (generally)	7
Foreign Aid	2
September 11, 2001	3
Terrorism	20
War in Iraq	19
China	1
Afghanistan	3
Middle East	3
Supporting Troops	15
United Nations/International Relations	2
General U.S. Security	2
Presidential/Governmental Issues	
Connects Candidate to Clinton	4
Connects Candidate to Bush	8
Rove/Bush Staff	1
Florida/Ballot Reform	3
Judicial Nominations	10
Competence in Government	1
Campaign Finance Reform	2
Government Ethics	4
Local Issues	3
Constitutional Amendments	6

people of personal financial struggles or not. Based on contextual factors mentioned earlier, I classify employment/jobs, health care, prescription drugs, Social Security, and Medicare as issues that potentially reminded people about personal financial struggles during the 2004 campaign. All other economic issues listed in Table 5.3 are classified as “Other Economic.” Note that this includes taxes¹² as well as issues such as poverty, the minimum wage, and welfare. While these latter three certainly refer to personal financial struggles, I include them in the “other economic” group because the people who are directly affected by these issues do not generally receive any donation solicitations in the first place. My results are robust, however, to including these three issues in the “personal financial struggles” category. In sum, then, all issues are classified in one of three mutually exclusive and exhaustive ways: {Personal Financial Struggles Issues, Other Economic Issues, Non-Economic Issues}.

The dependent variable is whether the respondent reported making a financial donation to a candidate, political party, or interest group. I should note that the particular question wording in the CCS is non-optimal in one regard: its time frame is the past eight years. The precise question wording is as follows: “During the last eight years, did you make a contribution to an individual candidate, political party, or other political group?” This wording is non-optimal because I am primarily concerned with donation decisions during the 2004 campaign. Given this, in what follows I assume that the responses to this question are positively correlated with the likelihood that people donated in the 2004 campaign. That is, people who donated in the years prior to 2004 were also likely to donate in 2004. Based on past surveys that have information about people’s donation decisions across elections, there is good reason to believe that this assumption holds (e.g. Brown et al. 1995, Francia et al. 2003, Graf et al. 2006). Even without this assumption, there is good reason to believe that when people answer this question they are focusing on their behavior

¹²I justified earlier why taxes should not be considered a personal financial struggle issue in 2004.

during the campaign that had just ended.¹³ The basis for this claim comes from a pilot study conducted for the American National Election Study (Hansen and Rosenstone 1983). This study examined whether and how recall of non-electoral political activity changed when the question specifically asked people if they had engaged in activity during the “past six months,” “past year,” and “ever”. Comparing these three time periods, the authors found no significant differences across similarly-worded questions. This led them to conclude that “[f]ew people seem to recall behavior that occurred more than six months ago.”

The structure of my model is based on past work that examines the effect of solicitations on political behavior (Rosenstone and Hansen 1993, Grant and Rudolph 2002, Hillygus and Monson 2008). It differs from these models, however, in two important ways. First, past work is based on datasets that do not have volume or content measures for solicitations, whereas the CCS has extensive information on both. Second, following earlier arguments, because the sample draws from the entire adult American population, there is significant heterogeneity in people’s life circumstances that may affect how they respond to issue content. In particular, we would expect that mentioning health care, prescription drugs, Social Security, Medicare, and employment/jobs would be more likely to remind someone of a personal financial struggle as their ability to afford out-of-pocket expenses and dip into savings diminishes. In other words, the effect of receiving solicitations mentioning these issues is conditional on an individual’s existing level of financial resources. For this reason, I include interactive terms between household income and issue content.

The model is as follows, where the dependent variable is coded dichotomously depending upon whether the respondent donated or not. My key independent variables are sums of the number of mentions of these issues in the solicitations received by individual i :

¹³This question appeared in a questionnaire that respondents filled out after the election.

$$\begin{aligned}
\text{Pr(Donation)} = & \\
& f\{\beta_0 + \beta_1(\text{Number of Solicitations Received}) + \\
& \beta_2(\text{Number of Personal Financial Struggles Issue Mentions}) + \\
& \beta_3(\text{Number of Personal Financial Struggles Issue Mentions*Income}) + \\
& \beta_4(\text{Number of Other Economic Issue Mentions}) + \\
& \beta_5(\text{Number of Other Economic Issue Mentions*Income}) + \\
& \beta_6(\text{Number of Non-Economic Issue Mentions}) + \\
& \beta_7(\text{Number of Non-Economic Issue Mentions*Income}) + \\
& \beta_8(\text{Income}) + \text{Controls}\}
\end{aligned}$$

A few remarks about this model are in order. First, the interpretation of a marginal effect is the change in the probability of donating if the number of issue mentions of a particular type (financial struggle, other-economic, or non-economic) increases by one, *holding constant the total number of solicitations that this person received*. This last part is important, as it allows us to isolate the effect of issue content without simultaneously changing the total volume of solicitations. In addition to its theoretical meaningfulness, this model also makes sense given that over two-thirds of solicitations mentioned more than one issue. Thus it is empirically valid to think about increasing the number of issue mentions while not at the same time increasing the number of solicitations.¹⁴ Second, note that although the model uses level variables for issue mentions and the number of solicitations, the results are robust to using a logarithmic transformation. Third, note that the model is only a valid test of the theory if we assume that people find the issues contained within the solicitations they receive to be important. This is a reasonable assumption in light of the increasing prevalence of public opinion polls that political organizations can and do use to ascertain what issues are important to select groups of people and what positions they hold on those issues (Jacobs and Shapiro 1994, Geer 1996, Druckman et al. 2004). Using this information they are able to craft solicitations that mention issues that people are concerned about.

¹⁴If every solicitation only every mentioned one issue, then this assumption would be less reflected in the data and therefore potentially be more problematic.

Hypothesis 1 predicts that $\beta_2 < 0$ and $\beta_3 > 0$. That is, people with low income should be *less* willing to donate money as the number of mentions of personal financial struggles increases, but people with high income should be *more* willing to donate as this number increases. Hypothesis 2 predicts that $\beta_4 > 0$, $\beta_5 = 0$, $\beta_6 > 0$, and $\beta_7 = 0$. That is, people should be more willing to donate as the number of times that issues they care about but do not remind them of personal financial struggles increases. This effect should not be conditional on an individual's level of financial resources.

My control variables include the set of factors that past work has shown to affect both the likelihood of donating as well as the likelihood of receiving direct mail requesting a donation (Rosenstone and Hansen 1993, Brown et al. 1995, Brady et al. 1999, Grant and Rudolph 2002, Francia et al. 2003). These include income, education, partisan strength, political interest, age, gender, and organizational involvement. Organizational involvement is a proxy variable that represents the likelihood that an individual is a member of a house list that a political organization might rent in order to broaden its list of donors and boost its fundraising totals. It includes membership in political, social, and religious organizations.¹⁵

Results

The raw coefficients for the full model appear in Table 5.4.¹⁶ Based solely on the direction of the coefficients, there is strong evidence in support of Hypothesis 1 and weak evidence in support of Hypothesis 2. Yet, while these results are helpful as a baseline, and they show that many of the variables that positively affect people's willingness to donate in past work have the same effect here (e.g. receiving solicitations,

¹⁵The coding of these variables was as follows: Income was coded as 0-1, below 2004 median household income and above 2004 median household income; Education was coded as 0-1, a six-category measure; Age was coded as 0-1, from minimum of 20 to maximum of 95; Organizational Involvement was coded as 0-1, from a minimum of 0 organizations to maximum of 9; Gender was coded 0 for female, 1 for male; Political Interest was coded from 0-1, four category measure.

¹⁶Note that the data are weighted here to represent a nationally-representative sample of all voters.

income, age, organizational membership), it is difficult to ascertain the substantive effects of the variables of interest. In particular, the fact that the coefficient on the interaction term is significant is not enough to justify its inclusion in the model:

It is perfectly possible for the marginal effect of X on Y to be significant for substantively relevant values of the modifying variable Z even if the coefficient on the interaction term is insignificant. [This means] that one cannot determine whether a model should include an interaction term simply by looking at the significance of the coefficient on the interaction term (Brambor et al. 2006:47).

Table 5.4: Effect of Fundraising Mail that Mentioned Various Issues

Variable	Coefficient	(Std. Err.)
# Solicitations Received	0.306	(0.229)
# Personal Financial Struggle Mentions	-0.498 [†]	(0.294)
# Personal Financial Struggle Mentions*Income	1.321**	(0.397)
# Other Economic Mentions	0.696 [†]	(0.371)
# Other Economic Mentions*Income	-1.109*	(0.441)
# Non-Economic Mentions	-0.062	(0.091)
# Non-Economic Mentions*Income	-0.014	(0.113)
Household Income	0.252	(0.237)
Education	0.830	(0.522)
Strength of Partisanship	0.445	(0.309)
Age	1.477**	(0.481)
Gender	0.233	(0.193)
Organizational Membership	1.318*	(0.612)
Political Interest	0.173	(0.642)
Constant	-2.861**	(0.654)

[†]≤10% *≤5% **≤1%, N=842, Pseudo R²=0.16

For this reason, I calculate the marginal effects of an increase in the number of times that each issue category was mentioned.¹⁷ Given the non-linear form of the model, the marginal effect of an increase in the number of issue mentions will differ depending upon the values of the other independent variables. As a result, it is important to choose values that are substantively relevant for the types of solicitations that people actually received during the 2004 campaign. Accordingly, I set the value

¹⁷I calculated marginal effects using code courtesy of Thomas Brambor, William Roberts Clark, and Matt Golder and available on the web: <http://homepages.nyu.edu/mrg217/interaction.html>.

of all control variables to their means.¹⁸ I also set the number of solicitations received to one, the median number that people received conditional on receiving at least one.¹⁹ For the issue-mention variables, I also set them to their medians conditional on receiving at least one solicitation, which translates to one financial struggle issue, one other-economic issue, and two non-economic issues. Given this, the substantively-relevant effect that I calculate is the change in the probability of donating that results from increasing the number of times that a particular issue category was mentioned by one. I calculate this marginal effect separately for increasing the number of financial struggle issue mentions, other economic issue mentions, and non-economic issue mentions. Note, again, that this marginal effect assumes that the total number of solicitations that the individual received remains the same. An example would be a situation in which an individual received one solicitation that mentioned two issues: one financial struggle issue and one non-economic issue.²⁰ In this case, I would calculate the marginal effect on the probability of donating if two financial struggle issues had been mentioned instead of one, holding everything else constant (and then similarly for the other-economic and non-economic issues).

The marginal effects appear in Table 5.5.²¹ Each marginal effect is significant using a 90% confidence interval unless it is labeled “ns” for not-significantly different from zero. The direction and significance of these effects are consistent with the results presented earlier. We observe strong evidence in support of Hypothesis 1, given the divergent responses of high and low income people to the financial struggle economic issues. Second, we observe weaker evidence in support of Hypothesis 2 –

¹⁸I use the mode for all dummy control variables.

¹⁹Note that while this number may seem low, it is important to remember that subjects were only asked to collect solicitations during the last three weeks, when the volume of content largely shifts toward get-out-the-vote type messages rather than fundraising.

²⁰Note that, on average, solicitations mentioned more non-economic issues because there were a far greater number of those issues to choose from.

²¹To the extent that readers find these numbers to be large, it is important to remember that increasing the number of issue mentions by one represents a 25% increase in the total number of issue mentions, given my initial conditions. This itself is a relatively large change.

Table 5.5: Marginal effects on donation probability of increasing the number of issue mentions by one

Issue Category	Low Income Respondents	High Income Respondents
Financial Struggle Economic Issue Mentions	-0.12	0.30
Other Economic Issue Mentions	0.25	ns
Non-Economic Mentions	ns	ns

we would expect a positive and significant value for each of the other four marginal effects, but only one of them significantly affected people’s probability of donating.

Test of Alternative Explanation

Lastly, I tested whether the results are an artifact of some other attribute of individuals related to their income but not specifically about financial resources. In particular, I examined whether there were similar differences in how people responded to issue information depending upon their level of education. That is, are there differences between how highly and less educated people respond to financial struggle issue mentions that do not occur in response to other-economic and non-economic mentions?

As shown in Table 5.6, which contains the results of the model split at the median level of education, this is not the case. Looking at the raw coefficients, there are no statistically-significant differences between how these groups respond to each type of issue information (i.e. all interaction terms are non-significant). The only issue information that has a significant effect in this model refers to personal financial struggle issues, and the effect is positive for both high and low education respondents. The marginal effects tell a similar story. These results suggest that the income findings presented in the previous section of the chapter were not an artifact of an educational difference between respondents, which lends further support to the idea that it is being reminded of personal financial struggles and constraints that conditions people’s responses to issue information.

Table 5.6: Effect of Fundraising Mail that Mentioned Various Issues (Using Education Conditional Effects)

Variable	Coefficient	(Std. Err.)
# Solicitations Received	0.323	(0.239)
# Personal Financial Struggle Mentions	0.593*	(0.266)
# Personal Financial Struggle Mentions*Education	-0.432	(0.323)
# Other Economic Mentions	-0.036	(0.299)
# Other Economic Mentions*Education	0.273	(0.361)
# Non-Economic Mentions	-0.127	(0.123)
# Non-Economic Mentions*Education	0.045	(0.119)
Education	0.310	(0.221)
Household Income	0.713*	(0.324)
Strength of Partisanship	0.428	(0.311)
Age	1.677**	(0.457)
Gender	0.158	(0.188)
Organizational Involvement	1.388*	(0.613)
Political Interest	0.113	(0.646)
Constant	-2.660**	(0.604)

† $\leq 10\%$ * $\leq 5\%$ ** $\leq 1\%$, N=842, Pseudo $R^2=0.17$

Conclusion

This chapter presents tests of Hypotheses 1 and 2 in a real campaign context. To do so, I have used a unique dataset that includes detailed content-coding of every donation solicitation that people received during part of the 2004 campaign. The results provide strong evidence in support of Hypothesis 1 (about issues that remind people of personal financial struggles) and weak evidence for Hypothesis 2 (about issues that do not remind people of personal financial struggles). These results compliment the experimental results presented in Chapters 3 and 4.

CHAPTER VI

Who Should Be Solicited For Money? A Formal Model of Strategic Solicitation

Introduction

The overarching question of this dissertation is: When are requests for political donations persuasive? I focus on impersonal requests, where by “impersonal” I mean any request for money that is not between personal acquaintances (e.g. direct mail, e-mail, telephone, and Internet). I break this question down into two parts: 1) What content will persuade people to give?, and 2) Who should be solicited for money? A common response to the former question is that political organizations stand to gain from mentioning issues that people care about. In Chapters 2-5 I showed that this strategy is effective only under certain conditions. In particular, mentioning issues that people care about can actually *decrease* their willingness to give if those issues remind them of their personal financial struggles. Examples include, but are not limited to, unemployment, inflation, the cost of health care, and the cost of education.

In this chapter I build upon these previous results to address the second question: Who should be solicited for money? A common response to this question is that political organizations stand to gain the most from requesting money from their core

supporters – the people who already believe that the organization is credible. By “credible,” I mean that the organization shares their issue positions and priorities. The basis for this claim comes from the literature on individual donation behavior, which has found that individuals donate money when they perceive that the organization shares their issue priorities and preferences (e.g. Verba et al. 1995, Brown et al. 1995, Francia et al. 2003). Francia et al. (2003:78-79) exemplify this point of view:

The keys to success in direct-mail fundraising and telemarketing are a good donor list and a compelling sales pitch on script. The list should be composed of individuals who are sympathetic to the [organization], agree with [its] issue positions, and have a history of contributing to campaigns or other political, social, or economic causes.

In this chapter I challenge this argument. I do so in two parts. In the first part I show that, in order to persuade someone to donate money, it is neither necessary nor sufficient that the individual initially believes that the organization is credible. I derive conditions under which political organizations can persuade people to donate who initially believe that the organization is *not* credible (as well as describe conditions under which people who view it as credible will be unwilling to donate). In the second part, I build upon these conclusions to show the conditions under which organizations have an incentive to contact people who initially *do not* perceive them as credible rather than those that do.

The main result is as follows. People that initially view an organization as credible are relatively easy to persuade, so long as the issues that they care about do not remind them about their personal financial struggles. When these issues do prime financial concerns, then these people will be reluctant to donate regardless of their belief about the organization’s credibility and regardless of their willingness to take other actions that might benefit the organization, such as volunteering their time.¹

¹Please see Chapters 2-5 for a more complete demonstration of this point.

People that initially view the organization as non-credible are harder to persuade to donate, even if they care about issues that do not remind them of personal financial struggles. For these people, under certain conditions the organization can establish credibility through the act of solicitation. The organization must send a costly solicitation that only certain types (i.e. credible ones) would send. This might entail, for example, obtaining a costly endorsement from someone that the audience is likely to know and that would endorse an organization if and only if he were certain that it was credible.

Taken together, I show that there exist conditions under which a political organization stands to gain more by sending solicitations to people that initially view it as non-credible rather than those that do. These conditions are: 1) those that believe it is non-credible care about issues that do not remind them of personal financial struggles and the organization can use the solicitation to signal its credibility to them, and 2) those that believe it is credible care about issues that remind them of personal financial struggles and which makes it difficult to justify donating.

Before presenting the model, I return to an example mentioned in Chapter 1. My argument does not necessarily imply that, for example, Focus on the Family will be able to persuade staunchly pro-choice Americans to donate money. Rather, a more likely scenario is as follows. Suppose that Republican Candidate Smith favors retraining programs for unionized workers who have lost their jobs. Although his commitment to this issue is well-known among union leaders and unionized workers, he is virtually unknown among professionals who also care a good deal about retraining programs. Moreover, mentioning unemployment and retraining programs does not remind these professionals of personal financial struggles like it does for the union workers. Further suppose that professionals use a partisan cue such that they only believe that Democrats share their issue positions when it comes to this issue. In other words, their initial belief is that Candidate Smith is not credible.

In this example, trying to raise money among union workers could be problematic, as Candidate Smith will essentially need to remind them about personal financial struggles in order to mention issues that they care about, which in turn will make it difficult for them to justify donating money. In addition, because the professionals do not initially perceive him as credible, they are not willing to donate either. This situation mirrors that described by Francia et al. (2003:79):

The fact that a candidate shares a group's position does not ensure a good return rate. Environmentalists may be happy to join the Sierra Club or subscribe to *National Geographic* and many gun owners are pleased to pay dues to the NRA or buy a subscription to *Guns and Ammo*, but most of these same individuals are unwilling to contribute to an unfamiliar candidate who claims to champion environmentalist or anti-gun-control positions.

In this case, Candidate Smith needs some way to signal his credibility to the professionals. One way to do so is to gather costly endorsements from well-known union leaders. So long as professionals are certain that the endorsers would only endorse candidates who are actually credible (i.e. it would be too difficult for candidates who do not support retraining programs to gather such endorsements), then the mere fact of receiving the endorsements will signal Smith's credibility. This signal, in turn, provides a reason for the professionals to donate to him. Another potential signal is to use issue-specific technical language and imagery that Smith would only be familiar with if he were actually credible (and that, if he were not credible, he would not find it worth his while to take the time and energy to learn). Here, again, the use of this language and imagery signals his credibility to the professionals, thereby providing a basis for their donations.

Three premises underlying the model

There are three premises that underlie the model of strategic solicitation. These premises are informed by earlier chapters in my dissertation as well as contextual factors that typically face solicitors trying to raise money using impersonal solicitations.

First, some political issues that people care about remind them of their personal financial struggles. Examples include, but are not limited to, unemployment, inflation, the cost of health care, and the cost of education. As shown in Chapters 2-5, mentioning issues like these in donation solicitations makes it difficult for recipients to justify spending money on a donation, which in turn makes them unwilling to donate.

Second, political organizations frequently solicit money from people who are not familiar with their issue positions and priorities. This situation arises because they “try to broaden their donor base by prospecting other lists” (Brown et al 1995:52). As a result, it is frequently the case that people receive solicitations from political organizations with which they are not familiar and do not initially believe to be credible. This assumption is consistent with work on the factors that lead people to join interest groups. This work finds that people are often confronted with the decision to join and donate money to groups about which they have incomplete information on the benefits of membership (e.g. Moe 1980, Rothenberg 1992).

Third, appearing credible on certain issues is more costly for some solicitors than others. Here, “costliness” refers to the amount of resources (in time and money) that must be expended in order to convince people that you share their issue positions and priorities. For example, a solicitor who is strongly committed to gun control and has consistently made this issue a priority will have a very easy time using language and images that are prevalent among potential donors who care about this issue. She will also have an easy time persuading well-known gun-control advocates to serve as endorsements. The same cannot be said for solicitors who either do not believe in gun

control and/or do support gun control but have not made this issue a priority. For these solicitors, they face substantial costs in trying to raise money from potential donors who care about this issue. These costs may be of two types: transaction costs associated with learning the appropriate language and imagery to appeal to these donors, and opportunity costs associated with not mentioning other issues. Moreover, it will be far more difficult, if not impossible, to persuade well-known gun control advocates to serve as endorsements.

To examine the implications of these premises to answer the key question – Who should be solicited for money? – I build a formal model of strategic solicitation. This model allows us to draw inferences about how different factors, such as an individual’s beliefs about a solicitor and the costliness of sending certain messages, affect when a solicitation will be persuasive. In the next section I describe the relationship between this model and previous models. Following that, I describe the model in detail, including greater elaboration upon the premises listed in this section.

Comparison of my model to previous models

A standard model of strategic communication involves one player, a speaker, who first has the opportunity to send a message to the other player, the receiver, who then makes a decision that affects the utility of both actors. The receiver is typically uncertain about certain aspects of utility-relevant information. A tension arises because the speaker generally has the information the receiver needs, but may not have an incentive to reveal what she knows.

I build from two seminal strategic communication games: the cheap-talk game and the costly-signaling game. The main difference between them is whether the speaker has to pay an exogenous cost for sending a message. In a cheap-talk game the speaker does not pay an exogenous cost for sending a message. The focus in this model is typically on simple statements in which it is no more difficult to say

one thing versus another (Farrell and Rabin 1996). The assumption is that more elaborate speeches are not meaningful.² A main finding is that the persuasiveness of such costless messages depends upon the extent to which the speaker's and receiver's interests are aligned (Crawford and Sobel 1982).

In a costly-signaling game, speakers pay an exogenous cost for being able to send a message. The assumption is that communication in these models requires taking an action or otherwise exerting effort that carries a clear transaction cost (Spence 1973, 1974). Spence (1973) showed that the persuasiveness of a costly signal depends upon whether the cost is sufficiently high such that only certain types of speakers would be willing to pay it. In these cases, the mere act of sending a costly signal (or failing to do so) provides information to an incompletely-informed receiver.

The model presented here is a costly-signaling model in which a solicitor (i.e. the speaker) sends a request for money to a citizen (i.e. the receiver). The solicitor can send either a free or a costly message. The specific model that I construct builds upon the one used by Lupia and McCubbins (1998). This model differs from theirs, however, in two important respects. First, I assume that the receiver knows the interests of the speaker, whereas they model a situation in which the receiver is uncertain about these interests. The reason for this assumption is that when people receive a donation solicitation they know that the solicitor would always prefer that the receiver donates regardless of the solicitor's credibility. Second, the signals differ not only in their costliness, but also in one other attribute: whether they remind the recipient of personal financial struggles.

²For example, as Austen-Smith (1992:48) notes: "Although the speech itself may involve all sorts of argument or exhortation to [act] one way rather than another, the only relevant content of such a speech is whether the bill hurts or helps the [receiver]." For other examples of cheap-talk games, see Calvert 1985, Sobel 1985, Milgrom and Roberts 1986, Farrell and Gibbons 1989, Gilligan and Krehbiel 1989, Matthews 1989, Banks 1991, Austen-Smith 1992, Lupia 1992, Farrell 1995, and Farrell and Rabin 1996.

A model of persuasion in a donation solicitation context

In this section I present a model of solicitation strategy. The game involves two players: a *citizen* and a *solicitor*. I use the term “solicitor” as a general term that can refer to any political organization that is trying to raise money, such as an interest group, political party, or campaign. The citizen must decide whether to donate money to the solicitor or not. In making this choice, the goal of the citizen is to enhance his own welfare. In this context, the citizen’s welfare is enhanced if and only if the solicitor and the citizen share the same issue positions and priorities. For a shorthand way of representing “the relationship between a citizen’s issue positions and priorities and those of the solicitor,” I refer to the solicitor as one of two types: “credible” or “non-credible”. If the solicitor is credible, then donating to the solicitor is beneficial to the citizen, and vice versa.

I assume that the citizen is uncertain about whether the solicitor is credible. The most common reason why a citizen would receive a solicitation from an unfamiliar solicitor is that the solicitor is using a house list from another organization to acquire names of people to contact (Godwin 1988, Brown et al 1995, Francia et al 2003). For example, environmentally-conscious non-incumbent candidates may rent the house list of donors to an already-established environmental group. For members of this group, they are likely to be uncertain about whether the candidates are really as credible on environmental issues as they claim to be.

Figure 6.1 describes the entire game. I model the type of solicitor as either credible or not as a move by Nature. I denote this as $n_b \in \{credible, not\ credible\}$. Nature chooses $n_b = credible$ with probability $b \in [0, 1]$, and $n_b = not\ credible$ with probability $1 - b$. This probability is common knowledge. The two information sets, S_1 and S_2 , characterize the solicitor’s location in the game tree. The solicitor knows whether she is credible or not. The citizen, on the other hand, does not know but has an initial belief b as mentioned above.

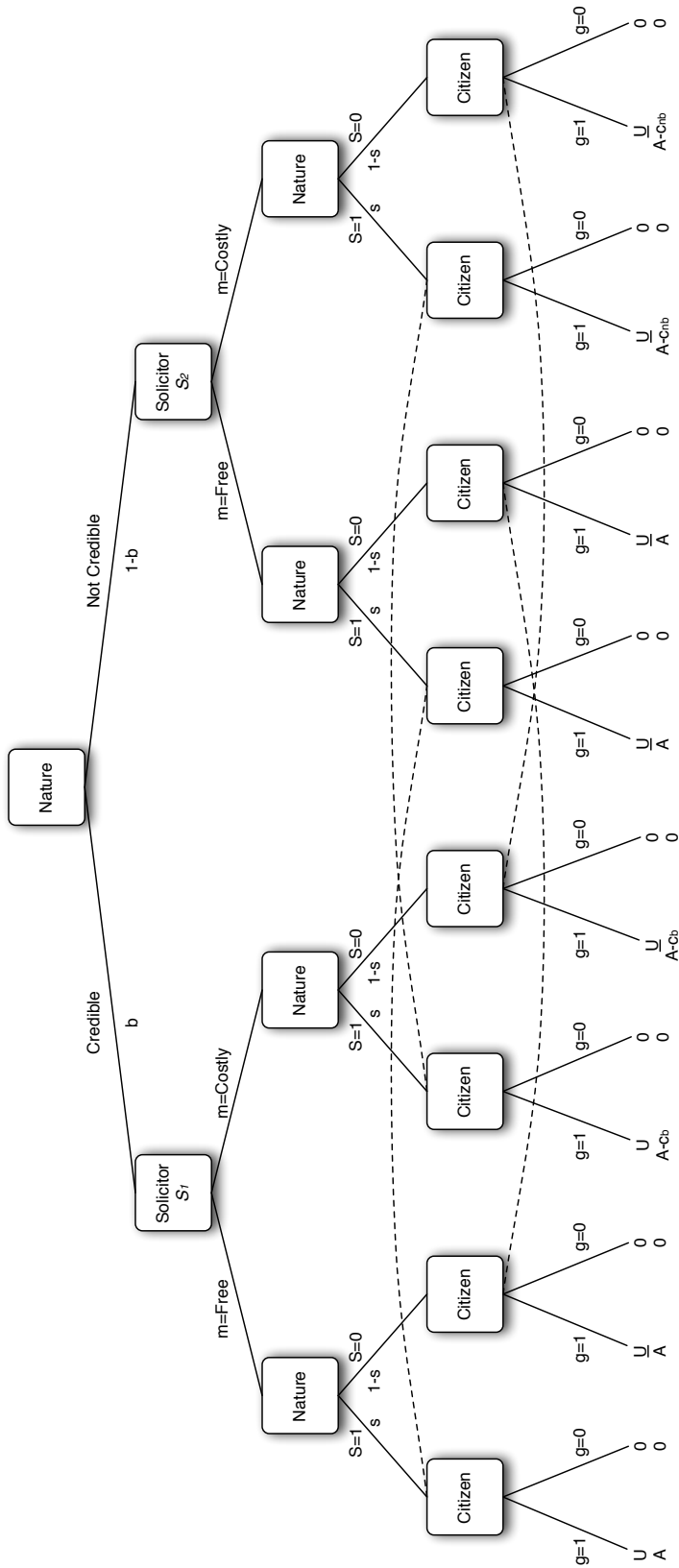


Figure 6.1: Model of solicitation

After observing this move by Nature, the solicitor then has the opportunity to send a message m to the citizen. A message consists of a solicitation that expresses an issue position and priority that matches the citizen's. I assume that the solicitor knows which issues are important to the citizen as well as his preferred positions on those issues. The basis for this assumption comes from the fact that modern solicitors engage in extensive issue polling to gauge citizens' preferences and thus are able to tailor their communications to match these preferences (Jacobs and Shapiro 1994, Druckman et al. 2004). Thus, solicitors are able to carefully craft messages that avoid taking issues the audience will oppose.

The message may either be free or costly: $m \in \{free, costly\}$. When $n_b = credible$, the cost of sending a costly message is $c_b > 0$. When $n_b = not\ credible$, the cost of sending a costly message is c_{nb} , where $c_{nb} > c_b$. Assuming that a message is either free or costly, and that these costs differ for different types of solicitors, reflects the fact that mentioning certain issues will be easier for some solicitors. While the act of writing words on paper is virtually costless for all types of solicitors, knowing what to say and what not to say often requires considerable expertise and knowledge on an issue. Solicitors who are credible on an issue will be familiar with the appropriate language, code-words, and imagery to use when talking about an issue. They will also have an easier time obtaining endorsements from well-known issue leaders. Solicitors who are not credible will not have such an easy time (hence $c_{nb} > c_b$). They will face transaction costs associated with learning this appropriate language, as well as opportunity costs associated with not mentioning issues with which they are far more familiar.

I further assume that the solicitor knows that there is a certain probability that mentioning an issue in a donation solicitation will remind the citizen about his personal financial struggles. As described in previous chapters, mentioning such issues makes it difficult to justify spending money on a non-necessity like a donation. I

model this as a move by Nature. Let $S \in \{1, 0\}$ refer to whether the issue mentioned in the message reminds him of personal financial struggles. Let S be drawn from a distribution that yields $S = 1$ (issue *does not* remind him) with probability s and $S = 0$ (i.e. issue *does* remind him) with probability $1 - s$.

Note that I am assuming a somewhat extreme implicit function for the physical act of sending a solicitation: zero. I make this assumption in order to make the link between the solicitor's choice of which message to send and the citizen's donation response unequivocal. Incorporating explicit and positive costs, such as budget-based incentives, would obscure the link between the use of strategic information signaling and the decision to donate.

Lastly, the citizen has to decide whether to donate money or not. Denote the citizen's decision as $g \in \{0, 1\}$ in which $g = 1$ means that the citizen decides to donate upon receiving m and $g = 0$ means that he does not. I also impose an implicit cost function on the giving decision – making a donation that leads to benefit A for the solicitor has a finite cost and is the same for all types of citizens (and hence does not serve to distinguish utility functions across types of citizens) but the cost of making any other type of donation is infinite. Thus I assume that all donors give the same amount. The rationale for this assumption is to ensure that the relationship between the types of endogenous strategic considerations (signaling types, updating beliefs, etc.) that I'm considering and their effect on giving is unequivocal.

To summarize, then, the order of events is as follows. First Nature decides whether the solicitor is credible or not. The solicitor observes this decision but the citizen does not. Next, the solicitor decides whether to send a free or costly message. Then, Nature decides whether the content of the solicitation reminds the citizen about his personal financial struggles. Lastly, the citizen decides whether or not to donate money to the solicitor. After he does so, the game ends and both players receive a utility payoff. These payoffs depend upon the state of the world and the strategies of the two players.

The solicitor receives utility A if the citizen gives and pays a cost that depends upon whether she is credible or not. She receives utility 0 if she ends the game by not sending a solicitation. The citizen receives utility $U \geq 0$ if the solicitor is credible on the issue and utility $\underline{U} < 0$ if the solicitor is not credible on that issue or if he donates and the issue reminds the citizen about personal financial struggles (where $U = -\underline{U}$). He receives 0 if he does not give.

Definition of Equilibrium

I assume that the perfect Bayesian equilibrium (PBE) is the appropriate solution concept for my game. I use this solution concept to derive precise inferences about how players will behave under varying conditions. A PBE has two components: a strategy profile and a set of beliefs.

The strategy profile is the vector $\pi = \{\pi_{solicitor}; \pi_{citizen}\}$. $\pi_{solicitor}$ has two scalar elements, one for each of the solicitor's information sets S_1 and S_2 as shown in Figure 6.1. Each element of $\pi_{solicitor}$ is the message $m \in \{Free, Costly\}$ that is sent at each information set S_a . $\pi_{citizen}$ consists of four scalar elements. Let $p(g; m, S)$ denote the probability of giving upon receiving message m when $S = 1$ or $S = 0$. Then, $\pi_{citizen} = \{p(g; m = Free, S = 1), p(g; m = Free, S = 0), p(g; m = Costly, S = 1), p(g; m = Costly, S = 0)\}$.

I use the scalar h to refer to the information sets in the game, in which $h \in \{S_1, S_2, M_{Free, S=1}, M_{Free, S=0}, M_{Costly, S=1}, M_{Costly, S=0}\}$. The vector μ denotes a set of probability distributions, one for each information set. Each μ_h represents a player's beliefs about the likelihood of being at each decision node within the information set. Formally, μ is a function from the set of decision nodes $d \in D$ to $[0, 1]$ such that for every information set h , $\sum_{d \in h} \mu(d) = 1$.

A message m is "along the path of play" if there exists an information set for which the probability of m being sent is positive. Citizens satisfy the sequential ra-

tionality and consistency requirements of a perfect Bayesian equilibrium. *Sequential rationality* requires that players' actions maximize their expected utility conditional on the equilibrium strategies of the other players. As Kreps (1990:427) put it: sequential rationality requires "a profile of strategies π and beliefs μ such that starting from every information set h ... [each player] plays optimally from then on, given that what has transpired previously is given by $\mu(h)$ and what will transpire at subsequent nodes belonging to other players is given by π ." *Consistency* requires that "Given a strategy profile π , for any information set h that will be reached with positive probability (if players use the strategies given by π) beliefs at h are computed from the strategies via Bayes' rule" (Kreps 1990:429).

One problem with this notion of consistency is that it does not specify precisely what the citizen should believe when he finds himself off the equilibrium path. Such an occurrence shows that his beliefs and strategies are out of synch. For such cases, I apply the "no-signaling-what-you-don't-know" criterion: I assume that the citizen learns nothing from the deviation that the solicitor herself does not already know. As Fudenberg and Tirole (1998:237) write, this assumes that "a player's deviation should not signal information that the player himself does not possess." In this case, I assume that the citizen's posterior beliefs about the state of the world are identical to his prior beliefs. The citizen learns nothing about the state of the world from the deviation. Put differently, in response to any m that is played with zero probability along the equilibrium path (conditional on citizen type), the citizen maximizes EU given $\mu(\text{credible}|h) = b$ and $\mu(\text{not credible}|h) = 1 - b$.

To summarize, then, the definition of a PBE entails the following:

1. For each S_a , m maximizes $EU_{solicitor}$ given $p(g; m, S)$ for each $m \in \{Free, Costly\}$.
2. For each m along the equilibrium path, $p(g; m, S)$ maximizes $EU_{citizen}$ given $\mu(\text{credible}|m)$ and $\mu(\text{not credible}|m)$ in which μ is computed using Bayes' Rule.
3. For any m not along the equilibrium path, $p(g; m, S)$ maximizes $EU_{citizen}$ given

$$\mu(\text{credible}|m) = b \text{ and } \mu(\text{not credible}|m) = 1 - b.$$

Results

In this section I present the main results from the model. The first set of results address the question: “Who can be persuaded to donate?” The final theorem builds on these findings to address the key question of interest in this chapter: “Who should be solicited for money?”

Proposition 1: There are three pure-strategy perfect Bayesian equilibria in the model:

- $\pi = \{\text{Costly}, \text{Free}; (0, 0, 1, 0)\}$.
This is an equilibrium if $S = 1$, the citizen holds initial belief $b \leq 0.5$, and $0 \leq sA - c_b$ and $0 > sA - c_{nb}$.
- $\pi = \{\text{Free}, \text{Free}; (1, 0, 1, 0)\}$.
This is an equilibrium if $S = 1$ and the citizen holds initial belief $b > 0.5$.
- $\pi = \{\text{Free}, \text{Free}; (0, 0, 0, 0)\}$.
This is an equilibrium if $S = 1$ and the citizen holds initial belief $b \leq 0.5$.

Proof: See Appendix.

The first one is a separating equilibrium in which persuasion occurs (i.e. the citizen’s beliefs change as a result of the message). The latter two are pooling equilibria in which no persuasion occurs (i.e. the citizen does not learn anything about the solicitor’s type as a result of the message) and the citizen’s donation decision is a function of his initial beliefs. In what follows, because the substantive goal of the model is to understand the conditions under which the solicitation can persuade people to donate money, rather than situations in which such persuasion does not occur, I restrict the discussion to the one pure-strategy separating equilibrium.

Corollary 1 to Proposition 1: For persuasion it is necessary that $S=1$.

Proof: The proof of this corollary follows directly from Proposition 1, in which all the separating equilibrium requires that $S = 1$. Note that it also follows from the assumptions of the model, which is that subjects receive 0 if they do not give but \underline{U} if they give when $S = 0$.

Corollary 2 to Proposition 1: An initial belief $b > 0.5$ is not necessary for persuasion.

Proof: The proof of this corollary follows directly from Proposition 1, in which the separating equilibrium involves $g = 1$ yet an initial belief $b \leq 0.5$. Thus it not necessary that $b > 0.5$.

Theorem 1: The following conditions are individually necessary and collectively sufficient for persuasion: $b \leq 0.5$ and $\pi_{solicitor} = \{Costly, Free\}$.

Proof: The proof follows directly from the separating equilibrium in Proposition 1, in which persuasion occurs if and only if these two conditions are met. QED.

Theorem 1 combines the results from the previous proposition and its corollaries. Taken together, these results show not only that solicitors *can* persuade people to donate who do not initially believe that the solicitor is credible, but also shows the precise conditions under which persuasion will occur.

Next I address the second part of my argument: Who should be solicited for money? Recall that the conventional wisdom (described in the introduction to this chapter) is that solicitors stand to gain the most from contacting people that initially believe that the solicitor is credible. The following theorem shows why that conclusion is not always warranted. Before presenting the theorem, however, I make one further assumption regarding s , the solicitor's beliefs about whether the solicitation will remind the citizen of financial struggles. This assumption is that s is tied to b in a particular (and for purposes of demonstration, extreme) way. I assume that the solicitor holds belief $s = 0$ for citizens with initial belief $b > 0.5$ and $s = 1$ for citizens with initial belief $b \leq 0.5$. This represents a situation in which the solicitor believes that its core supporters care about issues that would prevent them from donating,

but that a group of non-core supporters exists that do not. Note that this situation could arise for a number of reasons. The solicitor could be knowledgeable (in the sense of $n_b = \textit{credible}$) on multiple issues but it happens that its core supporters care about one personal financial-related issue but there is a group of identifiable non-core supporters that care about a non-personal financial-related issue. Another possibility is that both core and non-core supporters care about the exact same issue, and that this is the only issue on which the solicitor is knowledgeable, but that the issue reminds the core supporters of a personal financial struggle but does not have that effect for non-core supporters (perhaps due to different life circumstances between the two groups of citizens). Either way, given this assumption, the following theorem describes optimal solicitation strategy:

Theorem 2: $EU_{solicitor}$ is higher when $b \leq 0.5$ than when $b > 0.5$ when the following conditions are met:

$s = 0$ when the citizen holds initial belief $b > 0.5$,

$s = 1$ when the citizen holds initial belief $b \leq 0.5$,

$\pi_{solicitor} = \{ \textit{Costly}, \textit{Free} \}$.

Proof: By assumption, when $s = 0$, $EU_{solicitor} = 0$ (regardless of the value of b). To prove this theorem, then, it remains to show that it is possible that $EU_{solicitor} > 0$ when $b \leq 0.5$. Note that $b \leq 0.5$ in the separating equilibrium in Proposition 1. In this equilibrium, $EU_{solicitor}(n_b = \textit{credible}) = sA - c_b > 0$ and $EU_{solicitor}(n_b = \textit{not credible}) = 0$. QED.

Theorem 2 shows that under certain conditions solicitors have an incentive to request money from people that initially do *not* believe that they are credible rather than those that do. This situation arises when, among people who initially believe that the solicitor is credible, the issues that they care about remind them about their personal financial struggles. When this occurs, they have a hard time justifying a donation even though they may be perfectly willing to support the solicitor's cause in other ways such as volunteering time. The solicitor stands to gain zero utility from

requesting money from them. Under these conditions, the solicitor can do better by contacting people that do not initially perceive that she is credible, but how well this strategy works depends upon her actual degree of credibility.

Example

In the introduction to the chapter, I offered the example of Republican Candidate Smith. Here I describe another example to demonstrate the ideas in this chapter. Consider non-incumbent Democratic Candidate Jones who knows that there are two groups of citizens in the population. For people in the first group their top issue priority is the cost of gas because they depend greatly upon their cars for transportation. They have not heard of Candidate Jones before, but they generally believe that the Democratic Party and its members are concerned about making gasoline more affordable. Their initial belief, based solely on a partisan cue, is $b > 0.5$. The second group is composed of people that care, first and foremost, about the second amendment and gun rights. They are also not familiar with Candidate Jones, but they do have extensive issue-related knowledge. Absent any further information, they believe that the National Rifle Association is the best advocate for them. So, their initial belief is that Jones is not credible (i.e. $b \leq 0.5$).

The conventional wisdom argues that, because the people in the first group believe Jones is credible and those in the second do not, Jones stands to gain more from soliciting the first group rather than the second. The results of my model show why this is not the case. A request for money that conveys shared concern about gas prices will remind these citizens about necessities that are increasingly difficult to afford, which makes it difficult for them to justify spending money on a discretionary item like a donation. As a result, Candidate Jones does not stand to gain anything (in terms of donations) from soliciting this group. Instead, she actually stands to do better by soliciting the gun rights group, for which mentioning guns does not

remind them of personal financial struggles. She can do better by contacting them so long as she can afford to secure costly endorsements (e.g. from the NRA) and/or use technical, issue-specific language to demonstrate detailed knowledge about and commitment to gun rights. If she can, then she will persuade people in the second group that it would be beneficial for them to donate to her.

Conclusion

The goal of this chapter has been to address the question “Who should be solicited for money?” I have shown that a common response to this question – political organizations stand to gain the most by contacting people that initially believe they are credible – is not always an optimal strategy. Instead, my results show why organizations can sometimes do better by contacting people that initially believe that they are *not* credible.

CHAPTER VII

Conclusion

Why do people donate to political causes? This is a central question of political participation. For most people most of the time, they donate because they are asked, and most of these requests are impersonal, arriving via direct mail, e-mail, telephone, or a webpage/advertisement on the Internet (Graf et al. 2006). Given their prevalence, and their strong effects on who donates, it is important to ask the question: “When are requests persuasive?” Under this broad question, the focus of this dissertation has been on two specific questions: “What content persuades people to donate?” and “Who should be solicited for money?”

With respect to the first question, I argued in Chapters 2-5 why mentioning issues that people care about in donation solicitations will not always increase people’s willingness to donate money and can, under certain conditions, actually have the opposite effect. In particular, mentioning issues that people care about but remind them of personal financial struggles reduces their willingness to donate money. In addition, I showed how mentioning the same exact issue information can reduce people’s willingness to donate money yet not have this effect on their willingness to engage in non-monetary forms of political participation such as volunteering time. This latter finding is particularly novel because it challenges common statements about how political communications increase/decrease people’s tendency to participate in general.

Along this line of thinking, any piece of communication – such as an ad, a piece of direct mail, or a conversation with a credible speaker – that increases/decreases people’s willingness to take one action, such as voting, should also increase/decrease their willingness to take other actions, such as donate, volunteer, persuade friends, display lawn signs, attend rallies, etc. While the magnitude of the effects may differ across specific behaviors, this argument says that the tendencies all shift in the same direction. My findings, however, show how a divergent effect can result depending upon the life circumstances of the recipient.

The arguments and findings regarding content provide the basis of the answer to the second question about who should be solicited for money. Here I argued in Chapter 6 that under certain conditions political organizations have an incentive to solicit people that do not initially perceive them as credible (i.e. as sharing the same issues positions and priorities as they do) rather than their core supporters. This situation arises when two conditions are met. First, people who are initially sympathetic care about issues that remind them of personal financial struggles, and so any solicitation that mentions these issues will not be persuasive. Second, people who are not initially sympathetic may be persuaded of the organization’s credibility using costly language.

More generally, these findings are part of a larger theme, which is that the persuasiveness of a participatory request depends upon not just its *content*, but also the *context* (i.e. life circumstances of the person receiving it). This dissertation has examined one form of context – an individual’s monetary budget set – but the point has wider applicability for thinking about the effect of temporal budgetary sets, past donation behavior, and other aspects of context that affect whether a solicitation is persuasive. I return to these points below under “Future Research”.

More broadly, the findings have two implications. The first is that organizations that depend upon donations from individuals will be disadvantaged to the extent

that their key issues relate to people's personal financial struggles. All else constant, it will be harder for these organizations to raise money by mentioning issues that their membership deeply cares about. The result is that their fundraising efforts may be hindered in general, which would put them at a disadvantage relative to other groups in the political system, or they may have to rely more heavily upon people who care about the issues but are not reminded of personal financial struggles. In this latter case it is quite possible that this set of people will differ demographically from the rest of the potential members, and may have non-representative views of how the organization should spend its scarce resources. Indeed, this would be consistent with past studies of the internal politics of interest groups, which finds considerable preference heterogeneity among members (e.g. Rothenberg 1992). This heterogeneity is consequential because the leadership responds more closely to the preferences of people who are more active, including those who donate more.

The second implication reflects the fact that, despite the increasing prevalence of Americans making small donations in response to impersonal requests, the participatory donor pool is still highly skewed toward wealthier Americans (Verba et al. 1995, Corrado et al. 2010). This is potentially problematic because who donates affects whose preferences are heard by decision-makers, and if the pool is skewed then it is quite possible that certain preferences are being considered more than others. Broadening the set of people who are expressing their preferences by donating is a potential antidote. Broadening the pool can also be beneficial for its own sake – in general, our democracy fulfills its pledge of equal representation to a greater extent when citizens' preferences are heard equally. Impersonal solicitations are one of the most cost-effective ways to move toward achieving this goal, and knowing when they are persuasive can prevent political organizations from spending significant amounts of scarce resources in counter-productive ways.

Future Research

As mentioned above, the theoretical framework that underlies this dissertation opens multiple avenues for future research. Broadly speaking, the avenues I describe below all refer to situations in which the persuasiveness of content depends upon the context in which it is received. In addition, each relies upon two core principles of mental accounting that underlie the theory in Chapter 2: (1) people do not treat time and money as interchangeable, and (2) people classify scarce resources and these classifications affect their decisions about how to spend time and money.

The first avenue for future research is to examine when requests for volunteers are persuasive. As with donation solicitations, a common belief is that mentioning issues that people care about will increase their willingness to participate, including volunteering time. However, similar to the donation case, there are many issues that people care about that remind them of a temporal budget constraint, such as child care and jobs.¹ Beyond that, it is also common for requests for volunteers to acknowledge the recipient's busy-ness, yet then go on to request his/her time (e.g. to volunteer or contact legislators). Based on the theory outlined in Chapter 2, I would expect that mentioning these issues in a request for volunteers would reduce people's willingness to volunteer time. Yet, at the same time, because people do not treat time and money as interchangeable, I would not expect that mentioning them would reduce people's willingness to donate money.

The second avenue for future research focuses on donation solicitations, and thinking about which types of issues would have the greatest demobilizing effect. For example, one question is whether mentioning sociotropic economic issues has the same effect as mentioning pocketbook economic issues. Based on the theory in Chapter 2, I hypothesize that mentioning sociotropic issues will have a smaller demobilizing effect

¹The latter in the sense of people working multiple jobs and/or being members of two-earner households whose children are engaged in many extracurricular activities.

than pocketbook issues. The reason is because the demobilizing effect described there requires that people link the issue with less-discretionary goods that they themselves need to purchase. For pocketbook issues, this link is immediate. For sociotropic issues, such as “recessionary times,” the link may not be immediate – mentioning “recessionary times” may put people in a bad mood, but there is no evidence that mood accounts for the findings. Yet, by talking about specific things that people consider less-discretionary, a request for money sets up a situation in which people compare spending money on those items relative to a highly discretionary political donation, which in turn makes it difficult to justify spending money on a donation. If this hypothesis is correct, then organizations that wish to acknowledge poor economic times (to appear in-touch, for example) may be better off using sociotropic issues and downplaying associated pocketbook ones.

The third avenue for future research also considers the interplay of content and context, but defines context in terms of external political circumstances such as the likelihood of a favorable outcome. In order to motivate this point, it is necessary to distinguish between two types of mental accounts. The dissertation focuses on mental accounts that are used to classify different types of goods. Yet another type of mental account is a transaction-specific account (Thaler 1980, 1999; Arkes and Blumer 1985, Heath 1995). Transaction-specific accounts allow consumers to set up a mental account for a transaction, debit the payment for the transaction, and then credit it with the benefit achieved from consumption. The structure of these accounts is helpful for thinking about situations in which people receive a solicitation at time t that mentions a potentially favorable political outcome at time $t + n, n > 0$, such as the election of a favored candidate, confirmation of a favored judge, or the passage of favored legislation. In these situations, people consider making donations in a risky environment, and make the donation prior to receiving the benefit from it.² A

²Note that here I assume that one benefit people receive from making donations comes from the collective outcome itself. They could believe that this benefit is consequential—that their donation

question, then, is how the degree of uncertainty or risk affects people’s decisions to donate money, and whether the effect is the same for money and time.

Consider the following example. Suppose an individual received a solicitation by the Human Rights Campaign (HRC) in the summer of 2009. Suppose the solicitation was focused on an issue that this person cared very much about: hate crimes legislation that would incorporate gender identity and sexual orientation in United States federal hate-crime law. The HRC was asking for money to help fund efforts that would hopefully lead to its passage. Suppose the individual donated money, with the hope that it would lead to beneficial legislation in the fall. We may think about him as opening up a “HRC hate crimes legislation mental account”. He debits the cost of the donation right now, with the hope for a credit sometime in the future.

Transaction-specific mental accounts are important because, once established, they affect future spending decisions. In this case, they affect the likelihood that a subsequent solicitation mentioning federal hate crimes law will persuade him to donate again. The reason is because, once people have debited an amount to a transaction-specific account (a so-called “sunk cost”), they are in the domain of losses and are risk-seeking (Kahneman and Tversky 1979, Thaler 1980). Politically, this means that previous donors’ willingness to donate will be heightened when a favorable outcome is highly uncertain (e.g. poll numbers are slipping or, as in the HRC example above, a powerful lawmaker announces opposition to hate-crimes legislation). The upshot is that, relative to those who have not previously donated, we should expect solicitations to be more persuasive among people who have already donated when an outcome is especially risky. If a favorable outcome is likely (and therefore involves little-to-no risk), then we should expect no difference between people depending upon whether they donated in the past.³ Moreover, past work has found that people are not sen-

had a significant impact on the collective outcome—or purposive—the feeling of having contributing to a positive outcome.

³This assumes that people have not “used up” the amount of money that they allow themselves to spend on donations.

sitive to sunk costs when they involve time rather than money (Soman 2001). Thus these differences should not emerge when people receive volunteer requests.

Along with the findings in this dissertation, these three future avenues for research can extend and deepen our understanding of the psychological process and political circumstances that affect how people decide to participate in politics and when requests for participation will be persuasive. Answering them will have important implications for broadening the set of voices that are heard in American democracy.

APPENDICES

APPENDIX A

Appendix for Chapter 6

Proof of Proposition 1

There are sixteen pure strategies available for citizen:

$\pi_{citizen} = \{(1, 1, 1, 1), (1, 1, 1, 0), (1, 1, 0, 0), (1, 0, 0, 0), (1, 0, 0, 1), (1, 0, 1, 1), (1, 0, 1, 0), (1, 1, 0, 1), (0, 1, 1, 1), (0, 1, 1, 0), (0, 1, 0, 0), (0, 0, 0, 0), (0, 0, 0, 1), (0, 0, 1, 1), (0, 0, 1, 0), (0, 1, 0, 1)\}$. I focus on pure-strategy equilibria following arguments made in Lupia and McCubbins (1998:247). Twelve of these involve situations in which the citizen would donate when $S = 0$. As shown below these cannot be part of a pure strategy perfect Bayesian equilibrium:

Lemma 1: There does not exist a pure-strategy perfect Bayesian equilibrium with either $p(g; m = \text{Costly}, S = 0) = 1$ or $p(g; m = \text{Free}, S = 0) = 1$.

Proof of Lemma 1: Suppose that there did exist a perfect Bayesian equilibria in which either condition held. In that case, $EU_{citizen}(g = 1) = \underline{U} < 0$ and $EU_{citizen}(g = 0) = 0$. The citizen would never choose $g = 1$ in this case.

To solve for the pure-strategy equilibria I proceed as follows. First, I find the solicitor's best response strategy, given the strategy of the citizen. Second, I update the citizen's beliefs about the state of the world, given the solicitor's best response

Table A.1: Citizen Expected Utilities

G	S	EU
$g = 1$	$S = 1$	$\mu(\text{credible} m)U + \mu(\text{not credible} m)\underline{U}$
$g = 0$	$S = 1$	0
$g = 1$	$S = 0$	\underline{U}
$g = 0$	$S = 0$	0

strategy. Third, I derive the conditions under which the citizen's strategy is a best response to the solicitor's best response strategy, conditional on the citizen's updated beliefs. To do so, I compare expected utilities as shown in Table A.1.

Also note that I make the following tie-breaking assumptions about the citizen's and solicitor's strategies. For the citizen, if $EU(g = 1|m = j) = EU(g = 0|m = j)$, then $g = 0$. In other words, the citizen must strictly prefer giving in order to give. For the solicitor, if $EU(m = Free) = EU(m = Costly)$, then $m = Free$. The solicitor must strictly prefer sending the costly message in order to send it.

$$\pi_{\text{citizen}} = (\mathbf{0}, \mathbf{0}, \mathbf{1}, \mathbf{0})$$

First consider the solicitor's best response:

- If $n_b = \text{credible}$, then $EU(m = Costly) = sA - c_b$ and $EU(m = Free) = 0$.
- If $n_b = \text{not credible}$, then $EU(m = Costly) = sA - c_{nb}$ and $EU(m = Free) = 0$.

In all cases, whether the solicitor prefers $m = Free$ or $m = Costly$ depends upon the values of c_b , c_{nb} , s , and A . In particular, there are four cases to consider: Case 1: $0 > sA - c_b$ & $0 > sA - c_{nb}$, Case 2: $0 > sA - c_b$ & $0 \leq sA - c_{nb}$, Case 3: $0 \leq sA - c_b$ & $0 > sA - c_{nb}$, and Case 4: $0 \leq sA - c_b$ & $0 \leq sA - c_{nb}$. I consider each of these four cases in turn.

Case 1: $0 > sA - c_b$ & $0 > sA - c_{nb}$. The solicitor's best response at both information sets is $m = Free$. Thus, $\pi_{\text{solicitor}} = \{Free, Free\}$. Given the solicitor's best response strategy, the citizen updates his beliefs. This leads to the following beliefs: $\mu_{\text{citizen}}(\text{credible}|m = Free) = b$ and $\mu_{\text{citizen}}(\text{not credible}|m = Free) = 1 - b$. Finally, I examine the conditions under which the citizen's best response is a best response to the solicitor's best response. At $m = Free$, the equilibrium requires that $EU(g = 1) \leq EU(g = 0)$. Following Table A.1, this means that $\mu(\text{credible}|m = Free)U + \mu(\text{not credible}|m = Free)\underline{U} \leq 0$. This condition is satisfied whenever $bU + (1-b)\underline{U} \leq 0$. At $m = Costly$, the equilibrium requires that $EU(g = 1) > EU(g =$

0). This means that $\mu(\text{credible}|m = \text{Costly})U + \mu(\text{not credible}|m = \text{Costly})\underline{U} > 0$ (following the off-the-equilibrium path assumption identified earlier). This condition is satisfied whenever $bU + (1 - b)\underline{U} > 0$. Clearly these two conditions contradict one another, and therefore this case cannot be a perfect Bayesian equilibrium.

Case 2: $0 > sA - c_b$ & $0 \leq sA - c_{nb}$. The solicitor's best response is $\pi_{\text{solicitor}} = \{\text{Free}, \text{Costly}\}$. Given the solicitor's best response strategy, the citizen updates his beliefs. This leads to the following beliefs: $\mu_{\text{citizen}}(\text{credible}|m = \text{Free}) = 1$ and $\mu_{\text{citizen}}(\text{not credible}|m = \text{Free}) = 0$. Finally, I examine the conditions under which the citizen's best response is a best response to the solicitor's best response. At $m = \text{Free}$, the equilibrium requires that $EU(g = 1) \leq EU(g = 0)$. Following Table A.1, this means that $\mu(\text{credible}|m = \text{Free})U + \mu(\text{not credible}|m = \text{Free})\underline{U} \leq 0$. This condition is satisfied whenever $U \leq 0$, which is not possible. Therefore, this case cannot be a perfect Bayesian equilibrium.

Case 3: $0 \leq sA - c_b$ & $0 > sA - c_{nb}$. The solicitor's best response is $\pi_{\text{solicitor}} = \{\text{Costly}, \text{Free}\}$. Given the solicitor's best response strategy, the citizen updates his beliefs. This leads to the following beliefs: $\mu_{\text{citizen}}(\text{credible}|m = \text{Free}) = 0$ and $\mu_{\text{citizen}}(\text{not credible}|m = \text{Free}) = 1$. Finally, I examine the conditions under which the citizen's best response is a best response to the solicitor's best response. At $m = \text{Free}$, the equilibrium requires that $EU(g = 1) \leq EU(g = 0)$. Following Table A.1, this means that $\mu(\text{credible}|m = \text{Free})U + \mu(\text{not credible}|m = \text{Free})\underline{U} \leq 0$. This condition is satisfied whenever $\underline{U} \leq 0$, which is always satisfied by assumption. At $m = \text{Costly}$, the equilibrium requires that $EU(g = 1) > EU(g = 0)$. This means that $\mu(\text{credible}|m = \text{Costly})U + \mu(\text{not credible}|m = \text{Costly})\underline{U} > 0$. This condition is satisfied whenever $U > 0$, which again is always satisfied by assumption. Thus, in this case we have a perfect Bayesian equilibrium $\pi = \{\text{Costly}, \text{Free}; (0, 0, 1, 0)\}$ with initial belief $b \leq 0.5$.

Case 4: $0 \leq sA - c_b$ & $0 \leq sA - c_{nb}$. The solicitor's best response at both information sets is $m = \text{Costly}$. Thus, $\pi_{\text{solicitor}} = \{\text{Costly}, \text{Costly}\}$. Given the solicitor's best response strategy, the citizen updates his beliefs. This leads to the following beliefs: $\mu_{\text{citizen}}(\text{credible}|m = \text{Free}) = b$ and $\mu_{\text{citizen}}(\text{not credible}|m = \text{Free}) = 1 - b$. Finally, I examine the conditions under which the citizen's best response is a best response to the solicitor's best response. At $m = \text{Free}$, the equilibrium requires that $EU(g = 1) \leq EU(g = 0)$. Following Table A.1, this means that $\mu(\text{credible}|m = \text{Free})U + \mu(\text{not credible}|m = \text{Free})\underline{U} \leq 0$ (following the off-the-equilibrium path assumption identified earlier). This condition is satisfied whenever $bU + (1 - b)\underline{U} \leq 0$. At $m = \text{Costly}$, the equilibrium requires that $EU(g = 1) > EU(g = 0)$. This means that $\mu(\text{credible}|m = \text{Costly})U + \mu(\text{not credible}|m = \text{Costly})\underline{U} > 0$. This condition is satisfied whenever $bU + (1 - b)\underline{U} > 0$. Clearly these two conditions contradict one another, and therefore this case cannot be a perfect Bayesian equilibrium.

This concludes all of the possible perfect Bayesian equilibria when $\pi_{\text{citizen}} = (0, 0, 1, 0)$.

$$\underline{\pi_{\text{citizen}}} = (\mathbf{1}, \mathbf{0}, \mathbf{0}, \mathbf{0})$$

First consider the solicitor's best response:

- If $n_b = \text{credible}$, then $EU(m = \text{Costly}) = -c_b$ and $EU(m = \text{Free}) = sA$.
- If $n_b = \text{not credible}$, then $EU(m = \text{Costly}) = -c_{nb}$ and $EU(m = \text{Free}) = sA$.

The solicitor's best response at both information sets is $m = \text{Free}$. Thus, $\pi_{\text{solicitor}} = \{\text{Free}, \text{Free}\}$. Given the solicitor's best response strategy, the citizen updates his beliefs. This leads to the following beliefs: $\mu_{\text{citizen}}(\text{credible}|m = \text{Free}) = b$, $\mu_{\text{citizen}}(\text{not credible}|m = \text{Free}) = 1 - b$. Finally, I examine the conditions under which the citizen's best response is a best response to the solicitor's best response. At $m = \text{Free}$, the equilibrium requires that $EU(g = 1) \leq EU(g = 0)$. Following Table A.1, this means that $\mu(\text{credible}|m = \text{Free})U + \mu(\text{not credible}|m = \text{Free})\underline{U} \leq 0$. This condition is satisfied whenever $bU + (1 - b)\underline{U} \leq 0$. At $m = \text{Costly}$, the equilibrium requires that $EU(g = 1) > EU(g = 0)$. This means that $\mu(\text{credible}|m = \text{Costly})U + \mu(\text{not credible}|m = \text{Costly})\underline{U} > 0$ (following the off-the-equilibrium path assumption identified earlier). This condition is satisfied whenever $bU + (1 - b)\underline{U} > 0$. Clearly these two conditions contradict one another, and therefore this case cannot be a perfect Bayesian equilibrium.

$$\underline{\pi_{\text{citizen}}} = (\mathbf{0}, \mathbf{0}, \mathbf{0}, \mathbf{0})$$

First consider the solicitor's best response:

- If $n_b = \text{credible}$, then $EU(m = \text{Costly}) = -c_b$ and $EU(m = \text{Free}) = 0$.
- If $n_b = \text{not credible}$, then $EU(m = \text{Costly}) = -c_{nb}$ and $EU(m = \text{Free}) = 0$.

The solicitor's best response at both information sets is $m = \text{Free}$. The citizen learns nothing about the solicitor's type, and thus prefers $g = 0$ when whenever $bU + (1 - b)\underline{U} \leq 0$. Thus, in this case we have a perfect Bayesian equilibrium $\pi = \{\text{Free}, \text{Free}; (0, 0, 0, 0)\}$ with initial belief $b \leq 0.5$.

$$\underline{\pi_{\text{citizen}}} = (\mathbf{1}, \mathbf{0}, \mathbf{1}, \mathbf{0})$$

First consider the solicitor's best response:

- If $n_b = \text{credible}$, then $EU(m = \text{Costly}) = sA - c_b$ and $EU(m = \text{Free}) = sA$.
- If $n_b = \text{not credible}$, then $EU(m = \text{Costly}) = sA - c_{nb}$ and $EU(m = \text{Free}) = sA$.

The solicitor's best response at both information sets is $m = \text{Free}$. The citizen learns nothing about the solicitor's type, and thus prefers $g = 1$ when whenever $bU + (1 - b)\underline{U} > 0$. Thus, in this case we have a perfect Bayesian equilibrium $\pi = \{\text{Free}, \text{Free}; (1, 0, 1, 0)\}$ with initial belief $b > 0.5$.

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