INFORMATION ABOUT PRINCIPAL INVESTIGATORS/PROJECT DIRECTORS(PI/PD) and co-PRINCIPAL INVESTIGATORS/co-PROJECT DIRECTORS

Submit only ONE copy of this form **for each PI/PD** and **co-PI/PD** identified on the proposal. The form(s) should be attached to the original proposal as specified in GPG Section II.B. Submission of this information is voluntary and is not a precondition of award. This information will not be disclosed to external peer reviewers. *DO NOT INCLUDE THIS FORM WITH ANY OF THE OTHER COPIES OF YOUR PROPOSAL AS THIS MAY COMPROMISE THE CONFIDENTIALITY OF THE INFORMATION.*

PI/PD Name:	Raymond M Duch							
Gender:		\boxtimes	Male		Fema	lle		
Ethnicity: (Choose	e one response)		Hispanic or Lati	ino	\boxtimes	Not Hispanic or Latino		
Race:			American India	n or	Alaska	Native		
(Select one or more	e)		Asian					
			Black or African	n Am	erican			
			Native Hawaiia	n or	Other	Pacific Islander		
		\boxtimes	White					
Disability Status:			Hearing Impairr	nent				
(Select one or more	e)		Visual Impairment					
			Mobility/Orthop	edic	Impai	ment		
			Other					
			None					
Citizenship: (Ch	noose one)		U.S. Citizen		\boxtimes	Permanent Resident		Other non-U.S. Citizen
Check here if you	do not wish to provid	de an	y or all of the al	oove	infor	mation (excluding PI/PD name	:):	
REQUIRED: Chec project ⊠	k here if you are curre	ently	serving (or hav	e pre	evious	sly served) as a PI, co-PI or PI	on a	ny federally funded

Ethnicity Definition:

Hispanic or Latino. A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race.

Race Definitions:

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American. A person having origins in any of the black racial groups of Africa.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

WHY THIS INFORMATION IS BEING REQUESTED:

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PIs/PDs. To gather information needed for this important task, the proposer should submit a single copy of this form for each identified PI/PD with each proposal. Submission of the requested information is voluntary and will not affect the organization's eligibility for an award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information recieved from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. (The exceptions are the PI/PD name and the information about prior Federal support, the last question above.)

Collection of this information is authorized by the NSF Act of 1950, as amended, 42 U.S.C. 1861, et seq. Demographic data allows NSF to gauge whether our programs and other opportunities in science and technology are fairly reaching and benefiting everyone regardless of demographic category; to ensure that those in under-represented groups have the same knowledge of and access to programs and other research and educational oppurtunities; and to assess involvement of international investigators in work supported by NSF. The information may be disclosed to government contractors, experts, volunteers and researchers to complete assigned work; and to other government agencies in order to coordinate and assess programs. The information may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records", 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records", 63 Federal Register 268 (January 5, 1998).

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PI/PD Name: Randolph T Stevensor	า						
Gender:	\boxtimes	Male		Fema	le		
Ethnicity: (Choose one response)		Hispanic or Latir	no	\boxtimes	Not Hispanic or Latino		
Race:		American Indian	or A	laska	Native		
(Select one or more)		Asian					
		Black or African	Ame	erican			
		Native Hawaiian	or C	Other	Pacific Islander		
	\boxtimes	White					
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		Other					
	\boxtimes	None					
Citizenship: (Choose one)	\boxtimes	U.S. Citizen			Permanent Resident		Other non-U.S. Citizen
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REQUIRED: Check here if you are curre project ⊠	ently	serving (or have	pre	vious	sly served) as a PI, co-PI or P	D on a	ny federally funded
Ethnicity Definition.		•			<u> </u>		

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List of Suggested Reviewers or Reviewers Not 10 include (optional)
SUGGESTED REVIEWERS: Not Listed
REVIEWERS NOT TO INCLUDE: Not Listed

List of Suggested Reviewers of Reviewers Not 10 include (optional)
SUGGESTED REVIEWERS: Not Listed
REVIEWERS NOT TO INCLUDE: Not Listed

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/if not in response to a program announcement/solicitation enter NSF 02-2 FOR NSF USE ONLY							R NSF USE ONLY		
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PI/PD FAX NUMBER 713-743-3927				on, TX 77204	13474				
NAMES (TYPED)		High D	United egree	Yr of Degree	Telephone Number	er	Electronic Mail	Address	
PI/PD NAME			-						
Raymond M Du	ch	PhD		1982	713-743-3913	3 rduch@	uh.edu		
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CERTIFICATION PAGE

Certification for Authorized Organizational Representative or Individual Applicant:

By signing and submitting this proposal, the individual applicant or the authorized official of the applicant institution is: (1) certifying that statements made herein are true and complete to the best of his/her knowledge; and (2) agreeing to accept the obligation to comply with NSF award terms and conditions if an award is made as a result of this application. Further, the applicant is hereby providing certifications regarding debarment and suspension, drug-free workplace, and lobbying activities (see below), as set forth in Grant Proposal Guide (GPG), NSF 02-2. Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U. S. Code, Title 18, Section 1001).

In addition, if the applicant institution employs more than fifty persons, the authorized official of the applicant institution is certifying that the institution has implemented a written and enforced conflict of interest policy that is consistent with the provisions of Grant Policy Manual Section 510; that to the best of his/her knowledge, all financial disclosures required by that conflict of interest policy have been made; and that all identified conflicts of interest will have been satisfactorily managed, reduced or eliminated prior to the institution's expenditure of any funds under the award, in accordance with the institution's conflict of interest policy. Conflicts which cannot be satisfactorily managed, reduced or eliminated must be disclosed to NSF.

Drug Free Work Place Certification

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Drug Free Work Place Certification contained in Appendix A of the Grant Proposal Guide.

Debarment and Suspension Certification

(If answer "yes", please provide explanation.)

Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency?

Yes ☐ No 🛛

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Debarment and Suspension Certification contained in Appendix B of the Grant Proposal Guide.

Certification Regarding Lobbying

This certification is required for an award of a Federal contract, grant, or cooperative agreement exceeding \$100,000 and for an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

AUTHORIZED ORGANIZATIONAL REP	SIGNATURE		DATE		
NAME					
Rosemary Grimmet	Electronic Signature		Jan 22 2002 6:03PM		
TELEPHONE NUMBER	ELECTRONIC MAIL ADDRESS		FAX N	UMBER	
713-743-9201	rgrimmet@uh.edu		713	3-743-9577	

*SUBMISSION OF SOCIAL SECURITY NUMBERS IS VOLUNTARY AND WILL NOT AFFECT THE ORGANIZATION'S ELIGIBILITY FOR AN AWARD. HOWEVER, THEY ARE AN INTEGRAL PART OF THE INFORMATION SYSTEM AND ASSIST IN PROCESSING THE PROPOSAL. SSN SOLICITED UNDER NSF ACT OF 1950, AS AMENDED.

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/if not in response to a program announcement/solicitation enter NSF 02-2 FOR NSF USE ONLY									
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PI/PD DEPARTMENT Political Science			PI/PD POST 2314 S.	TAL ADDRESS Beverly Ci	·.				
PI/PD FAX NUMBER 713-348-5273			Staffor United	d, TX 77477	,				
NAMES (TYPED)		High De		Yr of Degree	Telephone Number	er	Electronic Mail	Address	
PI/PD NAME									
Randolph T Stev	venson	PhD		1997	713-348-2104	4 stevenso	@ruf.rice.edu		
CO-PI/PD									
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AUTHORIZED ORGANIZATIONAL REP	SIGNATURE		DATE		
NAME					
Heidi Thornton		Electronic Signature		Jan 22 2002 5:52PM	
TELEPHONE NUMBER	ELECTRONIC MAIL ADDRESS		FAX N	UMBER	
713-348-4820	heidi@rice.edu		713	3-348-5425	

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An important puzzle in the study of comparative political behavior is the apparent variability, across countries and over time, of the extent and nature of economic influences on political support for parties and politicians. In this proposal, we offer a theoretical solution to this puzzle and outline a plan for testing it empirically. The theoretical solution departs from previous work on comparative economic voting because it draws heavily on relatively recent insights into the nature, sources, and impact of information on public opinion (Zaller 1992, 2001; Mutz 1998; Lupia and McCubbins 1998; Iyengar 1991; Page and Shapiro 1992; Delli Carpini and Keeter 1996). Such work differs from earlier literature in two ways: (1) it assigns a dominant role to the media in communicating information to citizens and ultimately in influencing their political opinions and behavior; (2) it accounts for individual heterogeneity in political opinion and behavior largely through differences in people's incentive and ability to receive and accept media messages (i.e., their political awareness).

Most of the insights of this literature, however, have not yet penetrated the comparative study of economic voting, which has maintained quite simple conceptions of the cognitive process that leads to the empirical phenomenon of economic voting. This is perhaps the reason that the leading explanation for cross-national difference in economic voting, the "clarity of responsibility" hypothesis, has had only limited empirical success.

In this project, we offer a more nuanced theoretical model of economic voting that builds on the recent literature in American public opinion (which is itself an outgrowth of advances in cognitive psychology). We begin with the usual economic voting model, but recognize that it is really built from a series of connected opinions (i.e., an economic judgment, an attribution of responsibility for the economy, and an expression of political support). Consequently, a fruitful way of building a more fully realized model of economic voting would be to flesh out the explanation of how voters form and change each of these opinions. Fortunately, the public opinion literature mentioned above provides a general theoretical framework from which these opinion models can be built. This theoretical expansion of the economic voting model accommodates a number of the most prominent, but more ad hoc, hypotheses about comparative economic voting already in the literature, but it also generates a whole range of new theoretical hypotheses. Indeed, this theory promises to reorient student of comparative economic voting away from an exclusive focus on governmental institutions and party systems as the sources of difference in cross-national economic voting; and toward a focus on international differences in how the media reports on the economy. In addition, the theory produces a number of new sources of individual level heterogeneity in economic voting that (because of difference in the distribution of these characteristics in different populations) could also help explain variation in economic voting cross nationally.

In order to explore whether this kind of theoretical expansion is useful we will need to collect data on what the media in different countries say about the economy over time. To do this, we propose to collect about 30,000 front-pages of selected newspapers from 15 developed democracies from 1980-2001. These papers will be copied and coded for economic (and some political) messages by native language speakers.

The project will also require information at the individual level. Many of the hypotheses specify relationships between variables like political awareness and economic judgments, political support, or responsibility attributions. To test these, we need to ask a series of survey questions to citizens in different countries. We propose to do this inexpensively, by including a relatively short battery of the relevant items on the Gallup surveys conducted in each country.

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In this project, we offer a more nuanced theoretical model of economic voting that builds on the recent literature in American public opinion (which is itself an outgrowth of advances in cognitive psychology). We begin with the usual economic voting model, but recognize that it is really built from a series of connected opinions (i.e., an economic judgment, an attribution of responsibility for the economy, and an expression of political support). Consequently, a fruitful way of building a more fully realized model of economic voting would be to flesh out the explanation of how voters form and change each of these opinions. Fortunately, the public opinion literature mentioned above provides a general theoretical framework from which these opinion models can be built. This theoretical expansion of the economic voting model accommodates a number of the most prominent, but more ad hoc, hypotheses about comparative economic voting already in the literature, but it also generates a whole range of new theoretical hypotheses. Indeed, this theory promises to reorient student of comparative economic voting away from an exclusive focus on governmental institutions and party systems as the sources of difference in cross-national economic voting; and toward a focus on international differences in how the media reports on the economy. In addition, the theory produces a number of new sources of individual level heterogeneity in economic voting that (because of difference in the distribution of these characteristics in different populations) could also help explain variation in economic voting cross nationally.

In order to explore whether this kind of theoretical expansion is useful we will need to collect data on what the media in different countries say about the economy over time. To do this, we propose to collect about 30,000 front-pages of selected newspapers from 15 developed democracies from 1980-2001. These papers will be copied and coded for economic (and some political) messages by native language speakers.

The project will also require information at the individual level. Many of the hypotheses specify relationships between variables like political awareness and economic judgments, political support, or responsibility attributions. To test these, we need to ask a series of survey questions to citizens in different countries. We propose to do this inexpensively, by including a relatively short battery of the relevant items on the Gallup surveys conducted in each country.

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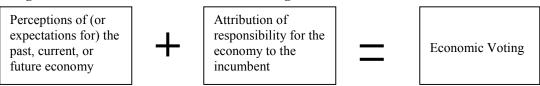
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Introduction

Many people believe that the economy is the most important influence on political support for incumbent politicians. However, as a scientific proposition, this belief has been hard to establish unequivocally. In the United States, empirical work has generally supported an economic influence on expressions of political support, but the nature of that influence has been the source of almost constant debate. In other countries, disagreement about the nature and strength of the economy-support relationship is even more pronounced. Some scholars have had trouble finding any empirical relationship between the economy and political support, but even among those who do identify some kind of relationship, contradictory evidence about the *nature* of the relationship persists. The initial comparative studies of economic voting (that is those that used the same measures and comparable data across several countries) have done little to clarify this situation. Paldam (1991) could find no systematic relationship between the economy and aggregate electoral results in the 19 countries he studied. Likewise, while Lewis-beck (1988) found evidence of economic voting at the individual level in Britain, Spain, France, and Italy, the strength and nature of this relationship varied considerably across countries.

More recent work has abandoned the hope that a single empirical model can account for economic voting across countries. Instead, these scholars accept the variability of economic influences on support, but try to account for them by identifying variables that may condition the strength and nature of the economy – support link. The theoretical starting point for this effort looks (for almost all of these studies) something like the following simple model of political support:

Figure 1: A Standard Model of Economic Voting



While this model is stark, it represents a complication to many earlier models in which the second term would not have been included.⁴ Further, it has the critical components necessary to motivate Powell and Whitten's notion that cross-national differences in the strength of economic voting are due to differences in the ability of voters in different systems to attribute responsibility for the economy to incumbents. Specifically, Powell and Whitten (1993) suggested that systems in which the institutions of government produced "clarity of responsibility" (e.g., a single governing party, weak legislatures, and weak central banks), voters would find it easier to identify the incumbents that they should (according the model in Figure 1) hold accountable for economic fluctuation. Consequently, these systems would evidence more economic voting than systems where responsibility for economic outcomes is clouded by the existence of coalition partners, strong oppositions, or other institutional barriers to strong one-party government. Powell and Whitten found support for their model using aggregate data, but other aggregate studies (Stevenson 2002) with different empirical specifications have produced conflicting results.

While the clarity idea helped bring some order to the economic voting literature, recent findings suggest that the simple theoretical picture presented in Figure 1 is too stark to effectively explain both cross-national, and within nation, variations in economic voting. A case in point is the empirical fact, documented in many comparative studies of economic voting, that national electorates vary in the importance they accord to different economic outcomes when they vote (Chappell and Keech 1985 and Lewis-Beck 1988). To take the results from Lewis-Beck's (1988) comparative study, the fact that the

¹ For example, is economic voting asymmetric (punishing incumbents but not rewarding them)? Is it prospective or retrospective? Is it focused on personal or national economic conditions? Is it Affective or coldly rational? Is it informed and strategic or is it just a convenient heuristic that guides voting behavior in the absence of other more relevant information?

² An example of this cross-national variability in the nature of economic voting is the apparent difference in the particular aspects of the economy (i.e., prices, growth, the labor market) that scholars have found to be empirically relevant to political support (Anderson 1997; Lewis-Beck 1988; Paldam 1991).

³ We will use the term "economic voting" as convenient shorthand for any empirical relationship between the economy or economic perceptions and political support (whether votes, voting intentions, or expressions of support in polls).

⁴ The theoretical development of the comparative economic voting literature has not been a priority of most of the authors writing in this field, who have been much more focused on establishing a set of empirical regularities that apply across countries.

economic vote in France is highly influenced by unemployment rates but not at all by price levels cannot be explained within the theoretical framework presented in Figure 1. In fact, Lewis-Beck (1988, 93) advises that "...the task of finally tagging the most important particular macroeconomic indicator is hopeless." We concur that this task is hopeless but we do not agree that the cross-national variation in the weight placed on these different indicators is unimportant. On the contrary we believe this heterogeneity in economic voting reflects fundamental differences in the economic messages that citizens in different countries receive, in how responsibility for these outcomes is attributed and in individual-level predispositions regarding these economic messages. Theoretical approaches based on Figure 1 cannot accommodate these empirics because they assume that evaluations reflect objective economic outcomes and attribution is homogeneously shaped by fixed institutional characteristics.

Our reservations regarding the adequacy of Figure 1 are predicated on speculation that there are significant cross-national and within-nation variations in the messages and information citizens receive about the economy and how they process this information. The failure of the simple model in Figure 1 to explain the voting behavior of post-communist electorates speaks to the veracity of these speculations. Many of the efforts to model the voting behavior of post-communist electorates concluded that the simple accountability model in Figure 1 was woefully inadequate (Duch 2001; Duch 1993; Tucker 1999a; Powers and Cox 1997). Most importantly, this model did not accommodate the individual-level and contextual variables that play a very important role in shaping how individuals respond politically to the macroeconomy. Tucker (1999a and 1999b) and Powers and Cox (1997), in particular, demonstrate that individuals have predispositions and "economic ideologies" that condition their receptivity to messages regarding the economy and regarding the attribution of responsibility for the economy. Similarly, Duch (2001) demonstrates in the case of Hungary and Poland how the information levels of transition electorates can generate very different levels of economic voting than might be expected in more mature democracies.

Scholars have also noted that the electoral consequences of economic outcomes have had very inconsistent effects on incumbent governments and party fortunes. Kitshelt (1994), for example, carefully details the extent to which economic voting models do a poor job of explaining the electoral fortunes of Socialist parties throughout the 1980s period. Moreover he concludes that institutional variables that shape clarity of responsibility—i.e., the intervening variable in Figure 1—are not candidates for explaining these deviations from the standard model. Scholars have proposed a number of explanations for these inconsistencies. For example, Clarke, Stewart and Whiteley (1998), Kitschelt (1994) and Stevenson (2001) argue that voters respond in an asymmetric fashion to economic outcomes, depending on the nature of the outcomes and the partisanship of the incumbent coalition. Once again, these nuances to the theory of economic voting cannot be accommodated in the narrow theoretical framework outlined in Figure 1.

In the discussion that follows we suggest one way forward in building a more fully realized model of economic voting that will accommodate these empirical challenges to the conventional economic voting model.

Theory

The most important insight necessary in building a more nuanced model of economic influence on political support is the recognition that each of the components of the traditional model (Figure 1) is an *opinion*. Consequently, the study of economic voting should be focused on understanding what factors influence these opinions and why they move together in predictable ways. More often than not, however, students of economic voting (and especially of comparative economic voting) have not paid attention to developments in the literature on public opinion. This inattention is especially regrettable given the wave of activity that swept through the American public opinion literature during the last decade – producing a number of important theoretical and empirical innovations (for example, Zaller 1992; Mutz 1998; Iyengar 1991; Bartels 1996; Lodge, Steenbergen and Brau. 1995). Indeed, one of the main messages of the work

⁵ This inattention tends to produce a disjuncture between how students of public opinion in different periods have thought about the nature of individual cognition and the way that these cognitions are represented in economic voting models. For example, during the years in which Converse's claims of voter non-attitudes and the randomness of aggregate opinion were in ascendancy, economic voting models were being published that required voters to understand not only economic outcomes, but the economic policies of competing parties.

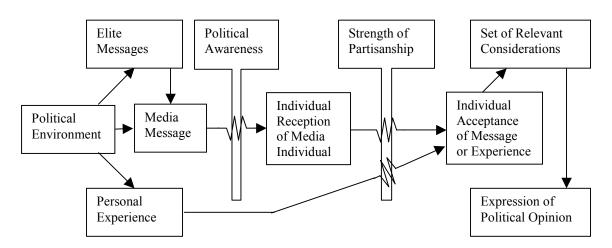
proposed here is that these recent advances offer comparativists the opportunity to build a more compelling comparative explanation of how the economy influences political support

In the rest of this section we describe how this opportunity might be exploited. Specifically, we begin by describing one important model of public opinion formation and change (due to Zaller 1992) and then show how it can be applied to the three opinions pictured in Figure 1 (economic judgments; attribution of responsibility and political opinion). Finally, we discuss the way that the models for these three opinions interact, both through the action of shared exogenous influences and through direct connections between the models.

This theoretical exercise suggests a number of novel explanations for the cross-national and temporal heterogeneity in economic voting that was discussed above. Further, it provides an integrated structure in which other variables, already identified in the economic voting literature are quite naturally accommodated. As such, it illustrates how we intend to build the theory in this project and motivates the data collection effort described below. We do not, however, want to imply that this is the final form of the theoretical model that will guide this project. Rather, the final model will also draw on the work of other scholars that have contributed (mostly) compatible visions of public opinion formation and change (e.g. Lodge, Steenbergen and Brau 1995; Lodge and McGraw 1995). That said, however, we rely almost exclusively on Zaller's model in this proposal because it will be familiar to most political scientists, is completely formulated and accessible, and is (in a slightly modified form) close enough to what we intend illustrate the kinds of insights that we think the modern public opinion literature has to offer students of comparative economic voting.

Figure 2 summarizes some of the most important connections in Zaller's theory of opinion formation and change. Since most readers will be familiar with this model, we concentrate our discussion on three specific features of the model will be important to its application to economic voting: (1) the impact of media behavior on opinions; (2) the sources of heterogeneity in the impact of the media on opinion; (3) the role of personal experience on opinions.

Figure 2: A (slightly) Modified Version of Zaller's Model of Political Opinion Formation and Change



Covariation between political awareness and strength or partisanship is positive

The Importance of Media Behavior on Opinion

Zaller's work differs from previous efforts to explain public opinion in its insistence that elites and the media are the driving force behind change in American public opinion in the United States. For years, the media's impact on political opinion had been characterized as minimal (see McGuire 1986 for a review) or limited to an agenda setting function (beginning with McCombs and Shaw 1972). Zaller's model, however, clearly gives the media a dominant role in shaping public opinion – a view echoed by many other

recent voices (Bartels 1996; Hetherington 1996;). Further, new empirical research, which uses new measures of the key concepts and accounts for individual heterogeneity in the reception and acceptance of media messages, supports the media's new status as the maker of public opinion (Mutz 1998; Zaller 1992, 2002; Iyengar 1991).

Given this emphasis on the media's role in opinion formation and change, it is, of course, natural to ask how media messages are themselves formed and change? Zaller's (2002), for example, has recently explored how market incentives, professional standards, and political competition play out in the editorial offices of the American political press. Overall, he (and many others) concludes that the press is not a benign force in American politics, faithfully transmitting the "true" story to the public. Instead, the media is an active selector and framer of the news. For the purposes of the model in Figure 2, this suggests that we should not assume that the connections between the political environment, elite messages, and the media message are unbiased, but should explore what kind of biases may be present. This effort is necessary because we are ultimately interested in how the real economy impacts political support, not just how the media message about the economy may move opinion.

Sources of Heterogeneity in the impact of the Media on Opinion

One of the key contributions of Zaller's work has been to focus the attention of students of public opinion on two variables (political awareness and strength of partisanship) that impact people's reception and acceptance of political messages from the media (and, therefore, condition the effect of the media on opinion). Specifically, Zaller makes three assumptions about these variables and their interaction:

- (A1) Greater political awareness increases the chance that a person will receive any given media message.
- (A2) Strong partisans will tend to reject political messages that they receive that are not in accordance with their partisan affiliations.
- (A3) An individual's level of political awareness is positively correlated with the strength of her partisanship.

Taken together, these assumptions lead to the most important testable implication in the theory: People at middle levels of political awareness will be more likely to change their opinions in response to a changing media message than will people at high or low levels of political awareness. This is the most important implication of the theory because it tells us how to separate people whose opinions can be changed by media messages from those whose opinions cannot. Consequently, given a distribution of these different types of people in a population, we can use the theory to predict what the impact of a given political message will be.

An important part of our application of this model to the question of economic voting will be to specify similar sets of variables that, through their impact on the probability of reception and acceptance of media messages, will condition the impact of the media on economic perceptions, attributions of responsibility, and political support.

The Role of Personal Experience

Students of Zaller's work might be surprised to find a path for personal experiences in an explication of his model. However, those familiar with the wider literature in American public opinion will recognize why we have added it. While most current scholars of American public opinion subordinate the role of personal experience to that of the media, many have argued that personal experience can be very important in certain kinds of opinions, especially when one's experience provides a source of information about changes in the political environment that is independent of media messages (Mutz 1998). Admittedly, these cases may be rare in modern society (much of the information that we get through interpersonal contact comes ultimately from media sources), but economic information (at least for some dimensions of the economy) may well be one of those cases. As we discuss more fully below, some people are able to garner significant independent information about the state of the national economy in their daily economic exchanges. For example, a person who regularly shops for a diverse basket of household goods is exposed to an unmediated (albeit noisy) sample of the price levels. We suggest that these experiences will decrease the impact of media messages (and media biases) on such people's assessment of the economy.

It is also worth noting that we have incorporated personal experience into Zaller's framework not as a path from the real economy directly to the set of relevant considerations, but instead to the acceptance stage

of the model. This requires a slight expansion of Zaller's notion of acceptance of media messages to include acceptance the "message" of personal experience. In our view, it is just as likely for a strong partisan, for example, to offer counter arguments and *ex post* rationalizations for discordant personal experience than for discordant media messages. Consequently, we would expect to see the impact of changes in personal experience to be muted in strong partisans. We are not aware of any empirical study that has yet pursued this hypothesis.

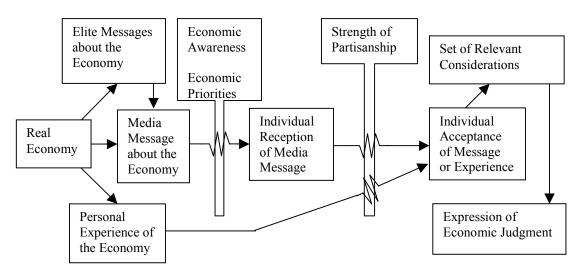
A More Fully Realized Model of Economic Voting

As we indicated above, we begin our effort to build a model of economic voting that accounts for how people come to form and change their political opinions by accepting the basic structure of the traditional model in Figure 1. Our task, however, is to flesh out this model by applying Zaller's theory to each of the three opinions represented there. Below, we do this separately for all three opinions (i.e., economic judgments, political support, and attribution of responsibility) and then discuss the possible interactions between them that could generate links between the economy and political support. For each of the individual models, we first present a schematic analogous to Figure 2; then discuss how we might expect media incentives to impact the relationship between changes in the relevant environment and changes in the media messages. Next, we discuss the variables that are likely to condition reception and acceptance of the relevant media messages. And finally, we address the role of personal experience.

Economic Judgments

Figure 3 provides an overview of our application of Zaller's model to economic judgments. Recall that in most of the economic voting literature, economic judgments have typically been treated as both exogenous and (at least on average) correct (i.e., reflecting the true economy). Here, however, we treat economic judgments as opinions (which need not reflect what is happening in the "real" economy) and uses the theoretical framework from Figure 2 to explore how they form and change. Since we have emphasized the importance of avoiding *ad hoc* specifications in fleshing out the traditional model of economic voting, we have left the structure of our economic judgment model the same as that in Figure 2, only modifying those elements that act as free parameters (i.e. that change with the nature of the opinion under consideration). As in the above discussion, there are three aspects of the model of particular interest: the impact of the media on economic judgments, the sources of individual heterogeneity in economic judgments, and the role of personal experience.

Figure 3: Zaller's Model Applied to Economic Judgments



- Covariations between economic awareness, economic priories, and economic ideology are all positive.
- Covariation between economic ideology and strength of partisanship is positive.

The Importance of Media Behavior on Economic Judgments

Zaller's model points to the need to study how the choices of journalist and editors affect the content of the media message. This is as true about economic news as it is for political news. Media sources have to decide when (and if) to cover the economy and how to spin any economic information that they report. Political biases, professional incentives, and market demands will certainly play a role in these decisions. Relatively, little empirical work has been done on the topic, however. And, what work there is does not consider how these incentives and biases might differ from one country to another. Still, this small country-specific literature can guide our expectations about the nature of media biases in the reporting of the economy. Specifically, American scholars have documented the agenda setting power of the media with respect to economic news (MacKuen and Coombs 1981); the dependence of news agencies on regularly released official statistics (Sigal 1973; Brody 1991; Iyengar 1991); asymmetric negative biases in the economic information reported in the media (MacKuen and Coombs 1981; Goidel and Langley 1995; Patterson 1993; Wattenberg 1984; and Nadeau et al 1996); and the absence of comparative (or over-time) references in the reporting of economic outcomes (Mutz 1998).

One of the most important messages of this literature is that the media (at least in the US) will systematically under-report good news and over emphasize change. Consequently, people who are relying on the media for information to inform their political judgments may seem to systematically over-react (in their summary economic judgments) to changes in the real economy, as well as to be more pessimistic than is warranted by real economic movements. Further, differences in the market incentives, professional incentives, and political control of the media in different countries should lead to different degrees of distortion in economic news.

Sources of Heterogeneity in the impact of the Media on Opinion

Economic Awareness

In Zaller's original model (Figure 2), the reception of political messages is contingent upon political awareness. Similarly, the model in Figure 3 makes economic judgments conditional on background knowledge of the economy (i.e., *economic* awareness). For example, a person who is unfamiliar with terms like "inflation" and "gross-national product" may find it difficult to receive and process news stories that report on the level and change of these variables. The particular way that economic awareness is thought to impact economic judgments is also similar to Zaller's use of political awareness. Indeed, if we accept assumptions A1-A3 above and we make the additional assumption that political and economic awareness are positively correlated (B1), the following implications obtain: (1) economic awareness is positively correlated with news reception, and (2) partisanship is positively correlated with economic awareness.⁶ These are all the assumptions that we need to produce a prediction about the relationship between economic awareness and change in economic judgments (given a change in the media message) that will have the familiar quadratic form with which students of Zaller's work have become familiar.⁷

Our presumption of course is that political and economic awareness are empirically distinct and that there are significant numbers of people that fall into the various regions of the implied distribution of political and economic awareness (e.g., high political awareness/low economic awareness, high political awareness/high economic awareness, etc.) Recent empirical work by Duch suggests this is in fact the case. This work explores measures of economic awareness that are analogous to the political knowledge indexes that Zaller recommends for measuring political awareness (Duch 2001; Duch and Palmer 2001a) and demonstrates that a variety of combinations of economic and political awareness are manifest in populations. In addition, we recently (in the late Fall of 2001) included an exploratory economic awareness instrument on a survey of the general population of Harris County Texas. Respondents were asked a standard set of political knowledge questions along with seven economic knowledge items. They were also asked for their impression of the general state of the national economy during the last six months. Factor analysis of these data revealed distinct political and economic knowledge dimensions. Further, since the media message about the Houston economy had been overwhelmingly negative in the six months leading up to the survey, we were able to access whether people with middle levels of economic knowledge were most likely to respond to this message and indicate that the economy had gotten worse or a lot worse (as

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⁶ (1) requires B1 and A1; (2) requires B1 and A2.

⁷ The exact form of the relationship will, of course, depend on the intensity of the message or, in the two (competing) message version of the model, the relative intensity of the two messages.

the model predicts they should). The results for political awareness were linear, that is (in a multivariable model with partisanship) people with more political awareness were always more likely to agree that country's economy had gotten worse. The economic awareness measure however, showed the kind of quadratic relationship the model predicts. Republicans with a high level of political awareness apparently discounted news of the poor economy, as they were able to "spin" even the last half of 2001 into a "not so bad" economy. Of course, these results are preliminary. As we explain below, more development of the economic knowledge measure is needed – particularly to identify items that capture economic (and for that matter political) knowledge in different countries.

Economic Priorities

The Model in Figure 3 also suggests how the concept of economic priorities, which has been prominent in the comparative economic voting literature, can be incorporated into this kind of theory of economic voting. "Economic priority" is the notion that some people care much more about one dimension of the economy than others (Duch and Palmer 2001b; Hibbs 1982; MacKuen and Mouw 1995; Nagler and De Boef 1999). For example, Hibbs (1982) has suggested that unskilled workers should care more about unemployment than inflation, while middle class voters and retirees should care more about inflation. Looking back at Figure 1, however, it is not clear how such an assumption might be included in the usual economic voting model. As a result, a number of *ad hoc* hypothesis have been put forward that make mutually contradictory claims about the impact of economic priorities (which have yet to be entirely resolved empirically).

In Figure 3, however, there is a very natural way to incorporate differences in economic priorities into the integrated model. Indeed, the *only* way this kind of individual heterogeneity can be included in the model is if it impacts either the reception, or acceptance, of media messages about the economy. Consequently, we suggest that economic priorities will impact the reception of economic information. Of course, this hypothesis is hardly controversial. A great deal of work in cognitive psychology makes the case that the more salient information is to a person, the more likely they will be to attend to it. And, it follows that people who care more about one dimension of the economy (e.g., inflation) than another (e.g., unemployment) will attend to media reports more about the former than the later (Mutz and Mondak 1997). As a result, we might expect these different aspects of the economy to have a differential impact on economic judgments.

This is a nice illustration of how concepts that have been important in the previous literature on economic voting can find a very natural entry into a fully realized theoretical effort. Indeed, while we cannot predict the ultimate impact of economic priorities on political support until we have discussed the other two parts the model, the focus on the informational role that economic priority plays is a clear departure from the role that economic priority has played in the literature to date.

Strength of Partisanship

As in Zaller's model, we expect strong partisans to reject messages about the economy that are not in accordance with their partisan predispositions. Here, we rely on work by such authors as Duch, Palmer and Anderson (2000), Wlezien, Franklin and Twiggs (1997) and Conover, Feldman and Knight (1986), who show that economic perceptions are substantially more favorable when a person is a strong "in" partisan (i.e., supports the party of the incumbent). In contrast, "out" partisans judge the economy much more harshly. Here, the adoption of Zaller's assumption that political awareness and partisanship are positively correlated is important (even though political awareness is not in this version of the model). The reason is that the availability in memory of partisan cues to modify ones evaluation of the economy no doubt requires a reasonable level of political awareness. At a minimum one must be aware of the party of the incumbent and must connect the performance of the economy with an implicit evaluation of that incumbent. It could be, in fact, that (unlike Zaller) we will ultimately need to incorporate political awareness into the acceptance part of this model. If so, the relevant correlations in the model that drive his predictions will be altered and we would expect different empirical predictions about the shape of the relationships between political awareness, economic awareness, and opinion change.

Finally, an alternative to the current story is possible, but can be accommodate within this theoretical framework. It could be that the impact of partisanship is not (or not only) felt in the rejection of non-conforming messages about the economy, but also in the selection of messages to attend to. This means that "in" partisans only pay attention to good news about the economy, while "out" tend to pay attention to

the bad. This formulation suggests that, in Figure 3, partisanship belongs in the box with economic knowledge and priorities. This change, however, does little to alter the overall implications of the model.

The Role of Personal Experience

Personal Experience is included in Figure 3 because, unlike many other changes in the political environment, people may sometimes be able to directly observe (in a completely unmediated form) aspects of the real national economy. Before discussing the implications of this, however, it is important to be clear what we mean (and do not mean) by an observation of the real national economy. Although almost every adult participates in economic activity on a daily basis, most of these activities do not (in our view) result in an observation of the real national economy. This is because most dimensions of the real national economy that political scientists, politicians, and journalists care about (and whose relationship with political support we want to explore) are artificial constructions that are only discernible in aggregate economic statistics. Indeed, the concept of a definable and measurable national economy only penetrated the consciousness of western publics in recent times. For the most part, personal economic experience does not help to reveal this constructed aggregate economy. For example, there is simply no way that every day economic activity could ever uncover (for the media-deprived citizen) an equivalent to GDP. On the other hand, individuals who regularly engage in market activities (such as grocery shopping or paying household bills) may have reasonably good information on changes in, or levels of, consumer prices. It is unclear to what extent individuals need to "sample" from the real economy in order to have reasonably accurate information, based on personal experience, of economic performance. For example, would knowledge of the employment status of 100 people be sufficient to generalize about unemployment levels? These are issues that we expect to explore with the survey research component of the project.

Empirical Questions From the Economic Judgments Model

The above discussion directs our attention to a set of empirical questions about economic judgments that we will need to explore in the empirical part of this project. Some these questions are summarized below:

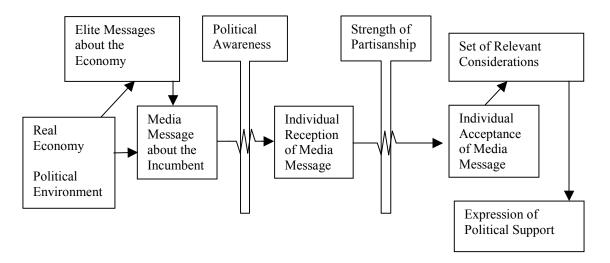
- 1. Does the media systematically select and frame economic news in a manner that leads to systematic distortions in aggregate economic judgments?
- 2. Do different dimensions of the economy have a differential impact on the economic judgments of people with differing economic priorities?
- 3. Do people with different levels of economic awareness and strength of partisanship differ in their responses to media messages about the economy?
- 4. How do cross-national differences in market incentives, professional incentives, and political control of the press distort the media message in different countries?
- 5. Do people with different personal experience with the economy evidence systematic differences in their economic judgments?
- 6. Do people with different personal experience with the economy evidence systematic differences in the degree to which media biases in the economic message impact their economic judgments?

Political Support

The application of Zaller's model to political support (in Figure 4) requires little comment since it is almost identical to the model in Figure 2. Indeed, due to the elimination of personal experience from the model, it is closer to Zaller's original formulation than even Figure 2. This is not surprising since Zaller himself has applied his model to the general question of political support (Zaller 2001). One should recall, of course, that this is only one of three parts of the overall model of economic voting that we are developing. The other two parts, economic judgments and the attribution of responsibility, respectively, constitute the main path through which we expect economic influence to shape political support. We will discuss these interactions below, but here show how another path between change in economic judgments and change in political support is possible even in the absense of voter attributions of responsibility for the economy to incumbents.

⁸ It is highly unlikely that the average citizen will have any unmediated experience with incumbents in large democracies.

Figure 4: Zaller's Model Applied to Political Support



 Covariation between political awareness and strength of partisanship is positive.

Figure 4 helps us understand how economic judgments can be correlated with incumbent support (i.e., an apparent economic vote) without the voter ever actually attributing responsibility for the economy to the incumbent. Specifically, Figure 4 supposes that there is an identifiable media message about the incumbent and that this message may respond to changes in the economy and the (non-economic) political environment. We can think of the media message about the incumbent as a positive or negative charaterization of some aspect of the incumbent's performance, qualifications, or character. When the incumbent is getting "good press", there are many positive stories about her, but when she is getting "bad press" the tone of coverage is negative. This incumbent message can include both non-economic stories (i.e., a story praising the government's health policy) and stories that explictly tie the economy to incumbent evaluations (i.e., a story saying the incumbent's health policy is ruining the economy). Clearly, within the framework of Figure 4 both kinds of messages shape public support for the incumbents; but it is also the case that both kinds of messages can induce the empirical phenonmenon of economic voting (i.e., an empirical connection between the real economy or economic judgements and political support). In the next section, we will talk about how media messages that directly attribute repsonsibilty for the economy to the incumbent can impact individual attributions of responsibility (and ultimately lead to economic voting); however, in this section we want to demonstrate how a the model in Figure 4 allows for an economic influence on political support that does not flow through an individual attribution of responsibility.

Specifically, if non-economic media messages about incumbents and media messages about the economy change in tandem, the models in Figures 3 and 4 will produce a correlation between economic judgements and political support. This is true even if the voters do not themselves connect their judgment of the economy to their evaluation of incumbents. This insight is potentially powerful because it suggests that in the prduction of economic voting, the connections that the *media* makes between the economy and politics may substitute for similar connections in the cognitions of *voters*. Consequently, individuals that are aware of economic and political change but who make no cognitive connections between them may yet be (unwitting) economic voters. In the previous empirical literature in economic voting, it has been demonstrated that economic voting is harder to detected when people do not make attributions of responsibility for the economy to incumbents. It is not clear, however, whether this impact is due to the lack of attributions or a correlation between the chance of making attributions on variables like economic and political awaremess (see the model in the next section). Only a model that controls for heterogeneity in these kinds of variables can rule out the kind of non-attributional economic voting suggested above.

Again, our discussion of political support directs our attention to a set of empirical questions that we will need to explore in the empirical part of this project. Some these questions are summarized below:

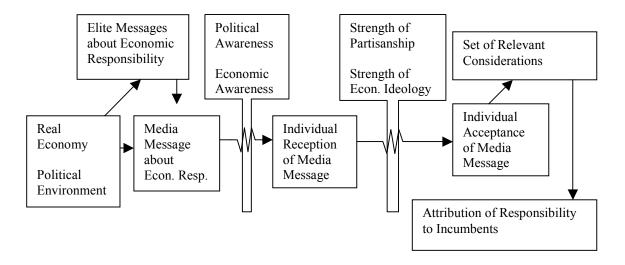
Empirical Questions From the Political Support Model

- 1. What (if any) is the relationship between non-economic media messages about the incumbent and media messages about the economy?
- 2. Among individuals who do not attribute responsibility for the economy to incumbents, is there an empirical connection between economic judgments and political support controlling for heterogeneity in the reception and acceptance of media messages about the economy and incumbents?

Attributions of Responsibility

In the last section we discovered a possible path thorugh which the economy could impact political support that did not require voters to make attributions of responsibility to incumbents. Clearly, however, many people can (and do) express opinions about who is responsible for economic performance. Indeed, as we suggested in our discussion of Figure 1, this is the primary path through which most sholars have traced economic voting and the one that has generated the most work trying to account for systematic differences in economic voting across countries and over time (i.e., the clarity of reposibility literature). In Figure 5 we model these attributions as opinions in the same way we have examined the other opinions in Figure 1.

Figure 5: Zaller's Model Applied to Attributions of Responsibility for the Economy to Incumbents



 Covariations between political awareness, economic awareness, strength of partisanship, and strength of ideology are all positive

According to some pundits, one of the reasons that Al Gore lost the 2000 U.S. presidential election was that he did not try hard enough to convince voters that he should be given the credit for the years of economic prosperity under Clinton. If true, it jibes well with our characterization of "attribution of responsibility for the economy to incumbents" as an opinion that should be modeled similary to the other opinions we have examined. The model is structurally like the previous models, but makes two significant changes to the set of variables that condition the reception and acceptance of media messages. First, it includes both political and economic awareness as indicators of reception, since it is likely that background knowledge in both areas is necessary to attend to and undestand these political-economic media messages. Next, it includes a new variable, Strength of Economic Ideology, as a factor conditioning acceptance of a received message.

Economic ideologies are like political ideologies in that they simplify and organize a set of cognitive relationships between related concepts. For this project, we are specifically concerned with

economic ideologies that characterize the ability and responsibity of the government to create positive economic outcomes. Specifically, we will be interested in where individuals fall on a two dimensional ideological space in which they answer whether the government *can* manipulate the economy and whether the government *should* try to manipulate the economy. We hypothesize that individuals that fell into the different quadrants of this space would respond quite differently to received media messages attributing responsibility for economic outcomes to the government.

We also include strength of partisanship as a conditioning variable for acceptance of received messages about attribution of responsibility, but point out that its impact on the acceptance of messages about attribution depends on the individual making an economic judgment as well. Specifically, when "in" partisans think the economy is performing poorly, they are unlikely to accept media messages that suggest incumbent politicians are resposible for the economy. Likewise, "out" partisans will reject messages promoting attribution to incumbent in good times.

Given the inclusion of these and the other conditioning variables in Figure 5, and assuming that all four of them are positively correlated, we again expect that political and economic awareness will have a non-linear realtionship to attributions of responsibility.

Finally, we should calrify an important distinction that is implict in the above disscussion. Throught this proposal, we use strength of partisanship to mean the attachment of an individual to the party of the incumbent. This may be rooted in ideological identification, but it may not. However, economic ideology (as we have defined it) may overlap quite a lot with political ideology (especially the traditional left/right distinction) and to thes extent that this does determine partisnaship, these two concepts may not be distinct. In our empirical analysis, we will need to explore the extent to which this is (or is not the case).

Some of the empirical questions about attribution that we will need to explore are:

Empirical Questions From the Attribution of Responsibility Model

- 1. Do people with different levels of economic awareness, political awareness, economic ideology, and partisanship differ in their responses to media messages about the economy?
- 2. Are economic ideology and partisanship empirically distinct?

Interactions Between the Opinion Models

Figure 1 suggests that economic judgments and attributions of responsibility impact support for incumbents. In our elaboration of this simple model, we have introduced more fleshed out opinion models for both of these components but have not explained how the different models may be interconnected to create the phenomenon of economic voting. The model in Figure 1 does little to help us with this task, since it is silent about the cognitive processes that underlie the proposed connections.

The political support model, however, does constrain the form that these connections can take. Specifically, the model only allows economic judgments and attributions of responsibility to have a direct effect on political support if they somehow enter the set of relevant considerations from which expressions of support are drawn. One way that this can happen is for attributions of responsibility to act as a cue that pulls judgments of the economy into memory whenever voters are asked to make some expression of political support.⁹

Research Design and Data Collection

The previous section outlined the critical building blocks of our approach to modeling economic influences on political support. That approach focuses attention on several understudied variables that might account for cross-national, temporal, and individual heterogeneity in the strength and nature of economic voting. These variables include the behavior of the media in reporting and framing economic news, incumbent news, and attributions of economic responsibility to incumbents; individual levels of political and economic knowledge; and partisanship, economic priorities, and economic ideology. In addition, variables capturing the "real" economy and individual (and aggregate) political support will be needed to evaluate the empirical usefulness of the model. In this section we describe our strategy for measuring these concepts and performing such an evaluation.

The Sample. The project will use evidence from 15 developed democracies (Canada, the United States, Britain, Ireland, France, Spain, Austria, Germany, Belgium, Australia, New Zealand, Italy,

⁹ Such speculations are not an important part of Zaller's opinion model, which seldom considers the interactions between multiple opinions. However, other scholars (e.g., the contributors to Lodge and McGraw 1995) do try to detail more precisely the cognitive process by which various opinions get grouped together, recalled, weighted, and combined in memory.

Denmark, Norway, and Sweden). We intend for the argument to apply to these countries generally. The need to focus on developed democracies comes not only from practical limitations in the data for less developed countries, but also because the theoretical arguments often depend on the existence, in a country, of particular kind of "media politics" that tends to occur in developed countries where the media plays the preeminent role in producing political communication and citizens have come to rely on the media to inform them about political and economic matters – often to the exclusion of personal and even interpersonal experience (Mutz 2000). Indeed, differences within the developed democracies in systems of mass communication will help us to understand some of the persistent cross-national differences in the nature and extent of economic voting in these countries. The data we collect from each country will span the 1980-2001 time period because the period varies significantly in terms of the ideology of incumbents in office, economic outcomes (the time frame spans periods of economic expansion, recession, rising and falling unemployment and significant changes in prices levels), and (potentially) media behavior (in many of these countries market incentives and the role of the government in media changed markedly over these two decades.

Real economy. In the discussion above, we pointed out that students of economic voting have not yet adequately traced the connection between the real economy and media messages about that economy. Such a mapping is critical, however – if one thinks that the media message is crucial to people's economic judgments. In order do this mapping we will need to have a precise measure of what constitutes the "real" economy in a country at a particular time. In the past, most comparativists have relied on official statistics reported by national statistical agencies and aggregated by international organizations like the OECD. We agree that these official statistics define the aggregate economy and so will use official statistics on four aspects of the economy (GDP, inflation, unemployment, and personal income) to measure it. Our emphasis on the media message about the economy, however, makes plain that many of the usual sources of crossnational economic data are not useful for our purposes. The problem is that these sources continue to update and revise their economic data months and years after they were initially reported. This kind of revision can often be substantial. Most aggregate economic voting models are estimated using these revised time-series and so are inadvertently modeling political attitudes at t₀ with economic information that was not even available at that time.

To evaluate our theory, we need to know what official statistics were reported at the time that the media reported them and voters consumed the resulting message. Consequently, we are building economic time-series data (on a monthly or quarterly basis) for each country that uses only the un-revised official statistics that were actually released to the media. This involves contacting the relevant statistical organizations and using sources like the *Economist* magazine, which publish these figures (in their appendices) immediately after they are reported. To our knowledge this data has never been collected and used in previous economic voting research.

Mediated Economic Information. Given the earlier theoretical discussion, it is clear that our empirical effort must include a measure of what the media is saying about the national economy. This measure needs to be comparable across countries and over time. Further, since out goal is to explore the relationship between the economy and *mass* political behavior, out measure should include a sampling of media that is aimed at different sectors of society. One practical strategy that meets these goals is to sample newspaper coverage of the economy in "mainstream", tabloid, and financial newspapers. Most countries have newspapers in each of these categories (with the exception of tabloids which are absent in some countries) and archives of the papers exist (usually on microfilm) that cover many years. Other strategies, like relying on television news shows, are prohibitive because of the difficulty in obtaining archival video and transcripts for enough countries.

Because of the geographical and temporal scope of the project, it will be impractical for us to code the economic information in the entire newspaper. Instead, we will restrict our attention to the information on the front-page. This is a high standard for coverage and results in many days in which we find no economic information. Still, there are plenty of front-pages that do contain economic information (in the pilot coding project based on about 2000 front-pages from different countries, approximately a third of the pages do have relevant economic information). Further, front-page information has some advantages for a study of how the media impacts the perceptions and opinions of the average citizen. First, everyone who reads a paper sees what is on the front-page and indeed many people who do not open up the paper will at least scan the headlines. Further, in modern society the front-page is a powerful agenda-setting device. The presence of a story on the front-page is a strong signal to readers that the information is important and worth attending to. A focus on front-page news, thus, lets us observe how economic news fares in just

these sort of editorial decisions (and how these decisions might be made differently in different countries and at different times).

Focusing on front-pages makes the project much more manageable, but, even taking only four papers per country, the fifteen countries in which we are interested produced over half a million front-pages from 1980-2001. We will clearly need to sample from this population of front-pages. The primary goal of our sampling strategy is to choose the newspaper front-pages that are most likely to contain economic information. This will ensure that our sample of front-pages in any given month is representative of all the front-page economic news that month. Which front-pages are most likely to contain economic information? Our assumption is that the reporting of economic news is most likely on (or around) those days that the releases monthly or quarterly economic statistics (specifically statistics on unemployment, inflation and growth). Based on this assumption, we will sample the day of and the day following the release of such economic information. To evaluate the validity of this assumption, we will collect frontpages for every day of selected months for each country and we will code these and determine if indeed economic information is concentrated on the days economic information was released. Our preliminary efforts to collect these release dates clearly suggest that this is hard-to-come-by information. For the most part historical information on the precise release dates of economic indicators is not readily available in national statistical archives. Rather, the staff of national statistical bureau must assemble these data (normally for a fee), or we will have to hire individuals to review the publication date of periodicals or press releases in which this information is reported. We have been able to determine, however, that, for most of our countries (for most of our time period), these data do exist and that one of these two methods is feasible to obtain it.

Based on this sampling strategy, a complete dataset could include the front-pages of four newspapers in each country for six days per month (2 days each for the release of unemployment, inflation, and growth statistics, respectively) from between 1980-2001. For the 15 countries in our current sample, this results in about 120,000 pages. In reality, the number of pages we will code is much smaller than this. First, we do not have data on the release dates for inflation, unemployment, or growth statistics for some countries and time periods, although our coverage is about 75% complete. In addition, for some countries all four newspapers are not available for the whole period. This missing data means that we usually get about 4 pages per month (instead of the possible 6) for 3-4 papers for an average of about 15 years per country. Our actual sample of front-pages will thus include about 40,000 front-pages. We expect, based on our pilot coding, about a third of these to have economic information.

Our goal is to obtain, for each country in the sample, two "mainstream" papers, one tabloid, and one financial newspaper. We concentrated on papers with national circulation, but in several cases (e.g., Australia) few national newspapers existed and/or the papers from the major cities were (according to a survey of country experts) more representative of what the typical citizen might see. The newspapers we will target are listed in the chart below – we chose the selected papers based on an e-mail survey that was sent to country experts from each of the countries.

Country	Mainstream 1	Mainstream 2	Tabloid	Financial
Australia	The Australian	The Sydney	The Daily	The Australian Financial
		Morning Herald	Telegraph	Review
Austria	Die Presse	Neue	Der Standard	Klienezetung
		Kronenzeitung		
Belgium	Het Laaste News	De Standaard		Financieel Economische
(Flemish)				Tijd
Belgium	Le Libre Belgique	Le Soir		
(Walloon)				
Canada	Globe and Mail	Toronto Star	Winnipeg Sun	Financial Post
Denmark	Bergens Tiende	Politiken	Ekstra Bladet	Borsen
France	Le Monde	Le Figaro		La Tribune
Germany	Sueddeutsche	Frankfurter	Bild Zeitung	Das Handelsblatt
	Zeitung	Allgemeine		
Ireland	The Irish Times	Irish Independent	Evening	Sunday Business Post
			Herald	

The	Volkskrant	NRC Handelsblad	Telegraaf	Financieel Dagblad
Netherlands				
New	The Press	The New Zealand	The Sunday	Independent
Zealand		Herald	News/Truth	
Norway	Aftenposten	Bergens Tidende	Verdens Gang	Dagens Naeringsliv
Spain	El Pais	La Vanguardia	El Periodico	La Gaceta de los negocios
Sweden	Expressen	Dagens Nyheter		
USA	New York Times	Los Angles Times	USA Today	Wall Street Journal

Aggregate Data on Economic Judgments and Political Support: Our measures of economic judgments are all survey based. Most are culled from existing cross-national and comparable national data, but we will need to include some economic judgment questions on a series of new surveys that we intend to field. These data will be used both for aggregate and individual level analysis.

Currently we have the full set of aggregate data on economic judgments by both economic elites (specifically industry executives) and the mass public from the monthly consumer and business confidence surveys conducted by the European Commission. ¹⁰ Three of the consumer confidence questions in this series ask respondents for an economic judgment: respondents' unemployment expectations over the next 12 months; respondents' expectations regarding price trends over the next 12 months; respondents' expectations regarding the general performance of the economy over the next 12 months. Two of business confidence items similarly capture industry executives' knowledge of economic outcomes: industry executives' employment expectations for the months ahead; and industry executives' selling price expectations for the months ahead. The consumer confidence data covers the months from the first quarter of 1986 to the first quarter of 2000. The business confidence index covers the period dating from the first quarter 1967 to the first quarter 2000. A preliminary analysis comparing these data to measures of the real economy (in the usual, revised, version) was recently presented at the 2001 Annual Meeting of the APSA ("The Economy: Do they get it Right and does it Matter?", Duch and Stevenson 2001). The empirical model in this analysis modeled aggregate economic judgments (the three EU consumer perception series) and actual economic outcomes as error correction processes. This is a convenient way to examine the degree to which economic judgments track the real economy. The results unambiguously support two conclusions that are important to the current project: 1) There are significant cross-national variations in how well citizens' judgments track the economy (which we expect is due to systematic differences across countries in the extent of media biases in reporting the economy); 2) There are similar variations in the fit between judgments and the real economy across economic indicators (which we expect is due to the extent to which personal experience works against media biases in reporting different aspects of the economy).

Our intention is to collect this kind of economic judgment series for the full set of countries in our developed nation sample. This will entail essentially adding the non-European countries in our sample (Australia, New Zealand, and Canada) to the current dataset. Preliminary efforts to identify sources for these data will be available for many of these countries.

In addition to the aggregate economic judgment series, we have also begun to collect aggregate monthly incumbent popularity series for many of the countries in our sample. In particular Chris Anderson (1997) has provided us with incumbent popularity series for a large number of the European countries – we will need to supplement these data for the period 1988 to the present. Monthly popularity series exist for all of the other countries in the sample – our task will be to contact the polling organizations with these data and assemble the data sets. Ultimately, these data, along with those just discussed, will let us examine the models implications for cross-national variation in aggregate relationships between the real economy, the media message, aggregate economic judgments, and aggregate incumbent popularity. While other researchers studying individual countries have examined as many as three of these variables in models of popularity, no study has ever examined them all in an integrated model – especially not for multiple countries.

Individual Level Data

Clearly, we cannot rely on aggregate data alone – our theory is posed at the individual level and depends on individual heterogeneity in many of the key variables. These include economic judgments,

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¹⁰ Unfortunately, the individual level data is not available.

responsibility attribution, political and economic awareness, partisanship, economic ideology, economic priorities, and incumbent support. Previous surveys will be useful in some cases. For example, the Eurobarometer often includes questions on economic judgments. Likewise, the Comparative Study of Electoral Systems project includes questions that we can use to measure many of the concepts mentioned above. Unfortunately, however, these sources do not include useable measures of several of the variables we will require (e.g., no measures of economic awareness, attributions of responsibility (usually), or economic ideology).

Our strategy for (affordably) obtaining a more complete data set for many of our countries is to purchase a block of questions in omnibus surveys in eight of our sampled countries (Canada, the United States, France, Spain, Denmark, Britain, Ireland, and Germany). These surveys will include measures of all they key concepts mentioned above. Our pre-test of the economic and political knowledge questions in the Houston area was discussed above. We plan on doing similar tests for the other measures using small samples of citizens from the relevant countries. The results of these tests will allow us to choose a small number of the most effective questions to construct our measures. Recent advances in the statistical methods of item discrimination will be utilized in this effort (Jackman 2001).

Timetable

May, 2002-June, 2002

- o Finalize database of all release dates
- Finalize sample of all newspapers and identification of archives with newspapers

July, 2002-September, 2002

o Finalize copying all newspaper front pages

September, 2002-January, 2003

o Finalize all coding of newspapers

January, 2003-May, 2003

Complete assembling databases and generation of preliminary empirical results
 May, 2003-December, 2003

o Finalize book manuscript and articles for refereed journals

Data Archiving

This project will create a unique data set consisting of a lengthy times series (1980-2001) of media representation of economic outcomes for 15 countries. Based on our sampling strategy, a complete dataset will include about 30,000 copies of front-pages. These data, the information extracted from it, and the detailed coding instructions we used will be archived with the ICPSR. In addition, we will be archiving the data generated from the eight-country public opinion surveys.

Qualifications of Principal Investigators

Both Principal Investigators have worked and contributed extensively to the study of economic voting both in the American context and in the comparative context. Ray Duch has recently published articles exploring the extent to which segments of the U.S. population have systematic differences in their assessments of the macro-economic and how this affects aggregate-level models of economic voting (Duch, Palmer Anderson 2000). In a recent APSR article Duch (2001) proposes and tests a developmental model of economic voting in which levels of economic voting are hypothesized to correlate with the levels of political information and levels of trust in government officials. In a recent Political Analysis article Duch (Palmer and Palmer 2001) tests a number of the information processing hypotheses proposed by Zaller (1992) and others (Lodge, Steenbergen and Brau 1995). Duch has designed and implemented public opinion surveys in over 25 countries with widely varying levels of political and economic development.

Randy Stevenson has published pieces on comparative economic voting in the *American Journal of Political Science* and the *British Journal of Political Science*. He has also implemented an NSF funded multi-country survey effort to measure European's knowledge of the post-election coalition formation process.

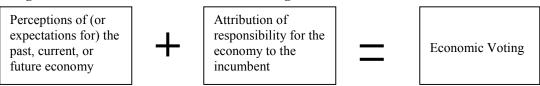
¹¹ We have already assembled all such data into a (carefully cleaned) cross-national overtime file that covers most of the 80's and 90's at least once every two years.

Introduction

Many people believe that the economy is the most important influence on political support for incumbent politicians. However, as a scientific proposition, this belief has been hard to establish unequivocally. In the United States, empirical work has generally supported an economic influence on expressions of political support, but the nature of that influence has been the source of almost constant debate. In other countries, disagreement about the nature and strength of the economy-support relationship is even more pronounced. Some scholars have had trouble finding any empirical relationship between the economy and political support, but even among those who do identify some kind of relationship, contradictory evidence about the *nature* of the relationship persists. The initial comparative studies of economic voting (that is those that used the same measures and comparable data across several countries) have done little to clarify this situation. Paldam (1991) could find no systematic relationship between the economy and aggregate electoral results in the 19 countries he studied. Likewise, while Lewis-beck (1988) found evidence of economic voting at the individual level in Britain, Spain, France, and Italy, the strength and nature of this relationship varied considerably across countries.

More recent work has abandoned the hope that a single empirical model can account for economic voting across countries. Instead, these scholars accept the variability of economic influences on support, but try to account for them by identifying variables that may condition the strength and nature of the economy – support link. The theoretical starting point for this effort looks (for almost all of these studies) something like the following simple model of political support:

Figure 1: A Standard Model of Economic Voting



While this model is stark, it represents a complication to many earlier models in which the second term would not have been included.⁴ Further, it has the critical components necessary to motivate Powell and Whitten's notion that cross-national differences in the strength of economic voting are due to differences in the ability of voters in different systems to attribute responsibility for the economy to incumbents. Specifically, Powell and Whitten (1993) suggested that systems in which the institutions of government produced "clarity of responsibility" (e.g., a single governing party, weak legislatures, and weak central banks), voters would find it easier to identify the incumbents that they should (according the model in Figure 1) hold accountable for economic fluctuation. Consequently, these systems would evidence more economic voting than systems where responsibility for economic outcomes is clouded by the existence of coalition partners, strong oppositions, or other institutional barriers to strong one-party government. Powell and Whitten found support for their model using aggregate data, but other aggregate studies (Stevenson 2002) with different empirical specifications have produced conflicting results.

While the clarity idea helped bring some order to the economic voting literature, recent findings suggest that the simple theoretical picture presented in Figure 1 is too stark to effectively explain both cross-national, and within nation, variations in economic voting. A case in point is the empirical fact, documented in many comparative studies of economic voting, that national electorates vary in the importance they accord to different economic outcomes when they vote (Chappell and Keech 1985 and Lewis-Beck 1988). To take the results from Lewis-Beck's (1988) comparative study, the fact that the

¹ For example, is economic voting asymmetric (punishing incumbents but not rewarding them)? Is it prospective or retrospective? Is it focused on personal or national economic conditions? Is it Affective or coldly rational? Is it informed and strategic or is it just a convenient heuristic that guides voting behavior in the absence of other more relevant information?

² An example of this cross-national variability in the nature of economic voting is the apparent difference in the particular aspects of the economy (i.e., prices, growth, the labor market) that scholars have found to be empirically relevant to political support (Anderson 1997; Lewis-Beck 1988; Paldam 1991).

³ We will use the term "economic voting" as convenient shorthand for any empirical relationship between the economy or economic perceptions and political support (whether votes, voting intentions, or expressions of support in polls).

⁴ The theoretical development of the comparative economic voting literature has not been a priority of most of the authors writing in this field, who have been much more focused on establishing a set of empirical regularities that apply across countries.

economic vote in France is highly influenced by unemployment rates but not at all by price levels cannot be explained within the theoretical framework presented in Figure 1. In fact, Lewis-Beck (1988, 93) advises that "...the task of finally tagging the most important particular macroeconomic indicator is hopeless." We concur that this task is hopeless but we do not agree that the cross-national variation in the weight placed on these different indicators is unimportant. On the contrary we believe this heterogeneity in economic voting reflects fundamental differences in the economic messages that citizens in different countries receive, in how responsibility for these outcomes is attributed and in individual-level predispositions regarding these economic messages. Theoretical approaches based on Figure 1 cannot accommodate these empirics because they assume that evaluations reflect objective economic outcomes and attribution is homogeneously shaped by fixed institutional characteristics.

Our reservations regarding the adequacy of Figure 1 are predicated on speculation that there are significant cross-national and within-nation variations in the messages and information citizens receive about the economy and how they process this information. The failure of the simple model in Figure 1 to explain the voting behavior of post-communist electorates speaks to the veracity of these speculations. Many of the efforts to model the voting behavior of post-communist electorates concluded that the simple accountability model in Figure 1 was woefully inadequate (Duch 2001; Duch 1993; Tucker 1999a; Powers and Cox 1997). Most importantly, this model did not accommodate the individual-level and contextual variables that play a very important role in shaping how individuals respond politically to the macroeconomy. Tucker (1999a and 1999b) and Powers and Cox (1997), in particular, demonstrate that individuals have predispositions and "economic ideologies" that condition their receptivity to messages regarding the economy and regarding the attribution of responsibility for the economy. Similarly, Duch (2001) demonstrates in the case of Hungary and Poland how the information levels of transition electorates can generate very different levels of economic voting than might be expected in more mature democracies.

Scholars have also noted that the electoral consequences of economic outcomes have had very inconsistent effects on incumbent governments and party fortunes. Kitshelt (1994), for example, carefully details the extent to which economic voting models do a poor job of explaining the electoral fortunes of Socialist parties throughout the 1980s period. Moreover he concludes that institutional variables that shape clarity of responsibility—i.e., the intervening variable in Figure 1—are not candidates for explaining these deviations from the standard model. Scholars have proposed a number of explanations for these inconsistencies. For example, Clarke, Stewart and Whiteley (1998), Kitschelt (1994) and Stevenson (2001) argue that voters respond in an asymmetric fashion to economic outcomes, depending on the nature of the outcomes and the partisanship of the incumbent coalition. Once again, these nuances to the theory of economic voting cannot be accommodated in the narrow theoretical framework outlined in Figure 1.

In the discussion that follows we suggest one way forward in building a more fully realized model of economic voting that will accommodate these empirical challenges to the conventional economic voting model.

Theory

The most important insight necessary in building a more nuanced model of economic influence on political support is the recognition that each of the components of the traditional model (Figure 1) is an *opinion*. Consequently, the study of economic voting should be focused on understanding what factors influence these opinions and why they move together in predictable ways. More often than not, however, students of economic voting (and especially of comparative economic voting) have not paid attention to developments in the literature on public opinion. This inattention is especially regrettable given the wave of activity that swept through the American public opinion literature during the last decade – producing a number of important theoretical and empirical innovations (for example, Zaller 1992; Mutz 1998; Iyengar 1991; Bartels 1996; Lodge, Steenbergen and Brau. 1995). Indeed, one of the main messages of the work

⁵ This inattention tends to produce a disjuncture between how students of public opinion in different periods have thought about the nature of individual cognition and the way that these cognitions are represented in economic voting models. For example, during the years in which Converse's claims of voter non-attitudes and the randomness of aggregate opinion were in ascendancy, economic voting models were being published that required voters to understand not only economic outcomes, but the economic policies of competing parties.

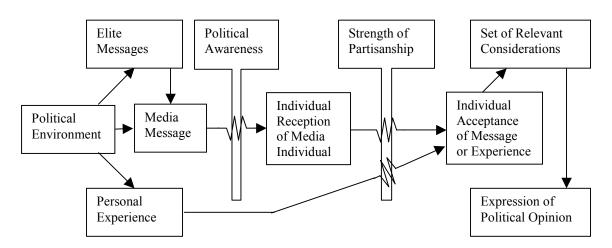
proposed here is that these recent advances offer comparativists the opportunity to build a more compelling comparative explanation of how the economy influences political support

In the rest of this section we describe how this opportunity might be exploited. Specifically, we begin by describing one important model of public opinion formation and change (due to Zaller 1992) and then show how it can be applied to the three opinions pictured in Figure 1 (economic judgments; attribution of responsibility and political opinion). Finally, we discuss the way that the models for these three opinions interact, both through the action of shared exogenous influences and through direct connections between the models.

This theoretical exercise suggests a number of novel explanations for the cross-national and temporal heterogeneity in economic voting that was discussed above. Further, it provides an integrated structure in which other variables, already identified in the economic voting literature are quite naturally accommodated. As such, it illustrates how we intend to build the theory in this project and motivates the data collection effort described below. We do not, however, want to imply that this is the final form of the theoretical model that will guide this project. Rather, the final model will also draw on the work of other scholars that have contributed (mostly) compatible visions of public opinion formation and change (e.g. Lodge, Steenbergen and Brau 1995; Lodge and McGraw 1995). That said, however, we rely almost exclusively on Zaller's model in this proposal because it will be familiar to most political scientists, is completely formulated and accessible, and is (in a slightly modified form) close enough to what we intend illustrate the kinds of insights that we think the modern public opinion literature has to offer students of comparative economic voting.

Figure 2 summarizes some of the most important connections in Zaller's theory of opinion formation and change. Since most readers will be familiar with this model, we concentrate our discussion on three specific features of the model will be important to its application to economic voting: (1) the impact of media behavior on opinions; (2) the sources of heterogeneity in the impact of the media on opinion; (3) the role of personal experience on opinions.

Figure 2: A (slightly) Modified Version of Zaller's Model of Political Opinion Formation and Change



Covariation between political awareness and strength or partisanship is positive

The Importance of Media Behavior on Opinion

Zaller's work differs from previous efforts to explain public opinion in its insistence that elites and the media are the driving force behind change in American public opinion in the United States. For years, the media's impact on political opinion had been characterized as minimal (see McGuire 1986 for a review) or limited to an agenda setting function (beginning with McCombs and Shaw 1972). Zaller's model, however, clearly gives the media a dominant role in shaping public opinion – a view echoed by many other

recent voices (Bartels 1996; Hetherington 1996;). Further, new empirical research, which uses new measures of the key concepts and accounts for individual heterogeneity in the reception and acceptance of media messages, supports the media's new status as the maker of public opinion (Mutz 1998; Zaller 1992, 2002; Iyengar 1991).

Given this emphasis on the media's role in opinion formation and change, it is, of course, natural to ask how media messages are themselves formed and change? Zaller's (2002), for example, has recently explored how market incentives, professional standards, and political competition play out in the editorial offices of the American political press. Overall, he (and many others) concludes that the press is not a benign force in American politics, faithfully transmitting the "true" story to the public. Instead, the media is an active selector and framer of the news. For the purposes of the model in Figure 2, this suggests that we should not assume that the connections between the political environment, elite messages, and the media message are unbiased, but should explore what kind of biases may be present. This effort is necessary because we are ultimately interested in how the real economy impacts political support, not just how the media message about the economy may move opinion.

Sources of Heterogeneity in the impact of the Media on Opinion

One of the key contributions of Zaller's work has been to focus the attention of students of public opinion on two variables (political awareness and strength of partisanship) that impact people's reception and acceptance of political messages from the media (and, therefore, condition the effect of the media on opinion). Specifically, Zaller makes three assumptions about these variables and their interaction:

- (A1) Greater political awareness increases the chance that a person will receive any given media message.
- (A2) Strong partisans will tend to reject political messages that they receive that are not in accordance with their partisan affiliations.
- (A3) An individual's level of political awareness is positively correlated with the strength of her partisanship.

Taken together, these assumptions lead to the most important testable implication in the theory: People at middle levels of political awareness will be more likely to change their opinions in response to a changing media message than will people at high or low levels of political awareness. This is the most important implication of the theory because it tells us how to separate people whose opinions can be changed by media messages from those whose opinions cannot. Consequently, given a distribution of these different types of people in a population, we can use the theory to predict what the impact of a given political message will be.

An important part of our application of this model to the question of economic voting will be to specify similar sets of variables that, through their impact on the probability of reception and acceptance of media messages, will condition the impact of the media on economic perceptions, attributions of responsibility, and political support.

The Role of Personal Experience

Students of Zaller's work might be surprised to find a path for personal experiences in an explication of his model. However, those familiar with the wider literature in American public opinion will recognize why we have added it. While most current scholars of American public opinion subordinate the role of personal experience to that of the media, many have argued that personal experience can be very important in certain kinds of opinions, especially when one's experience provides a source of information about changes in the political environment that is independent of media messages (Mutz 1998). Admittedly, these cases may be rare in modern society (much of the information that we get through interpersonal contact comes ultimately from media sources), but economic information (at least for some dimensions of the economy) may well be one of those cases. As we discuss more fully below, some people are able to garner significant independent information about the state of the national economy in their daily economic exchanges. For example, a person who regularly shops for a diverse basket of household goods is exposed to an unmediated (albeit noisy) sample of the price levels. We suggest that these experiences will decrease the impact of media messages (and media biases) on such people's assessment of the economy.

It is also worth noting that we have incorporated personal experience into Zaller's framework not as a path from the real economy directly to the set of relevant considerations, but instead to the acceptance stage

of the model. This requires a slight expansion of Zaller's notion of acceptance of media messages to include acceptance the "message" of personal experience. In our view, it is just as likely for a strong partisan, for example, to offer counter arguments and *ex post* rationalizations for discordant personal experience than for discordant media messages. Consequently, we would expect to see the impact of changes in personal experience to be muted in strong partisans. We are not aware of any empirical study that has yet pursued this hypothesis.

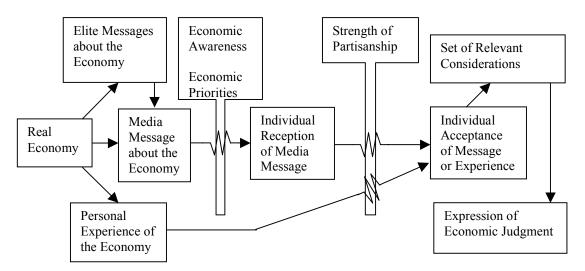
A More Fully Realized Model of Economic Voting

As we indicated above, we begin our effort to build a model of economic voting that accounts for how people come to form and change their political opinions by accepting the basic structure of the traditional model in Figure 1. Our task, however, is to flesh out this model by applying Zaller's theory to each of the three opinions represented there. Below, we do this separately for all three opinions (i.e., economic judgments, political support, and attribution of responsibility) and then discuss the possible interactions between them that could generate links between the economy and political support. For each of the individual models, we first present a schematic analogous to Figure 2; then discuss how we might expect media incentives to impact the relationship between changes in the relevant environment and changes in the media messages. Next, we discuss the variables that are likely to condition reception and acceptance of the relevant media messages. And finally, we address the role of personal experience.

Economic Judgments

Figure 3 provides an overview of our application of Zaller's model to economic judgments. Recall that in most of the economic voting literature, economic judgments have typically been treated as both exogenous and (at least on average) correct (i.e., reflecting the true economy). Here, however, we treat economic judgments as opinions (which need not reflect what is happening in the "real" economy) and uses the theoretical framework from Figure 2 to explore how they form and change. Since we have emphasized the importance of avoiding *ad hoc* specifications in fleshing out the traditional model of economic voting, we have left the structure of our economic judgment model the same as that in Figure 2, only modifying those elements that act as free parameters (i.e. that change with the nature of the opinion under consideration). As in the above discussion, there are three aspects of the model of particular interest: the impact of the media on economic judgments, the sources of individual heterogeneity in economic judgments, and the role of personal experience.

Figure 3: Zaller's Model Applied to Economic Judgments



- Covariations between economic awareness, economic priories, and economic ideology are all positive.
- Covariation between economic ideology and strength of partisanship is positive.

The Importance of Media Behavior on Economic Judgments

Zaller's model points to the need to study how the choices of journalist and editors affect the content of the media message. This is as true about economic news as it is for political news. Media sources have to decide when (and if) to cover the economy and how to spin any economic information that they report. Political biases, professional incentives, and market demands will certainly play a role in these decisions. Relatively, little empirical work has been done on the topic, however. And, what work there is does not consider how these incentives and biases might differ from one country to another. Still, this small country-specific literature can guide our expectations about the nature of media biases in the reporting of the economy. Specifically, American scholars have documented the agenda setting power of the media with respect to economic news (MacKuen and Coombs 1981); the dependence of news agencies on regularly released official statistics (Sigal 1973; Brody 1991; Iyengar 1991); asymmetric negative biases in the economic information reported in the media (MacKuen and Coombs 1981; Goidel and Langley 1995; Patterson 1993; Wattenberg 1984; and Nadeau et al 1996); and the absence of comparative (or over-time) references in the reporting of economic outcomes (Mutz 1998).

One of the most important messages of this literature is that the media (at least in the US) will systematically under-report good news and over emphasize change. Consequently, people who are relying on the media for information to inform their political judgments may seem to systematically over-react (in their summary economic judgments) to changes in the real economy, as well as to be more pessimistic than is warranted by real economic movements. Further, differences in the market incentives, professional incentives, and political control of the media in different countries should lead to different degrees of distortion in economic news.

Sources of Heterogeneity in the impact of the Media on Opinion

Economic Awareness

In Zaller's original model (Figure 2), the reception of political messages is contingent upon political awareness. Similarly, the model in Figure 3 makes economic judgments conditional on background knowledge of the economy (i.e., *economic* awareness). For example, a person who is unfamiliar with terms like "inflation" and "gross-national product" may find it difficult to receive and process news stories that report on the level and change of these variables. The particular way that economic awareness is thought to impact economic judgments is also similar to Zaller's use of political awareness. Indeed, if we accept assumptions A1-A3 above and we make the additional assumption that political and economic awareness are positively correlated (B1), the following implications obtain: (1) economic awareness is positively correlated with news reception, and (2) partisanship is positively correlated with economic awareness.⁶ These are all the assumptions that we need to produce a prediction about the relationship between economic awareness and change in economic judgments (given a change in the media message) that will have the familiar quadratic form with which students of Zaller's work have become familiar.⁷

Our presumption of course is that political and economic awareness are empirically distinct and that there are significant numbers of people that fall into the various regions of the implied distribution of political and economic awareness (e.g., high political awareness/low economic awareness, high political awareness/high economic awareness, etc.) Recent empirical work by Duch suggests this is in fact the case. This work explores measures of economic awareness that are analogous to the political knowledge indexes that Zaller recommends for measuring political awareness (Duch 2001; Duch and Palmer 2001a) and demonstrates that a variety of combinations of economic and political awareness are manifest in populations. In addition, we recently (in the late Fall of 2001) included an exploratory economic awareness instrument on a survey of the general population of Harris County Texas. Respondents were asked a standard set of political knowledge questions along with seven economic knowledge items. They were also asked for their impression of the general state of the national economy during the last six months. Factor analysis of these data revealed distinct political and economic knowledge dimensions. Further, since the media message about the Houston economy had been overwhelmingly negative in the six months leading up to the survey, we were able to access whether people with middle levels of economic knowledge were most likely to respond to this message and indicate that the economy had gotten worse or a lot worse (as

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⁶ (1) requires B1 and A1; (2) requires B1 and A2.

⁷ The exact form of the relationship will, of course, depend on the intensity of the message or, in the two (competing) message version of the model, the relative intensity of the two messages.

the model predicts they should). The results for political awareness were linear, that is (in a multivariable model with partisanship) people with more political awareness were always more likely to agree that country's economy had gotten worse. The economic awareness measure however, showed the kind of quadratic relationship the model predicts. Republicans with a high level of political awareness apparently discounted news of the poor economy, as they were able to "spin" even the last half of 2001 into a "not so bad" economy. Of course, these results are preliminary. As we explain below, more development of the economic knowledge measure is needed – particularly to identify items that capture economic (and for that matter political) knowledge in different countries.

Economic Priorities

The Model in Figure 3 also suggests how the concept of economic priorities, which has been prominent in the comparative economic voting literature, can be incorporated into this kind of theory of economic voting. "Economic priority" is the notion that some people care much more about one dimension of the economy than others (Duch and Palmer 2001b; Hibbs 1982; MacKuen and Mouw 1995; Nagler and De Boef 1999). For example, Hibbs (1982) has suggested that unskilled workers should care more about unemployment than inflation, while middle class voters and retirees should care more about inflation. Looking back at Figure 1, however, it is not clear how such an assumption might be included in the usual economic voting model. As a result, a number of *ad hoc* hypothesis have been put forward that make mutually contradictory claims about the impact of economic priorities (which have yet to be entirely resolved empirically).

In Figure 3, however, there is a very natural way to incorporate differences in economic priorities into the integrated model. Indeed, the *only* way this kind of individual heterogeneity can be included in the model is if it impacts either the reception, or acceptance, of media messages about the economy. Consequently, we suggest that economic priorities will impact the reception of economic information. Of course, this hypothesis is hardly controversial. A great deal of work in cognitive psychology makes the case that the more salient information is to a person, the more likely they will be to attend to it. And, it follows that people who care more about one dimension of the economy (e.g., inflation) than another (e.g., unemployment) will attend to media reports more about the former than the later (Mutz and Mondak 1997). As a result, we might expect these different aspects of the economy to have a differential impact on economic judgments.

This is a nice illustration of how concepts that have been important in the previous literature on economic voting can find a very natural entry into a fully realized theoretical effort. Indeed, while we cannot predict the ultimate impact of economic priorities on political support until we have discussed the other two parts the model, the focus on the informational role that economic priority plays is a clear departure from the role that economic priority has played in the literature to date.

Strength of Partisanship

As in Zaller's model, we expect strong partisans to reject messages about the economy that are not in accordance with their partisan predispositions. Here, we rely on work by such authors as Duch, Palmer and Anderson (2000), Wlezien, Franklin and Twiggs (1997) and Conover, Feldman and Knight (1986), who show that economic perceptions are substantially more favorable when a person is a strong "in" partisan (i.e., supports the party of the incumbent). In contrast, "out" partisans judge the economy much more harshly. Here, the adoption of Zaller's assumption that political awareness and partisanship are positively correlated is important (even though political awareness is not in this version of the model). The reason is that the availability in memory of partisan cues to modify ones evaluation of the economy no doubt requires a reasonable level of political awareness. At a minimum one must be aware of the party of the incumbent and must connect the performance of the economy with an implicit evaluation of that incumbent. It could be, in fact, that (unlike Zaller) we will ultimately need to incorporate political awareness into the acceptance part of this model. If so, the relevant correlations in the model that drive his predictions will be altered and we would expect different empirical predictions about the shape of the relationships between political awareness, economic awareness, and opinion change.

Finally, an alternative to the current story is possible, but can be accommodate within this theoretical framework. It could be that the impact of partisanship is not (or not only) felt in the rejection of non-conforming messages about the economy, but also in the selection of messages to attend to. This means that "in" partisans only pay attention to good news about the economy, while "out" tend to pay attention to

the bad. This formulation suggests that, in Figure 3, partisanship belongs in the box with economic knowledge and priorities. This change, however, does little to alter the overall implications of the model.

The Role of Personal Experience

Personal Experience is included in Figure 3 because, unlike many other changes in the political environment, people may sometimes be able to directly observe (in a completely unmediated form) aspects of the real national economy. Before discussing the implications of this, however, it is important to be clear what we mean (and do not mean) by an observation of the real national economy. Although almost every adult participates in economic activity on a daily basis, most of these activities do not (in our view) result in an observation of the real national economy. This is because most dimensions of the real national economy that political scientists, politicians, and journalists care about (and whose relationship with political support we want to explore) are artificial constructions that are only discernible in aggregate economic statistics. Indeed, the concept of a definable and measurable national economy only penetrated the consciousness of western publics in recent times. For the most part, personal economic experience does not help to reveal this constructed aggregate economy. For example, there is simply no way that every day economic activity could ever uncover (for the media-deprived citizen) an equivalent to GDP. On the other hand, individuals who regularly engage in market activities (such as grocery shopping or paying household bills) may have reasonably good information on changes in, or levels of, consumer prices. It is unclear to what extent individuals need to "sample" from the real economy in order to have reasonably accurate information, based on personal experience, of economic performance. For example, would knowledge of the employment status of 100 people be sufficient to generalize about unemployment levels? These are issues that we expect to explore with the survey research component of the project.

Empirical Questions From the Economic Judgments Model

The above discussion directs our attention to a set of empirical questions about economic judgments that we will need to explore in the empirical part of this project. Some these questions are summarized below:

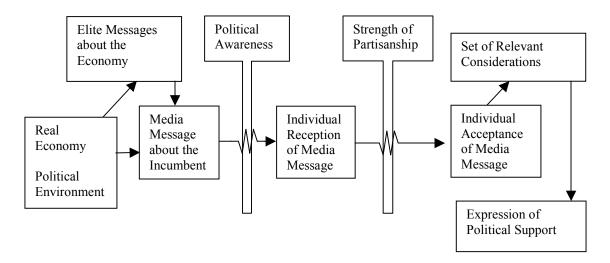
- 1. Does the media systematically select and frame economic news in a manner that leads to systematic distortions in aggregate economic judgments?
- 2. Do different dimensions of the economy have a differential impact on the economic judgments of people with differing economic priorities?
- 3. Do people with different levels of economic awareness and strength of partisanship differ in their responses to media messages about the economy?
- 4. How do cross-national differences in market incentives, professional incentives, and political control of the press distort the media message in different countries?
- 5. Do people with different personal experience with the economy evidence systematic differences in their economic judgments?
- 6. Do people with different personal experience with the economy evidence systematic differences in the degree to which media biases in the economic message impact their economic judgments?

Political Support

The application of Zaller's model to political support (in Figure 4) requires little comment since it is almost identical to the model in Figure 2. Indeed, due to the elimination of personal experience from the model, it is closer to Zaller's original formulation than even Figure 2. This is not surprising since Zaller himself has applied his model to the general question of political support (Zaller 2001). One should recall, of course, that this is only one of three parts of the overall model of economic voting that we are developing. The other two parts, economic judgments and the attribution of responsibility, respectively, constitute the main path through which we expect economic influence to shape political support. We will discuss these interactions below, but here show how another path between change in economic judgments and change in political support is possible even in the absense of voter attributions of responsibility for the economy to incumbents.

⁸ It is highly unlikely that the average citizen will have any unmediated experience with incumbents in large democracies.

Figure 4: Zaller's Model Applied to Political Support



 Covariation between political awareness and strength of partisanship is positive.

Figure 4 helps us understand how economic judgments can be correlated with incumbent support (i.e., an apparent economic vote) without the voter ever actually attributing responsibility for the economy to the incumbent. Specifically, Figure 4 supposes that there is an identifiable media message about the incumbent and that this message may respond to changes in the economy and the (non-economic) political environment. We can think of the media message about the incumbent as a positive or negative charaterization of some aspect of the incumbent's performance, qualifications, or character. When the incumbent is getting "good press", there are many positive stories about her, but when she is getting "bad press" the tone of coverage is negative. This incumbent message can include both non-economic stories (i.e., a story praising the government's health policy) and stories that explictly tie the economy to incumbent evaluations (i.e., a story saying the incumbent's health policy is ruining the economy). Clearly, within the framework of Figure 4 both kinds of messages shape public support for the incumbents; but it is also the case that both kinds of messages can induce the empirical phenonmenon of economic voting (i.e., an empirical connection between the real economy or economic judgements and political support). In the next section, we will talk about how media messages that directly attribute repsonsibilty for the economy to the incumbent can impact individual attributions of responsibility (and ultimately lead to economic voting); however, in this section we want to demonstrate how a the model in Figure 4 allows for an economic influence on political support that does not flow through an individual attribution of responsibility.

Specifically, if non-economic media messages about incumbents and media messages about the economy change in tandem, the models in Figures 3 and 4 will produce a correlation between economic judgements and political support. This is true even if the voters do not themselves connect their judgment of the economy to their evaluation of incumbents. This insight is potentially powerful because it suggests that in the prduction of economic voting, the connections that the *media* makes between the economy and politics may substitute for similar connections in the cognitions of *voters*. Consequently, individuals that are aware of economic and political change but who make no cognitive connections between them may yet be (unwitting) economic voters. In the previous empirical literature in economic voting, it has been demonstrated that economic voting is harder to detected when people do not make attributions of responsibility for the economy to incumbents. It is not clear, however, whether this impact is due to the lack of attributions or a correlation between the chance of making attributions on variables like economic and political awaremess (see the model in the next section). Only a model that controls for heterogeneity in these kinds of variables can rule out the kind of non-attributional economic voting suggested above.

Again, our discussion of political support directs our attention to a set of empirical questions that we will need to explore in the empirical part of this project. Some these questions are summarized below:

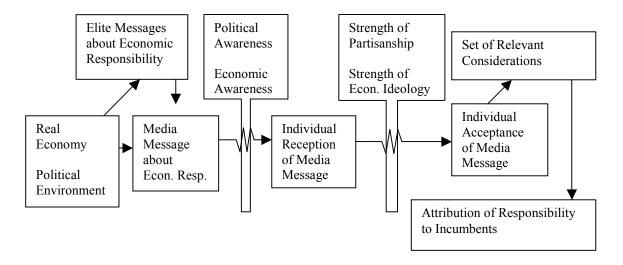
Empirical Questions From the Political Support Model

- 1. What (if any) is the relationship between non-economic media messages about the incumbent and media messages about the economy?
- 2. Among individuals who do not attribute responsibility for the economy to incumbents, is there an empirical connection between economic judgments and political support controlling for heterogeneity in the reception and acceptance of media messages about the economy and incumbents?

Attributions of Responsibility

In the last section we discovered a possible path thorugh which the economy could impact political support that did not require voters to make attributions of responsibility to incumbents. Clearly, however, many people can (and do) express opinions about who is responsible for economic performance. Indeed, as we suggested in our discussion of Figure 1, this is the primary path through which most sholars have traced economic voting and the one that has generated the most work trying to account for systematic differences in economic voting across countries and over time (i.e., the clarity of reposibility literature). In Figure 5 we model these attributions as opinions in the same way we have examined the other opinions in Figure 1.

Figure 5: Zaller's Model Applied to Attributions of Responsibility for the Economy to Incumbents



 Covariations between political awareness, economic awareness, strength of partisanship, and strength of ideology are all positive

According to some pundits, one of the reasons that Al Gore lost the 2000 U.S. presidential election was that he did not try hard enough to convince voters that he should be given the credit for the years of economic prosperity under Clinton. If true, it jibes well with our characterization of "attribution of responsibility for the economy to incumbents" as an opinion that should be modeled similary to the other opinions we have examined. The model is structurally like the previous models, but makes two significant changes to the set of variables that condition the reception and acceptance of media messages. First, it includes both political and economic awareness as indicators of reception, since it is likely that background knowledge in both areas is necessary to attend to and undestand these political-economic media messages. Next, it includes a new variable, Strength of Economic Ideology, as a factor conditioning acceptance of a received message.

Economic ideologies are like political ideologies in that they simplify and organize a set of cognitive relationships between related concepts. For this project, we are specifically concerned with

economic ideologies that characterize the ability and responsibity of the government to create positive economic outcomes. Specifically, we will be interested in where individuals fall on a two dimensional ideological space in which they answer whether the government *can* manipulate the economy and whether the government *should* try to manipulate the economy. We hypothesize that individuals that fell into the different quadrants of this space would respond quite differently to received media messages attributing responsibility for economic outcomes to the government.

We also include strength of partisanship as a conditioning variable for acceptance of received messages about attribution of responsibility, but point out that its impact on the acceptance of messages about attribution depends on the individual making an economic judgment as well. Specifically, when "in" partisans think the economy is performing poorly, they are unlikely to accept media messages that suggest incumbent politicians are resposible for the economy. Likewise, "out" partisans will reject messages promoting attribution to incumbent in good times.

Given the inclusion of these and the other conditioning variables in Figure 5, and assuming that all four of them are positively correlated, we again expect that political and economic awareness will have a non-linear realtionship to attributions of responsibility.

Finally, we should calrify an important distinction that is implict in the above disscussion. Throught this proposal, we use strength of partisanship to mean the attachment of an individual to the party of the incumbent. This may be rooted in ideological identification, but it may not. However, economic ideology (as we have defined it) may overlap quite a lot with political ideology (especially the traditional left/right distinction) and to thes extent that this does determine partisnaship, these two concepts may not be distinct. In our empirical analysis, we will need to explore the extent to which this is (or is not the case).

Some of the empirical questions about attribution that we will need to explore are:

Empirical Questions From the Attribution of Responsibility Model

- 1. Do people with different levels of economic awareness, political awareness, economic ideology, and partisanship differ in their responses to media messages about the economy?
- 2. Are economic ideology and partisanship empirically distinct?

Interactions Between the Opinion Models

Figure 1 suggests that economic judgments and attributions of responsibility impact support for incumbents. In our elaboration of this simple model, we have introduced more fleshed out opinion models for both of these components but have not explained how the different models may be interconnected to create the phenomenon of economic voting. The model in Figure 1 does little to help us with this task, since it is silent about the cognitive processes that underlie the proposed connections.

The political support model, however, does constrain the form that these connections can take. Specifically, the model only allows economic judgments and attributions of responsibility to have a direct effect on political support if they somehow enter the set of relevant considerations from which expressions of support are drawn. One way that this can happen is for attributions of responsibility to act as a cue that pulls judgments of the economy into memory whenever voters are asked to make some expression of political support.⁹

Research Design and Data Collection

The previous section outlined the critical building blocks of our approach to modeling economic influences on political support. That approach focuses attention on several understudied variables that might account for cross-national, temporal, and individual heterogeneity in the strength and nature of economic voting. These variables include the behavior of the media in reporting and framing economic news, incumbent news, and attributions of economic responsibility to incumbents; individual levels of political and economic knowledge; and partisanship, economic priorities, and economic ideology. In addition, variables capturing the "real" economy and individual (and aggregate) political support will be needed to evaluate the empirical usefulness of the model. In this section we describe our strategy for measuring these concepts and performing such an evaluation.

The Sample. The project will use evidence from 15 developed democracies (Canada, the United States, Britain, Ireland, France, Spain, Austria, Germany, Belgium, Australia, New Zealand, Italy,

⁹ Such speculations are not an important part of Zaller's opinion model, which seldom considers the interactions between multiple opinions. However, other scholars (e.g., the contributors to Lodge and McGraw 1995) do try to detail more precisely the cognitive process by which various opinions get grouped together, recalled, weighted, and combined in memory.

Denmark, Norway, and Sweden). We intend for the argument to apply to these countries generally. The need to focus on developed democracies comes not only from practical limitations in the data for less developed countries, but also because the theoretical arguments often depend on the existence, in a country, of particular kind of "media politics" that tends to occur in developed countries where the media plays the preeminent role in producing political communication and citizens have come to rely on the media to inform them about political and economic matters – often to the exclusion of personal and even interpersonal experience (Mutz 2000). Indeed, differences within the developed democracies in systems of mass communication will help us to understand some of the persistent cross-national differences in the nature and extent of economic voting in these countries. The data we collect from each country will span the 1980-2001 time period because the period varies significantly in terms of the ideology of incumbents in office, economic outcomes (the time frame spans periods of economic expansion, recession, rising and falling unemployment and significant changes in prices levels), and (potentially) media behavior (in many of these countries market incentives and the role of the government in media changed markedly over these two decades.

Real economy. In the discussion above, we pointed out that students of economic voting have not yet adequately traced the connection between the real economy and media messages about that economy. Such a mapping is critical, however – if one thinks that the media message is crucial to people's economic judgments. In order do this mapping we will need to have a precise measure of what constitutes the "real" economy in a country at a particular time. In the past, most comparativists have relied on official statistics reported by national statistical agencies and aggregated by international organizations like the OECD. We agree that these official statistics define the aggregate economy and so will use official statistics on four aspects of the economy (GDP, inflation, unemployment, and personal income) to measure it. Our emphasis on the media message about the economy, however, makes plain that many of the usual sources of crossnational economic data are not useful for our purposes. The problem is that these sources continue to update and revise their economic data months and years after they were initially reported. This kind of revision can often be substantial. Most aggregate economic voting models are estimated using these revised time-series and so are inadvertently modeling political attitudes at t₀ with economic information that was not even available at that time.

To evaluate our theory, we need to know what official statistics were reported at the time that the media reported them and voters consumed the resulting message. Consequently, we are building economic time-series data (on a monthly or quarterly basis) for each country that uses only the un-revised official statistics that were actually released to the media. This involves contacting the relevant statistical organizations and using sources like the *Economist* magazine, which publish these figures (in their appendices) immediately after they are reported. To our knowledge this data has never been collected and used in previous economic voting research.

Mediated Economic Information. Given the earlier theoretical discussion, it is clear that our empirical effort must include a measure of what the media is saying about the national economy. This measure needs to be comparable across countries and over time. Further, since out goal is to explore the relationship between the economy and *mass* political behavior, out measure should include a sampling of media that is aimed at different sectors of society. One practical strategy that meets these goals is to sample newspaper coverage of the economy in "mainstream", tabloid, and financial newspapers. Most countries have newspapers in each of these categories (with the exception of tabloids which are absent in some countries) and archives of the papers exist (usually on microfilm) that cover many years. Other strategies, like relying on television news shows, are prohibitive because of the difficulty in obtaining archival video and transcripts for enough countries.

Because of the geographical and temporal scope of the project, it will be impractical for us to code the economic information in the entire newspaper. Instead, we will restrict our attention to the information on the front-page. This is a high standard for coverage and results in many days in which we find no economic information. Still, there are plenty of front-pages that do contain economic information (in the pilot coding project based on about 2000 front-pages from different countries, approximately a third of the pages do have relevant economic information). Further, front-page information has some advantages for a study of how the media impacts the perceptions and opinions of the average citizen. First, everyone who reads a paper sees what is on the front-page and indeed many people who do not open up the paper will at least scan the headlines. Further, in modern society the front-page is a powerful agenda-setting device. The presence of a story on the front-page is a strong signal to readers that the information is important and worth attending to. A focus on front-page news, thus, lets us observe how economic news fares in just

these sort of editorial decisions (and how these decisions might be made differently in different countries and at different times).

Focusing on front-pages makes the project much more manageable, but, even taking only four papers per country, the fifteen countries in which we are interested produced over half a million front-pages from 1980-2001. We will clearly need to sample from this population of front-pages. The primary goal of our sampling strategy is to choose the newspaper front-pages that are most likely to contain economic information. This will ensure that our sample of front-pages in any given month is representative of all the front-page economic news that month. Which front-pages are most likely to contain economic information? Our assumption is that the reporting of economic news is most likely on (or around) those days that the releases monthly or quarterly economic statistics (specifically statistics on unemployment, inflation and growth). Based on this assumption, we will sample the day of and the day following the release of such economic information. To evaluate the validity of this assumption, we will collect frontpages for every day of selected months for each country and we will code these and determine if indeed economic information is concentrated on the days economic information was released. Our preliminary efforts to collect these release dates clearly suggest that this is hard-to-come-by information. For the most part historical information on the precise release dates of economic indicators is not readily available in national statistical archives. Rather, the staff of national statistical bureau must assemble these data (normally for a fee), or we will have to hire individuals to review the publication date of periodicals or press releases in which this information is reported. We have been able to determine, however, that, for most of our countries (for most of our time period), these data do exist and that one of these two methods is feasible to obtain it.

Based on this sampling strategy, a complete dataset could include the front-pages of four newspapers in each country for six days per month (2 days each for the release of unemployment, inflation, and growth statistics, respectively) from between 1980-2001. For the 15 countries in our current sample, this results in about 120,000 pages. In reality, the number of pages we will code is much smaller than this. First, we do not have data on the release dates for inflation, unemployment, or growth statistics for some countries and time periods, although our coverage is about 75% complete. In addition, for some countries all four newspapers are not available for the whole period. This missing data means that we usually get about 4 pages per month (instead of the possible 6) for 3-4 papers for an average of about 15 years per country. Our actual sample of front-pages will thus include about 40,000 front-pages. We expect, based on our pilot coding, about a third of these to have economic information.

Our goal is to obtain, for each country in the sample, two "mainstream" papers, one tabloid, and one financial newspaper. We concentrated on papers with national circulation, but in several cases (e.g., Australia) few national newspapers existed and/or the papers from the major cities were (according to a survey of country experts) more representative of what the typical citizen might see. The newspapers we will target are listed in the chart below – we chose the selected papers based on an e-mail survey that was sent to country experts from each of the countries.

Country	Mainstream 1	Mainstream 2	Tabloid	Financial
Australia	The Australian	The Sydney	The Daily	The Australian Financial
		Morning Herald	Telegraph	Review
Austria	Die Presse	Neue	Der Standard	Klienezetung
		Kronenzeitung		
Belgium	Het Laaste News	De Standaard		Financieel Economische
(Flemish)				Tijd
Belgium	Le Libre Belgique	Le Soir		
(Walloon)				
Canada	Globe and Mail	Toronto Star	Winnipeg Sun	Financial Post
Denmark	Bergens Tiende	Politiken	Ekstra Bladet	Borsen
France	Le Monde	Le Figaro		La Tribune
Germany	Sueddeutsche	Frankfurter	Bild Zeitung	Das Handelsblatt
	Zeitung	Allgemeine		
Ireland	The Irish Times	Irish Independent	Evening	Sunday Business Post
			Herald	

The	Volkskrant	NRC Handelsblad	Telegraaf	Financieel Dagblad
Netherlands				
New	The Press	The New Zealand	The Sunday	Independent
Zealand		Herald	News/Truth	
Norway	Aftenposten	Bergens Tidende	Verdens Gang	Dagens Naeringsliv
Spain	El Pais	La Vanguardia	El Periodico	La Gaceta de los negocios
Sweden	Expressen	Dagens Nyheter		
USA	New York Times	Los Angles Times	USA Today	Wall Street Journal

Aggregate Data on Economic Judgments and Political Support: Our measures of economic judgments are all survey based. Most are culled from existing cross-national and comparable national data, but we will need to include some economic judgment questions on a series of new surveys that we intend to field. These data will be used both for aggregate and individual level analysis.

Currently we have the full set of aggregate data on economic judgments by both economic elites (specifically industry executives) and the mass public from the monthly consumer and business confidence surveys conducted by the European Commission. ¹⁰ Three of the consumer confidence questions in this series ask respondents for an economic judgment: respondents' unemployment expectations over the next 12 months; respondents' expectations regarding price trends over the next 12 months; respondents' expectations regarding the general performance of the economy over the next 12 months. Two of business confidence items similarly capture industry executives' knowledge of economic outcomes: industry executives' employment expectations for the months ahead; and industry executives' selling price expectations for the months ahead. The consumer confidence data covers the months from the first quarter of 1986 to the first quarter of 2000. The business confidence index covers the period dating from the first quarter 1967 to the first quarter 2000. A preliminary analysis comparing these data to measures of the real economy (in the usual, revised, version) was recently presented at the 2001 Annual Meeting of the APSA ("The Economy: Do they get it Right and does it Matter?", Duch and Stevenson 2001). The empirical model in this analysis modeled aggregate economic judgments (the three EU consumer perception series) and actual economic outcomes as error correction processes. This is a convenient way to examine the degree to which economic judgments track the real economy. The results unambiguously support two conclusions that are important to the current project: 1) There are significant cross-national variations in how well citizens' judgments track the economy (which we expect is due to systematic differences across countries in the extent of media biases in reporting the economy); 2) There are similar variations in the fit between judgments and the real economy across economic indicators (which we expect is due to the extent to which personal experience works against media biases in reporting different aspects of the economy).

Our intention is to collect this kind of economic judgment series for the full set of countries in our developed nation sample. This will entail essentially adding the non-European countries in our sample (Australia, New Zealand, and Canada) to the current dataset. Preliminary efforts to identify sources for these data will be available for many of these countries.

In addition to the aggregate economic judgment series, we have also begun to collect aggregate monthly incumbent popularity series for many of the countries in our sample. In particular Chris Anderson (1997) has provided us with incumbent popularity series for a large number of the European countries – we will need to supplement these data for the period 1988 to the present. Monthly popularity series exist for all of the other countries in the sample – our task will be to contact the polling organizations with these data and assemble the data sets. Ultimately, these data, along with those just discussed, will let us examine the models implications for cross-national variation in aggregate relationships between the real economy, the media message, aggregate economic judgments, and aggregate incumbent popularity. While other researchers studying individual countries have examined as many as three of these variables in models of popularity, no study has ever examined them all in an integrated model – especially not for multiple countries.

Individual Level Data

Clearly, we cannot rely on aggregate data alone – our theory is posed at the individual level and depends on individual heterogeneity in many of the key variables. These include economic judgments,

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¹⁰ Unfortunately, the individual level data is not available.

responsibility attribution, political and economic awareness, partisanship, economic ideology, economic priorities, and incumbent support. Previous surveys will be useful in some cases. For example, the Eurobarometer often includes questions on economic judgments. Likewise, the Comparative Study of Electoral Systems project includes questions that we can use to measure many of the concepts mentioned above. Unfortunately, however, these sources do not include useable measures of several of the variables we will require (e.g., no measures of economic awareness, attributions of responsibility (usually), or economic ideology).

Our strategy for (affordably) obtaining a more complete data set for many of our countries is to purchase a block of questions in omnibus surveys in eight of our sampled countries (Canada, the United States, France, Spain, Denmark, Britain, Ireland, and Germany). These surveys will include measures of all they key concepts mentioned above. Our pre-test of the economic and political knowledge questions in the Houston area was discussed above. We plan on doing similar tests for the other measures using small samples of citizens from the relevant countries. The results of these tests will allow us to choose a small number of the most effective questions to construct our measures. Recent advances in the statistical methods of item discrimination will be utilized in this effort (Jackman 2001).

Timetable

May, 2002-June, 2002

- o Finalize database of all release dates
- o Finalize sample of all newspapers and identification of archives with newspapers

July, 2002-September, 2002

o Finalize copying all newspaper front pages

September, 2002-January, 2003

o Finalize all coding of newspapers

January, 2003-May, 2003

Complete assembling databases and generation of preliminary empirical results
 May, 2003-December, 2003

o Finalize book manuscript and articles for refereed journals

Data Archiving

This project will create a unique data set consisting of a lengthy times series (1980-2001) of media representation of economic outcomes for 15 countries. Based on our sampling strategy, a complete dataset will include about 30,000 copies of front-pages. These data, the information extracted from it, and the detailed coding instructions we used will be archived with the ICPSR. In addition, we will be archiving the data generated from the eight-country public opinion surveys.

Qualifications of Principal Investigators

Both Principal Investigators have worked and contributed extensively to the study of economic voting both in the American context and in the comparative context. Ray Duch has recently published articles exploring the extent to which segments of the U.S. population have systematic differences in their assessments of the macro-economic and how this affects aggregate-level models of economic voting (Duch, Palmer Anderson 2000). In a recent APSR article Duch (2001) proposes and tests a developmental model of economic voting in which levels of economic voting are hypothesized to correlate with the levels of political information and levels of trust in government officials. In a recent Political Analysis article Duch (Palmer and Palmer 2001) tests a number of the information processing hypotheses proposed by Zaller (1992) and others (Lodge, Steenbergen and Brau 1995). Duch has designed and implemented public opinion surveys in over 25 countries with widely varying levels of political and economic development.

Randy Stevenson has published pieces on comparative economic voting in the *American Journal of Political Science* and the *British Journal of Political Science*. He has also implemented an NSF funded multi-country survey effort to measure European's knowledge of the post-election coalition formation process.

¹¹ We have already assembled all such data into a (carefully cleaned) cross-national overtime file that covers most of the 80's and 90's at least once every two years.

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- Zaller, John. 2002. A Theory of Media Politics: How the Interests of Politicians, Journalists, and Citizens Shape the News. Chicago: University of Chicago Press (forthcoming).

VITA Raymond Michel Duch

I. Positions

Professor, Political Science Department, University of Houston, 2001 Associate Professor, Political Science Department, University of Houston, 1990-2001 Visiting Scholar, Graduate School of Business, Stanford University, Fall 2000 Visiting Scholar, Hoover Institution, Stanford University 1995-96 Assistant Professor, Political Science Department, University of Houston, 1982-1990 Assistant Professor, State University of New York, 1981-1982

II. Education

University of Rochester, Ph.D. (1982) University of Rochester, M.A. (1978) University of Manitoba, B.A. Honours (1975)

III. Recent Awards

Robert H. Durr Award for the best paper (delivered at the 2001 Midwest Political Science Association meetings) applying quantitative methods to a substantive problem.

IV. Professional Associations and Activities

Editorial Board of the American Journal of Political Science, 1997-2001.

National Science Foundation Political Science Advisory Panel, 1999-2001.

Chair, Texas Higher Education Coordinating Board Advisory Committee on International Issues 1999-present.

Co-coordinator, Re-Thinking Democracy in the New Millennium Conference, February 16-19, 2000, Houston Texas (http://www.uh.edu/democracy)

Director, Social Science Data Lab, University of Houston, 1997-present.

VI. Recent Publications

Articles

Raymond M. Duch and Harvey Palmer. "Strategic Voting in Post-communist Democracy." *British Journal of Political Science* (Forthcoming 2002).

Raymond M. Duch "A Developmental Model of Heterogeneous Economic Voting in New Democracies" *American Political Science Review* (December, 2001 98 (4)).

Harvey Palmer and Raymond M. Duch. "Do Surveys Provide Representative or Whimsical Assessments of the Economy" *Political Analysis* (2001)

Raymond M. Duch and Harvey Palmer. "Heterogeneity in Perceptions of National Economic Conditions." *American Journal of Political Science* (2000) (October).

Raymond M. Duch. "The Electoral Connection and Democratic Consolidation." *Electoral Studies* (1998).

Raymond M. Duch and Michaell Taylor. "Economics and the Vulnerability of Pan European Institutions." *Political Behavior* (1997)

Raymond M. Duch. "Economic Chaos and the Fragility of Democratic Transition in Former Communist Regimes." *Journal of Politics*. (February, 1995).

Raymond M. Duch and Michaell Taylor. "A Reply to Abramson and Inglehart's "Education, Security, and Postmaterialism." *American Journal of Political Science*. 38: 398-411 (August 1994).

James L. Gibson and Raymond M. Duch. "Postmaterialism and the Emerging Soviet Democracy." *Political Research Quarterly*. (March, 1994).

James L. Gibson and Raymond M. Duch. "Political Intolerance in the USSR: The Distribution and Etiology of Mass Opinion." *Comparative Political Studies*. (October, 1993).

Raymond M. Duch. "Tolerating Economic Reform: Popular Support for Transition to a Free Market in the Former Soviet Union." *American Political Science Review*. 87:590-608 (September 1993).

Raymond M. Duch and Michaell Taylor. "Post-Materialism and the Economic Condition." *American Journal of Political Science*. 37: 747-778 (August 1993).

James L. Gibson, Raymond M. Duch and Kent Tedin. "Democratic Values and the Transformation of the Soviet Union," *Journal of Politics* 54 (May, 1992):329-371.

James L. Gibson and Raymond M. Duch. "Attitudes Toward Jews and the Soviet Political Culture," *Journal of Soviet Nationalities*, 2 (Spring, 1992), 77-117.

James L. Gibson and Raymond M. Duch. "Anti-Semitic Attitudes of the Mass Public: Estimates and Explanations Based on a Survey of the Moscow Oblast," *Public Opinion Quarterly*, 56 (Spring, 1992), 1-28.

Raymond M. Duch and James L. Gibson. "Putting Up With' Fascists in Western Europe: A Comparative, Cross-National Analysis of Political Tolerance," *Western Political Quarterly*, 45 (March, 1992).

Books

<u>Privatizing the Economy: Telecommunications Policy in Comparative Perspective</u> Ann Arbor, Michigan: University of Michigan Press (1991).

Monographs and Book Chapters

Raymond M. Duch and Harvey Palmer. "Heterogeneous Perceptions of Economic Conditions in Cross-national Perspective." In *Economic Voting*. Oxford: Oxford University Press.

Raymond M. Duch. "How Citizens Decide: Information, Persuasion and Choice in Developing Democracies" in *Democratic Institution Performance: Research and Policy Perspectives*. Praeger. (Forthcoming 2002)

Raymond M. Duch. "Participation in the New Democracies of Central and Eastern Europe: Cultural versus Rational Choice Explanations." In Samuel Barnes and Janos Simon, eds. *The Postcommunist Citizen* Budapest: Erasumus Foundation. 1998.

Raymond M. Duch. "Rationality" In <u>The Encyclopedia of Democracy</u>, ed. Seymour Martin Lipset, Washington, D.C.: Congressional Quarterly Books. 1995.

Biographical Sketch: Randolph T. Stevenson

A. Academic Background

University of Rochester, Ph.D. 1997, M.A. 1995 Texas A&M University, B.A.,1991.

B. Professional Experience

2001-present Albert Thomas Assistant Professor of Political Science, Rice University

1997-2001 Assistant Professor of Political Science, Rice University

1996-97 Lecturer in Political Science, Rice University

1995-96 Research Associate, Hoover Institution, Stanford University

1995 Visiting Researcher, The European University Institute, Fiesole, Italy.

Research associate, University of Haifa; Haifa, Israel. 1993-94 Lecturer, Department of political science, University of Rochester

C. Publications – Related to the Proposed Project

"The Economy as Context: Indirect Links between the Economy and Voters." In Han Dorussen, ed., <u>The Changing Economic Voter</u>. London: Routledge (forthcoming)

"The Economy and Policy Preference: A Fundamental Dynamic of Democratic Politics." <u>American Journal of Political Science</u>. Vol. 45, no. 3, July 2001, pp. 620-633

"Do campaigns Matter? Testing for Cross-National Effects." <u>British Journal of Political Science</u>. Vol. 30, April, 2000, pp. 217-235. (with Lynn Vavreck)

Publications - Other

"The Cost of Ruling, Cabinet Duration, and the "Median Gap Model" Public Choice. (forthcoming, 2001)

"Cabinet Formation in Parliamentary Democracies." <u>American Journal of Political Science</u>. Vol. 45, no. 1, January 2001, pp. 33-50. (with Lanny Martin)

"Cabinet Terminations and Critical Events." <u>American Political Science Review</u>. Vol. 94, no. 3. September 2000, pp. 627-640. (with Daniel Diermeier)

"Cabinet Survival and Competing Risks." <u>American Journal of Political Science</u>. vol.43, no. 4, October 1999, pp. 1051-1068. (with Daniel Diermeier)

"Defense Expenditures and Economic Growth In Israel: The Indirect Link." <u>Journal of Peace Research</u>, Vol. 33, no. 3, 1996, pp. 341-353. (with Alex Mintz, Michael Ward, and Jordin Cohen)

"Theories of Budgetary Tradeoffs." Public Budgeting and Financial Management. 1995 (with Alex Mintz).

"Defense Expenditures, Economic Growth, and the 'Peace Dividend': A Longitudinal Analysis of 103 Countries." Journal of Conflict Resolution, Vol. 39, No. 2, 1995, pp. 283-309 (with Alex Mintz).

"Armament and Development: An Empirical Analysis of the Impact of Military Spending on Economic Growth in Developing Countries." in Chatterji, Jager, and Rima (eds.) <u>The Economics of International Security: Essays in Honor of Jan Tinbergen</u>, London: Palgrave. 1994 (with Alex Mintz).

D. Collaborators

Raymond Duch, University of Houston Lanny Martin, Florida State University Daniel Diermeier, Kellog School of Management, Northwestern University

E. Graduate Advisors

G. Bingham Powell, University of Rochester Renee Smith, University of Rochester (formerly)

F. Thesis Students

Shaun Schottsmiller, Rice University Seth Precht, Rice University Shawn Richert, Rice University

Total Students Supervised to Date: 6

SUMMARY PROPOSAL BUDGE	YE T		FOI	R NSF L	JSE ONL	Y
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PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		AW	'ARD N		Портого	
Raymond M Duch		, , , ,				
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates	N	SF Funde erson-mos	d		unds	Funds
(List each separately with title, A.7. show number in brackets)	CAL	ACAD		Reque	ested By poser	granted by NS (if different)
1. Raymond M Duch - Professor	0.00					
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6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)		0.00			16,920	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)	0.00	0.00	2.00		10,720	
1. (1) POST DOCTORAL ASSOCIATES	0.00	0.00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)		0.00			0	
3. (1) GRADUATE STUDENTS	0.00	0.00	0.00		9,408	
4. (()) UNDERGRADUATE STUDENTS					0	
5. (()) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)				,	26,328	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					20,328	
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	IG \$5,000	<i>5.</i>)				
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E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 0 0 0 0 0 0 0 0 0 0 0 0 0	SIONS)				0 1,200	
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) 1. TOTAL PARTICIPANTS (0) 1. TOTAL PARTICIPANTS (0) 1. TOTAL PARTICIPANTS (0) 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 0. TOTAL PARTICIPANTS (0) 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES	SIONS)				0 1,200	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS G. OTHER DIRECT COSTS	SIONS)				0 1,200 0 1,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES	SIONS)				0 1,200 0 1,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	SIONS)				0 1,200 0 1,000 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES	SIONS)				1,000 0 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES	SIONS)				1,000 0 0 0 0 0 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS (1) TOTAL PARTICIPANTS (1) TOTAL PARTICIPANTS (2) PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS	SIONS)			(1,000 0 0 0 0 0 60,000 61,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIP	SIONS)			(1,000 0 0 0 0 0 0 0	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	SIONS)			(1,000 0 0 0 0 0 60,000 61,000	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 0 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS (0) TOTAL PARTICIPANTS (0) TOTAL PARTICIPANTS (0) TOTAL PARTICIPANTS (1) TOTAL PARTICIPANTS (2) PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G)	SIONS)			10	0 1,200 1,000 0 0 0 60,000 61,000 08,733	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)	SIONS)			10	0 1,200 1,000 0 0 0 60,000 61,000 08,733	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL	SIONS)			10	0 1,200 1,000 0 0 0 60,000 61,000 08,733	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) II. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 108733 (Rate: 56.4000, Base: 108733) TOTAL INDIRECT COSTS (F&A)	SIONS)	COSTS	.)	10	0 1,200 1,000 0 0 0 60,000 61,000 08,733 61,325 70,058	
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PA	SIONS)	COSTS	.)	10	0 1,200 1,000 0 0 0 60,000 61,000 08,733	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS G. OTHER DIRECT COSTS 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 5. SUBAWARDS 6. OTHER TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A) (SPECIFY RATE AND BASE) 108733 (Rate: 56.4000, Base: 108733) TOTAL INDIRECT COSTS (F&A) J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS)	SIONS) CIPANT	COSTS		10	0 1,200 1,000 0 0 0 60,000 61,000 08,733 61,325 70,058	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PA	SIONS) CIPANT	COSTS	Т\$	10	0 1,200 1,000 0 0 0 60,000 61,000 08,733 61,325 70,058	\$
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 1. STIPENDS \$ 2. TRAVEL 3. SUBSISTENCE 4. OTHER TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANTS (1) TOTAL PA	CIPANT SEE GPG EL IF DIF	COSTS GII.C.6.j	T\$ FOR I	10 10 11 11 11 11 11 11 11 11 11 11 11 1	0 1,200 1,000 0 0 0 60,000 61,000 08,733 61,325 70,058 0	

SUMMARY YEAR 2
PROPOSAL BUDGET FOR NSF USE ONLY

PROPOSAL BUDGET			FO	R NSF USE ONLY						
ORGANIZATION		PROPOSAL NO. DURAT			DURATIO	ON (months				
University of Houston					Proposed	Granted				
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		ΑW	AWARD N		AWARD N		AWARD N			
Raymond M Duch		OF F								
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates				SF Funded erson-mos.		Re	Funds quested By	Funds granted by NS		
(List each separately with title, A.7. show number in brackets)	CAL	ACAD			proposer	(if different)				
1. Raymond M Duch - Professor	0.00	0.00	0.00	\$	0	\$				
2.										
3. 4.										
5.										
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0					
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)		0.00			0					
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)	0.00	0.00	0.00							
1. (0) POST DOCTORAL ASSOCIATES	0.00	0.00	0.00		0					
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)		0.00			0					
3. (1) GRADUATE STUDENTS	0.00	0.00	0.00		9,408					
4. (0) UNDERGRADUATE STUDENTS					0					
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0					
6. (0) OTHER					0					
TOTAL SALARIES AND WAGES (A + B)					9,408					
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					2,267					
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					11,675					
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDIN	G \$5,000).)								
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES: 2. FOREIGN	SIONS)				1,200					
Z. I OKLIGIV					1,200					
F. PARTICIPANT SUPPORT COSTS										
1. STIPENDS \$ 0										
2. TRAVEL										
3. SUBSISTENCE										
4. OTHER	OIDANIT	00000			Δ					
TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTIC	CIPANT	COSTS			0					
G. OTHER DIRECT COSTS 1. MATERIAL S AND SLIDBLIES					1,000					
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	1. MATERIALS AND SUPPLIES 2. DUBLICATION COSTS/DOCLIMENTATION/DISSEMINATION				<u> 1,000</u>					
B. CONSULTANT SERVICES				0						
4. COMPUTER SERVICES					0					
5. SUBAWARDS					0					
6. OTHER					0					
TOTAL OTHER DIRECT COSTS					1,000					
H. TOTAL DIRECT COSTS (A THROUGH G)					13,875					
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)										
13875 (Rate: 56.4000, Base: 13875)										
TOTAL INDIRECT COSTS (F&A)					7,826					
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)				-	21,701					
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS S	SEE GPG	3 II.C.6.j	.)		0					
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)			- -	\$	21,701	\$				
M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVE	EL IF DIF	FEREN								
PI/PD NAME		NID:55			SE ONLY	0.471611				
Raymond M Duch		INDIRE Checked			TE VERIFICATE Sheet	CATION Initials - OR				
ORG. REP. NAME* Pagamany Crimmat	Date	OHECKEU	Dal	o Oi Ra	iie Olieet	illiais - UK				
Rosemary Grimmet										

PROPOSAL BUDGET FOR NSF USE ONLY **ORGANIZATION** PROPOSAL NO. **DURATION** (months) **University of Houston** Proposed Granted PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARD NO. Raymond M Duch Funds Requested By proposer Funds granted by NSF (if different) A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates NSF Funded Person-mos. (List each separately with title, A.7. show number in brackets) CAL ACAD SUMR 0.00 | 0.00 | 2.00 | \$ 1. Raymond M Duch - Professor 16,920 | \$ 2. 3. 4 5. 0.00 | 0.00 | 0.00) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 6. (0 7. (1) TOTAL SENIOR PERSONNEL (1 - 6) $0.00|\ 0.00|\ 2.00$ 16,920 B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 0.00 | 0.00 | 0.00 0 1. ($oldsymbol{0}$) POST DOCTORAL ASSOCIATES (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 0.00 0.00 0.00 0 18,816 2) GRADUATE STUDENTS 4. (**0**) UNDERGRADUATE STUDENTS 0 5. (**()**) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 0 6. (**0**) OTHER 0 35,736 TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) 22,472 TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) 58,208 D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) **TOTAL EQUIPMENT** 0 E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS) 0 2,400 2. FOREIGN F. PARTICIPANT SUPPORT COSTS 0 1. STIPENDS 0 2. TRAVEL 0 3 SUBSISTENCE 0 4. OTHER TOTAL PARTICIPANT COSTS TOTAL NUMBER OF PARTICIPANTS 0) 0 G. OTHER DIRECT COSTS 2,000 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 0 0 3. CONSULTANT SERVICES 4. COMPUTER SERVICES 0 5. SUBAWARDS 0 6. OTHER 60,000 62,000 TOTAL OTHER DIRECT COSTS H. TOTAL DIRECT COSTS (A THROUGH G) 122,608 I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 69,151 TOTAL INDIRECT COSTS (F&A) 191,759 J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.C.6.j.) 0 191,759 | \$ L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL IF DIFFERENT \$ PI/PD NAME FOR NSF USE ONLY Raymond M Duch INDIRECT COST RATE VERIFICATION ORG. REP. NAME* Date Checked Date Of Rate Sheet Initials - ORG **Rosemary Grimmet**

SUMMARY

Cumulative

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Budget Justification

Salaries and Wages

Duch is requesting two-ninths summer salary for the first year of the project (2002). He will devote the summers of 2002 and 2003 to the supervision of data collection, data cleaning, data analysis and the preparation of manuscripts for submission to peer reviewed journals.

The proposal will fund one full-time graduate student at the University of Houston for each of the years of the project. These graduate students will work with the PIs and on all phases of the project including data collection, coding, analysis and the preparation of manuscripts summarizing project findings.

Travel

We have budgeted \$1200 per year for foreign travel for Duch. This will allow Duch to better supervise the fielding of the European surveys that we are conducting as well as allow him do the archival work necessary to obtain some of the newspapers that are unavailable in the United States.

Other Direct Costs

1.) Materials and Supplies

We have budgeted \$1,000 each year for supplies which include mailing, courier and telephone expenses. The major cost here is the mailing of newspapers from sampled countries to Houston.

2.) Survey Research Contractor

We have included a preliminary estimate from Mogens Jacobsen at Gallup Denmark for conducting and overseeing the surveys we require. This will allow 10 standard format questions to be included on omnibus surveys of 1000 respondents in each of 8 countries. The portion of this cost budgeted in the request from the University of Houston is \$60,000.

A copy of the preliminary quotation for the Survey work follows:

To: Randy Stevenson and Raymond Duch From: Mogens Storgaard Jakobsen, Gallup Denmark

January 17th, 2002

Dear Dr. Duch and Dr. Stevenson

I have now received preliminary quotations from all the countries involved. It will be possible for us to conduct the study according to the conditions you have outlined so far.

Gallup Denmark – a part of Taylor Nelson Sofres - will manage and coordinate the study. Since there are eight countries involved this time, Gallup Denmark recommend that the countries commit themselves to deliver a data-file where not only the 10 standard questions but also a number of selected standard-criteria will have to fit a predefined data-map. This implies that each county will have to code their own specific criteria into a set of categories which essentially are for you to choose. We will be happy, however, to offer our assistance since we have a lot of experience in managing multinational surveys. Of course, party

choice questions will not be coded into one large variable but only translated into English for by each participating country.

Some country-specific knowledge is lost here on account of the need to secure cross-country comparability, but on balance this trade off is most likely a worthwhile effort.

There are some differences in which demographics each individual country uses. As a result, we should settle on a minimum number of standard demographics that should be delivered by each country.

Also, party choice – both past voting behaviour and voting intentions - is not automatically included in all countries. I have, however, asked all countries to deliver quotes that include these questions.

If you decide to carry out the study, timing and coordination should be settled on immediately afterwards. It will not be a problem to implement the study within $1-1\frac{1}{2}$ months. Most countries interview on average 1000 persons on a weekly basis.

Price

Please note that the price is preliminary which is due to the fact that we have not yet been introduced to the questionnaire. At this point, a preliminary price for the survey will be: DKK 710 000,- which in todays prices amounts to app. US\$ 85 000,- In the price is included:

- Administration of the surveys from Denmark
- App. 1000 interviews in each of the following countries. Germany, Britain, France, Spain, Ireland, USA, Canada & Denmark.
- 10 normal questions
- Standard demographics
- Party-choice questions
- One aggregated data-file with demographics, party choice and 10 normal questions.

Given that exchange rates are somewhat versatile adjustment of prices may necessary at a later stage. However, please note that in the last 5 years such adjustments have always worked in favour of the US.

I'm looking forward to hearing from you

Yours sincerely

Mogens Storgaard Jakobsen Senior Research Executive, MA poli.sci. SUMMARY YEAR 1
PROPOSAL BUDGET FOR NSF USE ONLY

PROPOSAL BUDGET			FOF	R NSF USE ONLY		
ORGANIZATION		PROPOSAL NO. DI			DURATIO	N (months)
William Marsh Rice University			Propos		Proposed	Granted
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		AW	/ARD N	Ο.		
Randolph T Stevenson						
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates	N	SF Funde	d S.	D	Funds	Funds
(List each separately with title, A.7. show number in brackets)	CAL	ACAD			uested By roposer	granted by NSI (if different)
1. Randolph T Stevenson - none	0.00	0.00	0.00	\$	0	\$
2.						
3.						
4.						
5.						
6. (()) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0	
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)		0.00			0	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)	0,00	0,00	0,00			
1. (0) POST DOCTORAL ASSOCIATES	0.00	0.00	0.00		0	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)		0.00			<u>ŏ</u>	
3. (1) GRADUATE STUDENTS	0.00	0.00	0.00		12,500	
4. (0) UNDERGRADUATE STUDENTS					0	
5. (1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					12,500	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					4,297	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					16,797	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDIN	C &E 000				10,/9/	
TOTAL EQUIPMENT E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSES)	SIONS)				0	
2. FOREIGN	0.00)				0	
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$						
2. TRAVEL						
3. SUBSISTENCE — 0						
4. OTHER0						
TOTAL NUMBER OF PARTICIPANTS ($oldsymbol{0}$) TOTAL PARTI	CIPANT	COSTS			0	
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES					1,000	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					0	
3. CONSULTANT SERVICES					25,000	
4. COMPUTER SERVICES					0	
5. SUBAWARDS					0	
6. OTHER					19,600	
TOTAL OTHER DIRECT COSTS					45,600	
H. TOTAL DIRECT COSTS (A THROUGH G)					62,397	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					3=,071	
28469 (Rate: 49.0000, Base: 58100)						
TOTAL INDIRECT COSTS (F&A)					28,469	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					90,866	
K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS S	SEE GPO	II.C 6 i	.)		0	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)	01 0		•,	\$	90,866	\$
M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL	EL IE DIE	FFRFN	IT \$	Ψ	20,000	*
PI/PD NAME		:_!\		ISF II	SE ONLY	
Randolph T Stevenson		INDIRE			TE VERIFIC	CATION
ORG. REP. NAME*		Checked			e Sheet	Initials - ORG
Heidi thornton						
***************************************					D DE\//055	

SUMMARY YEAR 2
PROPOSAL BUDGET FOR NSF USE ONLY

PROPOSAL BUDGET			FOR	R NSF USE ONLY														
ORGANIZATION		PROPOSAL NO. DURA			DURATIO	N (months												
William Marsh Rice University			Propose		Proposed	Granted												
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		ΑW	AWARD NO.															
Randolph T Stevenson																		
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates	N: Pe	F Funded erson-mos.		F Funded erson-mos.		SF Funded		SF Funded		F Funded erson-mos.		SF Funded erson-mos.		SF Funded		F	unds	Funds granted by NS
(List each separately with title, A.7. show number in brackets)		ACAD		Requ pr	ested By oposer	(if different)												
1. Randolph T Stevenson - none 2.	0.00	0.00	2.00	\$	16,666	\$												
3.																		
4.																		
5.																		
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0													
7. (1) TOTAL SENIOR PERSONNEL (1 - 6)		0.00			16,666													
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)	0.00	0.00	2.00		10,000													
1. (1) POST DOCTORAL ASSOCIATES	0.00	0.00	0.00		0													
		0.00			0													
	0.00	0.00	0.00		12,500													
4. (0) UNDERGRADUATE STUDENTS 5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0													
6. (1) OTHER					0													
TOTAL SALARIES AND WAGES (A + B)					29,166													
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					8,734													
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					37,900													
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING	C &E 000				37,900													
2. FOREIGN					0													
F. PARTICIPANT SUPPORT COSTS																		
1. STIPENDS \$																		
2. TRAVEL — 0																		
3. SUBSISTENCE $\frac{0}{0}$																		
4. OTHER0																		
TOTAL NUMBER OF PARTICIPANTS ($oldsymbol{0}$) TOTAL PARTIC																		
G. OTHER DIRECT COSTS	CIPANT	COSTS			0													
	CIPANT (COSTS																
1. MATERIALS AND SUPPLIES	CIPANT (COSTS			1,000													
MATERIALS AND SUPPLIES PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION	CIPANT (COSTS			1,000													
MATERIALS AND SUPPLIES PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION CONSULTANT SERVICES	CIPANT (COSTS			1,000 0 0													
MATERIALS AND SUPPLIES PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION CONSULTANT SERVICES COMPUTER SERVICES	CIPANT (COSTS			1,000 0 0													
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SUMMARY **Cumulative** PROPOSAL BUDGET FOR NSF USE ONLY ORGANIZATION PROPOSAL NO. **DURATION** (months) William Marsh Rice University Proposed Granted PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR AWARD NO. Randolph T Stevenson Funds Requested By proposer Funds granted by NSF (if different) A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates NSF Funded Person-mos. (List each separately with title, A.7. show number in brackets) CAL ACAD SUMR 0.00 | 0.00 | 2.00 | \$ 1. Randolph T Stevenson - none 16,666 | \$ 2. 3. 4. 5. 0.00 | 0.00 | 0.00) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE) 0 6. (7. (1) TOTAL SENIOR PERSONNEL (1 - 6) $0.00|\ 0.00|\ 2.00$ 16,666 B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS) 0.00 | 0.00 | 0.00 0 1. ($oldsymbol{0}$) POST DOCTORAL ASSOCIATES (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.) 0.00 0.00 0.00 0 25,000 2) GRADUATE STUDENTS 4. (**0**) UNDERGRADUATE STUDENTS 0 5. (**0**) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY) 0 6. (**0**) OTHER 0 41,666 TOTAL SALARIES AND WAGES (A + B) C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) 13,031 TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C) 54,697 D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.) **TOTAL EQUIPMENT** 0 E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS) 0 2. FOREIGN 0 F. PARTICIPANT SUPPORT COSTS 0 1. STIPENDS 0 2. TRAVEL 0 3 SUBSISTENCE 0 4. OTHER TOTAL NUMBER OF PARTICIPANTS 0) TOTAL PARTICIPANT COSTS 0 G. OTHER DIRECT COSTS 2,000 1. MATERIALS AND SUPPLIES 2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION 0 3. CONSULTANT SERVICES 25,000 4. COMPUTER SERVICES 0 0 5. SUBAWARDS 6. OTHER 38,200 65,200 TOTAL OTHER DIRECT COSTS 119,897 H. TOTAL DIRECT COSTS (A THROUGH G) I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) 54,447 TOTAL INDIRECT COSTS (F&A) 174,344 J. TOTAL DIRECT AND INDIRECT COSTS (H + I) K. RESIDUAL FUNDS (IF FOR FURTHER SUPPORT OF CURRENT PROJECTS SEE GPG II.C.6.j.) 0 174,344 | \$ L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K) M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL IF DIFFERENT \$ PI/PD NAME FOR NSF USE ONLY Randolph T Stevenson INDIRECT COST RATE VERIFICATION ORG. REP. NAME* Date Checked Date Of Rate Sheet Initials - ORG Heidi thornton

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Budget Justification

Salaries and Wages

Stevenson is requesting two-ninths salary for the second year of the project (2003). He will devote the summer 2003 to the supervision of data collection, data cleaning, data analysis and the preparation of manuscripts for submission to peer reviewed journals.

The proposal will fund one full-time graduate student at Rice for each of the years of the project. This graduate student will work on all phases of the project including data collection, coding, analysis and the preparation of manuscripts summarizing project findings.

Other Direct Costs

1.) Materials and Supplies

We have budgeted \$1,000 each year for supplies, which includes postage, courier, and long distance telephone expenses. The major cost here is the postage for mailing copies of newspaper front pages from other countries to Rice.

2.) Survey Research Contractor

We have included a preliminary estimate from Mogens Jacobsen at Gallup Denmark for conducting and overseeing the surveys we require. This will allow 10 standard format questions to be included on omnibus surveys of 1000 respondents in each of 8 countries. The portion of this cost budgeted in the request from Rice is \$25,000.

3.) Other

A major element of the project is the photocopying of newspaper front pages and the coding of these pages. We have budgeted \$10,000 for copying of newspapers and \$20,000 for the coding of the front pages. This will cover the coding of 30,000 pages at approximately \$.70 per page, which is consistent with our experience to date. The people doing this work will be natives of the countries will do the work in their respective countries using our web interface.

We have budgeted for server rental and maintenance at \$300 per month. This server will house the interactive coding interface that can be accessed at www.berthall.com/newspapers. This is necessary since we will sometimes have to utilizing native language coders who live overseas and who will only be able to access the coding mechanism via the web.

In addition, we have budgeted \$1000 for one PC that will be available to our undergraduate workers for data entry at Rice.

Current and Pending Support (See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investig	ator and other senior personnel. Failure to provide this informati	on may delay consideration of this proposal.
Investigator: Paymond Duch	Other agencies (including NSF) to which this proposa	al has been/will be submitted.
Investigator: Raymond Duch Support: ☑ Current ☐ Pending Project/Proposal Title:	☐ Submission Planned in Near Future	□*Transfer of Support
Source of Support: Total Award Amount: \$ 0 Location of Project: Person-Months Per Year Committed		1/ 00 - 01/01/00 00 Sumr: 0.00
Support: Current Pending Project/Proposal Title:	☐ Submission Planned in Near Future	□ *Transfer of Support
Source of Support: Total Award Amount: \$ Location of Project: Person-Months Per Year Committed	Total Award Period Covered: to the Project. Cal: Acad:	Sumr:
Support: □ Current □ Pending Project/Proposal Title:	☐ Submission Planned in Near Future	
Source of Support: Total Award Amount: \$ Location of Project: Person-Months Per Year Committed	Total Award Period Covered: to the Project. Cal: Acad:	Sumr:
Support: ☐ Current ☐ Pending Project/Proposal Title:	☐ Submission Planned in Near Future	□*Transfer of Support
Source of Support: Total Award Amount: \$ Location of Project: Person-Months Per Year Committed	Total Award Period Covered: to the Project. Cal: Acad:	Sumr:
Support: ☐ Current ☐ Pending Project/Proposal Title:	☐ Submission Planned in Near Future	
Source of Support: Total Award Amount: \$ Location of Project: Person-Months Per Year Committed	Total Award Period Covered: to the Project. Cal: Acad:	Summ:
*If this project has previously been funded by another	er agency please list and furnish information for imme	ediately preceding funding period

Current and Pending Support (See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposed
Other agencies (including NSF) to which this proposal has been/will be submitted. Investigator: Randolph Stevenson
Support: ☑ Current ☐ Pending ☐ Submission Planned in Near Future ☐ *Transfer of Support
Project/Proposal Title: What Do Voters Know about Cabinet Formation?
Source of Support: NSF SES-0079094
Total Award Amount: \$ 49,752 Total Award Period Covered: 07/01/00 - 06/30/02
Location of Project: Rice University
Person-Months Per Year Committed to the Project. Cal: 0.00 Acad: 0.00 Sumr: 1.00
 Support: □Current □Pending □Submission Planned in Near Future □*Transfer of Support
Project/Proposal Title:
Source of Support:
Total Award Amount: \$ Total Award Period Covered: Location of Project:
Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:
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Support: □ Current □ Pending □ Submission Planned in Near Future □ *Transfer of Support
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Support: Current Pending Submission Planned in Near Future *Transfer of Support
Project/Proposal Title:
Source of Support:
Total Award Amount: \$ Total Award Period Covered:
Location of Project:
Person-Months Per Year Committed to the Project. Cal: Acad: Summ:

FACILITIES, EQUIPMENT & OTHER RESOURCES

FACILITIES: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. USE additional pages as necessary.

Laboratory:	
Clinical:	
Animal:	
Computer:	One desktop PC, Pentium III for use by Stevenson One desktop PC, Pentium IV for use by coders
Office:	Office #214 at the Baker Institute Rice University for the use by Stevenson One desk in a shared office space in the political science department, Rice University
Other:	for the use by coders.
MAJOR EQUIPMENT capabilities of each.	: List the most important items available for this project and, as appropriate identifying the location and pertinent
such as consultant, se	is: Provide any information describing the other resources available for the project. Identify support services cretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. of any consortium/contractual arrangements with other organizations.