Public Broadcasting, Public Funding and the Public Interest: How Government Broadcasting Subsidies Affect Political Knowledge and Participation

by

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DEDICATION

I dedicate this work to Jenn D. I know you understand the painful reality that true courage often goes unrecognized. I acknowledge yours here. Also, I dedicate this work to Molly, for having faith that I would complete this journey.

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The processes of completing a dissertation and recovering from a chronic illness have alarming parallels. The journeys are long, emotionally taxing and often very lonely. However, both are much more manageable, comfortable and empowering if you have a good support group. I am grateful that my support group has been nothing short of extraordinary – they all believed in me when I didn’t believe in myself and collectively helped to haul me across the finish line.

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Prelude: Mitt Romney Gets to *Sesame Street*

Several of the most memorable moments of the 2012 U.S. presidential election involved heated arguments over a large yellow puppet. During the first candidate debate, PBS journalist Jim Lehrer challenged former Massachusetts governor and Republican nominee Mitt Romney to state specific ways he would reduce the federal budget deficit. Romney replied he would eliminate government funding for public broadcasting. He added that the cuts needed to happen despite his respect for the popular children's show *Sesame Street* character Big Bird:

> I'm sorry, Jim, I'm going to stop the subsidy to PBS…. I like PBS, I love Big Bird. Actually I like you, too. I'm [just] not going to keep on spending money on things [we have] to borrow money from China to pay for. That's number one.
>
> (Commission on Presidential Debates, 2012)

Romney's proposal set off a storm of protest among PBS partisans and Big-Bird backers across the United States in the media. The outrage spanned both traditional media and newer social media from newspapers to memes and Twitter. Political cartoonists depicted the Sesame Street star collecting unemployment insurance or begging for food. One cartoon by Jeff Dazinger depicted Romney about to drive away with the giant yellow bird strapped to the roof of his station wagon, parodying the infamous story about Romney's treatment of his family's

Irish setter on a vacation trip (Danziger, 2012). Internet memes were often cruder, though quite witty as well. One particularly memorable image depicted an aggrieved posse of Sesame Street cast members decked out like a street gang. The angry mob featured Bert, Ernie, Cookie Monster, Grover and Elmo fully equipped with switchblades, broken beer bottles, hand guns and automatic weapons – and clearly ready to rumble with any interlopers trying to poach cash flow from their territory. The caption read simply: “Mitt said turn off PBS? [Stuff] just got real.” (Tumblr, 2012).

The Serious Business of Public Broadcasting

Setting aside delinquent Muppets and laughter, Romney’s remarks do raise legitimate questions about a serious public policy issue. In fiscal year 2009, the U.S. Corporation for Public Broadcasting received $400 million in federal appropriations (Corporation for Public Broadcasting, 2012). Public broadcasters in other countries receive far more. For example, the Canadian Broadcasting Corporation received $925 million (U.S.) in government support for operating subsidies alone that year (Canadian Broadcasting Corporation, 2009), while the British Broadcasting Corporation took in $6.45 billion (U.S.) in subsidies for 2008 (British Broadcasting Corporation, 2008). Respectively, the two countries have roughly a tenth and a fifth of the population of the United States, yet still spend more than double and 15 times the U.S. allotment of public funds on public broadcasters. Romney challenges this spending on several fronts. What do public broadcasters provide that commercial broadcasters do not? Even assuming public broadcasters provide a select benefit; does supporting them with taxpayer dollars unfairly marginalize independent commercial broadcasters who must sell advertising to cover expenses?

Romney's question is important not merely because of the expenditure of public funds. In modern societies, mass media influence the political process in a number of ways. In his conception, Lasswell argues that a communications system plays a number of critical roles in any society:

> The communication process in society performs three functions: (a) *surveillance* of the environment, disclosing threats and opportunities affecting the value position of the community and of the component parts within it; (b) *correlation* of the components of society in making a response to the environment; (c) *transmission* of the social inheritance. (Lasswell, 1971)

In his discussion, Lasswell also notes that in certain individuals specialize to take on key functions in society, just as human cells perform specialized functions in the body. Professional journalists are the communications specialist in modern democracies. They perform all three roles that Lasswell discusses above, but the first two concern us most. It is impossible for every citizen to directly interact with politicians on every policy that might affect their well-being, so we rely on professional journalists perform the surveillance function. Journalists sift through all the events and ideas occurring in the political world and alert us to potential threats and opportunities that the proposals and actions of political leaders might entail for us. In modern democracies with millions of citizens, it's impossible for us all to discuss events directly with large numbers of compatriots , but media professionals can take a primary role in public deliberation about policy proposals (Page, 1996b).

In democracies, citizens choose their leaders in competitive elections. Because professional journalists perform much of the surveillance and deliberative roles in our communications process, our ability to evaluate the fitness of leaders for office, the quality of their policy proposals rests squarely on the decisions that journalists and their bosses make. As

I discuss thoroughly in later chapters, political knowledge makes a large difference in the types of policy views that individuals adopt and how vigorously they participate in the political process. Without a robust media system in good working order, citizens lose much of their ability to hold their leaders accountable for their actions in office, which weakens a central democratic ideal. Much like a blind and deaf rabbit is at the mercy of the wolf, a democracy without journalists as its eyes and ears is at the mercy of numerous dangers. These threats range from the negligence or malice of its domestic leaders, to the ravages of foreign invaders, to environmental catastrophes like disease or unchecked pollution.

With this logic in mind, the question of what type of media system performs best is central to political science, critical to sound public policy and essential to the proper operation of democracy. This work seeks an answer to Romney's question of the relative worth of public broadcasting. In the chapters that come, I offer evidence that public broadcasters do a better job at providing feedback to the public about their elected officials relative to their commercial counterparts, and this enables citizens to more effectively hold their leaders accountable. Citizens who get their news from public broadcasting have greater levels of political knowledge and are more likely to participate in politics than those who rely only on commercial sources. In addition, public broadcasting reduces the power of economic and social forces that traditionally exacerbate knowledge gaps. The evidence, in other words, shows that not only does public broadcasting make citizens smarter, but it also narrows the gaps between society's elite and disadvantaged members.

This performance comes at a price to taxpayers, however. That price is taxpayer subsidy.

The management of public broadcasters have a broader mission than their commercial counterparts who exist to make a profit for shareholders. Like other non-profit organizations like schools and charities, public broadcasters attract workers with interests beyond merely making money. The mission of public broadcasters and their employees involves using the power of broadcasting to educate, inform and serve cultural and linguistic minorities.
Chief among their goals is to provide public affairs programming of quantity and quality that will help citizens understand policymaking and hold their democratic leadership accountable. Because these ideas, not profit, are the central goals, public broadcasting employees would seem to have less of a propensity to pad their bottom line with any government subsidies. Relying on advertising dollars is not an option for public service broadcasting. If public broadcasters rely merely on advertising dollars, they have to water down their goals to remain commercially viable – focusing on retaining their audience at the expense of all else. Without direct subsidies, many of the benefits that public broadcasters provide shrink or disappear.

Summary of the Project

The dissertation proceeds in four parts. I start by defining public broadcasting and developing a theory about how it can boost political knowledge. In the second part, I test the implications of that theory in the realms of individual-level political knowledge and political participation. Next, I explore the circumstances under which my individual-level results can have an appreciable societal impact. Finally, I circle back to consider the implications of the current direction of the broadcasting environment on the future of public broadcasting.

Chapter 2 develops the theory, defining public broadcasting and predicting its effects. I begin by reviewing the political science research regarding media effects on public information.

In order to systematically hold their elected officials accountable, citizens use the commodity of political information, which several scholars have shown can change individuals' voting patterns. I also explore the vast literature on media effects, which indicates that mass media can have significant impacts on individual opinions. In societies in which most individuals get their political information from the mass media – i.e. all of the industrialized democratic world –the information that broadcasters provide plays a critical role in the functioning of democratic government in dozens of countries collectively containing hundreds of millions of citizens.

From this foundation, I then discuss the fundamental differences in organization and motives between public broadcasters and their commercial counterparts. Commercial broadcasters exist mainly to make money for shareholders, while public broadcasters have a host of non-profit goals. From there, I use straightforward logic of political economy to examine how different types of funding streams alter how effectively public broadcasters can pursue their non-profit goals. From this analysis I conclude that public broadcasters that rely on advertising are more likely to have programming and influences similar to their commercial cousins, while those public broadcasters that receive some form of governmental subsidy are more likely to have programming that coincides with one of their broader goals. Chief among these goals is informing and educating the public on the important political issues of the day.

But before evaluating those effects, in chapter 3, I pause to examine under what circumstances public broadcasters actually have enough of an audience share to make any impacts they have matter. Having a large influence on only a few citizens will not have noticeable effects in a country with tens of millions of residents. I suspect that increasing competition, fragmentation and diversity in the broadcasting market will drastically erode any influence that public broadcasters currently have over the long haul. However, there will be important differences in the short and medium-term outlooks for public broadcasters. Existing public broadcasters who have established histories, secure funding and large audience shares today benefit from long-establish self-reinforcing patterns in political institutions and public credibility that will help them prevent rapid erosion of their clout.

The bulk of the chapter explores how these public broadcasters developed to be more strongly placed than others to endure for some time in the emerging hyper-competitive media market (and keep providing their benefits to a relatively large part of the population). To predict the future, I examine the past using the logic of critical junctures and increasing returns. Analyzing three historical case studies of the development of broadcasting in Great Britain, the United States and Canada, I conclude public broadcasters established with strong institutional support during the dawn of the broadcasting era in the 1920s gained a first-mover advantage. They were able to parlay their technical knowledge, institutional power and credibility with audiences into a dominant position in their respective broadcasting markets that only slowly erode with time. In contrast, countries in which commercial broadcasters dominated the initial development of radio never have and never will establish a powerful public broadcasting presence. Finally, I close the chapter by briefly exploring several environmental factors that will hasten or slow the decline of influence of public broadcasters across the world.

Having established that enough people still watch public broadcasting to matter, Chapter 4 applies the theory's logic to a real-world test. Using Eurobarometer survey results and budget data gathered from 14 European public broadcasters, I examine the impact of funding systems on political knowledge. My analysis shows three profound results. First, individuals who watch public broadcasting display noticeably greater ability to correctly identify political leaders and understand European Union policies and institutions than those who watch commercial outlets. Second, these results only hold in countries where the public broadcaster receives substantial public subsidies. Further tests show that increasing the level of subsidies increases the positive knowledge effect. Finally, subsidizing public broadcasting decreases the gaps in political knowledge that are traditionally associated with class, education, interest and especially income levels. These results demonstrate that public broadcasters can have large positive impacts on individual knowledge scores and a leveling influence across the information levels of diverse segments of the population – both of which are positive from a standpoint of democratic accountability and political equality.

Chapter 5 expands the theory of chapter 2 and the analysis of chapter 4 from political knowledge to political participation. Unlike the straightforward application of political knowledge, the predicted impact of public broadcasting on participation is more complicated. Using the same Eurobarometer data, I find limited support for the proposition that the knowledge created by public broadcasting increases voter turnout. My analysis does show a medium-sized influence from the interaction between subsidized public broadcasting and public broadcasting viewership on increasing turnout. However, the limited number of cases makes for low-leverage and requires further research to substantiate any claims.

I close this project by tentatively (if depressingly) concluding that there are few simple public interventions that can substantially alter the long-term decline and perhaps ultimate demise of the public broadcaster. I recommend that supporters of public broadcasting take a two-part strategy. First, they need to defend the public's widespread access to public broadcasting. As a part of this defense, they absolutely must protect public subsidies, which allow public service broadcasters to deliver the multiple benefits I detail in this work. The second strategy is to think outside the box. The days of the public broadcasting monopoly are over in the industrialized world, so reformers need to think about how they can provide information to all individuals – even those who don't want to watch the news – in a 500-channel universe supplemented by Internet cat videos. I outline one such radical proposal, which consists of a non-profit trust that produces short news videos and buys up highly strategic areas of advertising time.

But those grandiose conclusions are for the end. For now we return to the beginning. To begin understanding the role the public broadcasting plays in democratic societies, we need to start by analyzing the role that information plays in influencing democratic elections.

Chapter II

Developing a Theory of Public Broadcasting, Subsidies and Democracy

Introduction

Why does the citizenry of some democracies know more about public policy than others? The American public, for example, lags notably behind most of its peers in the industrialized world. Some studies, for example, show that Americans with university degrees know less about public affairs than western Europeans who have completed the equivalent of an American high-school education (Dimock & Popkin, 1997).

My task here is to explain these discrepancies, with a particular focus on the role that media institutions play. First, increasing government funding for public broadcasting elevates individual political knowledge. Second, large audience share for subsidized public broadcasters distributes well-informed individuals widely across a democratic society. This chapter develops the logic behind the first idea, which rests on two sets of assumptions. First, citizens need some minimum level of political knowledge to hold their elected leaders accountable in a democracy. Second, I detail the mechanism of how citizens gain political knowledge and use it to influence their decisions. This second point consists of three parts. I suggest that differences in political knowledge among citizens influence what public policies they favor. Next, I argue that most citizens get their political knowledge from the mass media, particularly television. Finally, I posit that changes in media coverage actually influence individuals' beliefs about public policy.

The first section of this chapter reviews several decades of literature on voting and public opinion in order to justify the four statements I make above. The second section then builds upon these arguments, as well as drawing from a model of politics and the press developed by Zaller (n.d.) in order to develop my own theory of public broadcasting. This theory predicts public funding of media outlets provides citizens with the tools to support public policies more in their own best interest. By providing individuals both with better knowledge of public policy options and their own leaders' stances and records on policy, publically funded public broadcasters help citizens hold their leaders more accountable for making policy.

Review of Foundational Assumptions

Citizens Need Political Information to Hold Leaders Accountable

In order to make decisions consistently in their own best interest, individuals need information. It then seems logical that everyday citizens would have a critical need for political information[1] in order to properly execute their rights and duties in a free society. Political information encompasses the identities and beliefs of political leaders, institutional structures of government and facts about specific aspects of public policy. This statement holds up under

[1] Political information, as I describe more thoroughly when I discuss political knowledge, encompasses recognizing the identities and preferences of leaders, specific policy information and knowledge of how the institutions of a political system work (e.g. a bill has to pass both the House and Senate in the United States before it can become law)

a variety of conceptions of democratic government, but as democracy becomes more expansive, political information becomes more important to voters to make effective choices.

Take the most limited democratic imaginable: A dictator ruling over an isolated society subject to regular votes of citizen confidence. If she is not retained, a new dictator is randomly selected in a lottery. Even in this simple case without overt political competition, voters need some sort of political information to determine whether or not to retain the dictator. Has the economy grown or faltered? Is the society secured from outside threat or has it been invaded? Have the dictator's policies aided citizens or been cruel to them? Citizens might recall or seek out information regarding any of these matters to make their choice.

This example is an extreme instance of *retrospective voting*; under which citizens only evaluate the past record of their current leaders in elections. Modifying the scenario to allow other candidates to run for office introduces the concept of *prospective voting*. Instead of merely considering the past record of the incumbent, now citizens also take into account the policy proposals of the challengers for the office of dictator. They can also take into account the new proposals of the current dictator. All other things being equal, more political information is necessary for citizens to weigh the likelihood and desirability of the prospective future visions of each candidate. Finally, not only does the need for political information increase about prospective plans, but the need for retrospective political information increases as voters attempt to vet the backgrounds and experiences of the challengers.[2]

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[2] For a useful summary of retrospective and prospective voting, as well as how the two interact with each other, see Fiorina (1979) on the subject.

Many scholars challenge the premise that individuals need large amounts of political information to make political decisions. Much research, notably the Michigan school's seminal works has shown that the majority of citizens retain few concrete political facts (Campbell, Converse, Miller, & Stokes, 1960) (Converse, 1964). Instead, these scholars argued that most reasonably engaged citizens use party affiliation as a filter through which to make political decisions. This filtering limits the role political information plays in decision-making. Additionally, many political scientists have since argued that low-information voters can make use of similar cues and act as they would as if they were high- information voters e.g. (Lupia, 1992) (Sniderman, Brody, & Tetlock, 1993) (Lupia, 1994) (Lupia & McCubbins, 1998). Finally, still other scholars, notably Page and Shapiro, (1992) have claimed that low-information voters simply do not matter. The two reasoned that if citizens make "mistakes" when voting, they do so randomly. As a result, the "mistakes" cancel each other out and the electorate's preferred candidate or policy will still carry the day.

However, even the work on electoral cues acknowledges that *some* political information is necessary for a voter to make her preferred choice. Lupia (1994) argued that cues offer shortcuts, but still recognized that voters needed at least a little knowledge to effectively employ the shortcut. In his study of how voters reacted to the five insurance-reform measures on the California ballot in 1988, this knowledge was the identity of groups sponsoring various insurance referenda. Lupia (1994, see discussion on page 67 in particular) argued that voters tended to vote against propositions backed by insurance companies – a group not notably beloved by the electorate. However, insurance firms recognized their unpopularity and created front groups to try and conceal their true identities from voters. The result was that only some low-information voters knew the cue and were able to mimic their high-information counterparts. Thus, though informational shortcuts reduce the need for political knowledge, they do not eliminate it. And information is especially vital when political leaders can manipulate policy proposals to hide their true costs for voters (Hacker & Pierson, 2005) (Bartels, 2005).

Other research has challenged the idea that cues allow low-information voters to behave like their knowledgeable counterparts. In one example, Bartels (1996) simulated the results of presidential elections from 1972 and 1992 by imputing low-information voters with the knowledge charateristics of their highly-informed and demographically similar counterparts. He found that individual vote choice probabilities shifted by 10 percentage points. These effects did not cancel out over the entire electorate, as Page and Shaprio (1992) would predict: incumbent candidates did on average five percentage points better among low-information voters than high information voters, all else equal (Bartels, 1996).

Althaus' (1996) research mined a vein similar to Bartels, though using somewhat different measurements. Unsurprisingly, he found that high-information citizens in the United States are more likely to have expressed policy preferences than low-information ones. Relatedly, he also found that policy preferences have a smaller random component among the most infomed. As a result, high-information individuals tend to have disproportionate impact on polling results, which inform the decisions of policy makers. Since high-information citizens tend to be wealthier than their low-information counterparts, the two groups often have different preferences on taxation and social issues. When these divergences occurr, the disproportionate influence that high-information respondents have over the expressed opinions reported in public opinion polls can actually reverse a majority opinion reported by a poll (Althaus, 1996). In a follow-up study, he found that imputing higher levels of knowledge to voters leads to significant shifts of opinion on fiscal policy and somewhat smaller ones on social issues (Althaus, 1998).

Finally, field experiments have provided some evidence that citizens' beliefs really do change based on their levels of political knowledge. Fishkin's (1996) studies with deliberative democracy have suggested that providing individuals with information influences their policy preferences. The study team provided a nationally representative group of American participants with information about Social Security. Then organizers randomly assigned participants to discussion groups, encouraged them deliberate over the issue, and had experts on the program available to answer questions. Overall, the reading and dialogue led to increased knowledge about the program and shifted overall opinion in support of the traditional program (Fishkin, 1996). He and his colleagues conducted a similar "deliberative poll" in Manchester, England in 1994 and found similar shifts in knowledge and opinions regarding British crime-control policies (Luskin, Fishkin, & Jowell, 2002).[3]

In summary, political information helps citizens make political decisions. Despite the general population's ignorance of politics and politicians' attempts to manipulate public opinion, information provides citizens with the ability to make decisions in their best interest. Individuals who gain policy knowledge in turn tend to change their views on political questions.

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[3] For an insightful and thorough look at the state of scholarship surrounding the effect of political knowledge on preferences and participation, see Luskin's account in "The Heavenly Public: What would a Fully Informed Citizenry Be Like?" (2003).

Scholars have shown that knowledge influences decisions on how citizens hold their government accountable through several different mechanisms, which underpins the relevance for this study.

The Media as the Source of Political Information

So far, I have reviewed research that demonstrates how voters use information and concluded that knowledge actually influences individual opinions. But where does political information come from? Obviously, we get some information from our family, friends and neighbors. Person-to-person conversations represent an important part of public opinion formation (Cramer-Walsh, 2004). Personal interaction also often plays a large role in elite bargaining and consensus building, as well as reinforcing elite divisions (Johnson & Knight, 1994). Despite this influence, however, citizens still get most of their information directly or indirectly from the mass media.

In mass publics, it is nearly impossible for citizens to deliberate with each other in large and diverse groups. As a result, the public relies generally on professional communicators – the journalists who make a living of sorting through and reporting political information for consumption by the mass public. As a result, most information of national and regional importance accessible to the general public flows through the mass media (Page, 1996b). Even if people were to get most of their political information from friends or plugged-in opinion leaders in their community (Katz & Lazarfeld, 1955), it's likely that those opinion leaders receive political information from the mass media.

Finally, survey data shows that many individuals report that they receive political information from the mass media, especially television. Print media retains influence among certain sectors of the population, especially in northern European countries with a broad circulation. Also, internet consumption has been making inroads in industrialized countries, especially among younger viewers. However, television remains the mass media of choice for the vast majority of residents of industrialized democracies, as the Eurobarometer data presented in Table 2.1 show below. In addition, surveys in the United States have shown since the early 1960s that a majority of respondents have reported getting their political information from television (Chafee & Kanihan, 1997).

As many parents have suspected over the years, because people claim they get their political information from television does not mean television actually makes people smarter. McClure and Patterson's classic study finds no association between exposure to television – even television news—and political knowledge (1976). Follow-up studies have reported, however, that part of this finding stems from a measurement problem. Exposure to print media like newspapers indicates active attention from the reader. In contrast, television is a passive medium that can be on in the background while a viewer pays attention to other happenings. Changing the question to ask about paying attention to specific political issues on the news shows a somewhat larger effect than the very mild positive effect shown by exposure to news shows alone (Chaffee & Schleduer, 1986), though newspaper exposure is still a larger predictor of knowledge (Robinson & Levy, 1996).

However, the most important feature of television is not that observations have shown its limited effect on knowledge, at least in the United States. Instead it is that television's ubiquitous nature allows for it to have a potentially large impact. Indeed, nuggets buried in the American studies showing limited effects of watching television news suggest that some television news shows have larger effects than others. For example, Robinson and Levy noted that main steam TV news had small positive impacts on knowledge when they controlled for demographic variables. In their study, cable news had no positive impact. However, watching C-SPAN or PBS's MacNeil/Lehrer Newhour correlated with elevations of political knowledge levels as large as increases acquired by reading a newspaper regularly (1996).

The Media Influences Public Opinion

The conclusion that mass media provide most political information in modern societies still leaves the question of whether media coverage actually influences how citizens think about politics. The first several decades of communications research revealed no direct effects of media consumption on political opinion. Contrary to the fears of scholars who saw the potential for radio and television to indoctrinate the mass public in authoritarian ideas, early studies found that exposure to media tended be minimal e.g. (Lazarsfeld, Berelson, & Gaudet, 1944) (Patterson & McClure, 1976) or to merely reinforce existing predispositions (Klapper, 1960).

During the last 30 years, however, measurement and methodological improvements have helped scholars isolate overwhelming evidence that news coverage in the mass media has large effects on public opinion. The first promising line of research dealt with indirect effects of media – the idea that the media might not influence what citizens think, but does influence what they think about (Cohen, 1963) (McCombs & Shaw, 1972). Experimental and empirical studies demonstrated that the stories the media cover help determine which political issues individuals think are important, an effect called agenda-setting. In addition, citizens then use their opinions on issues receiving high levels of coverage to evaluate political leaders in a process called priming (Iyengar & Kinder, 1987) (Kinder & Krosnick, 1990). Other scholars have detailed how the media's presentation of ideas, called framing, influences readers' and viewers' evaluations of policy ideas e.g. (Iyengar, 1991) (Nelson & Oxley, 1999) (Druckman, 2001). Finally, another strand of research began to re-evaluate the traditional claim that news media have no direct effects on changing public opinion. Improvements in survey research and analysis have also improved studies, which can now detect the direct effects on public opinion of massive shifts in media coverage (Bartels, 1993). Another tack suggests that everyday citizens follow the shifts in opinion of their preferred ideological elites, who make up many of the sources showcased in media coverage (Zaller, 1992).

To summarize, despite the importance of interpersonal deliberation, the mass media provide the bulk of political information in modern democracies. A large body of research also shows that media choices about coverage have serious, though often subtle, influences on public opinion. Finally, television has a large if somewhat unrealized potential to influence knowledge because it reaches such broad proportion of the public. Therefore, the mass media, particularly television, can play a critical role in providing political information that citizens use to make political decisions.[4]

What is Political Knowledge?

To this point, I have discussed political knowledge as a given, but here I define its context to better understand its effects. Survey researchers in the United States have been examining political knowledge since the 1940s. Converse and his Michigan colleagues conducted extensive

[4] Also, recent research on panel data has suggested strongly that this relationship runs from media consumption to increased knowledge, not from political knowledge to increased media consumption (Eveland, Hayes, Shah, & Kwak, 2005).

research regarding political knowledge in the context of their work on political participation during the 1950s and 1960s (Campbell, Converse, Miller, & Stokes, 1960) (Converse, 1964). Converse's infamous phrase sums up the results of his research and those who followed after: "When it comes to Americans' political knowledge, two things can be said: the mean is low and the variance is high." (1990).

Converse (1964) and his contemporaries focused their analysis on the concept of political ideology, which did not focus so much on individual political facts, but rather on citizens' ability to relate their beliefs on individual issue domains together into a coherent political philosophy. He found that fewer than 3 percent of the population had a coherent ideology – hardly a ringing endorsement of the average American's political IQ.

Despite its contributions, critics noted that much of this early literature obsessed over whether or not individuals had a coherent political ideology. Though they agreed that the concept was valuable, they found the emphasis on the dividing line between citizens with and without an ideology as an arbitrary one. Worse, they saw many discrepancies among various scholars as to what precisely consisted of political knowledge. To move forward, the reformers first suggested a renewed focus on measurement on one hand, and a more thorough development of the concept of political knowledge – or sophistication, as it was often called in the literature—on the other (Luskin, 1987).

Luskin (1987) in particular suggested a unifying concept of political sophistication, which many scholars have adopted (Delli Carpini and Keeter 1993).[5] Political sophistication is the

[5] For my purposes, political knowledge and political sophistication are the same concept.

unification of three distinct concepts. The first is the raw number of political facts a person possesses. Second is the range of domains across which a citizen possesses facts. Political ideology, Luskin claims, stems from the third concept, which is the number of connections between facts. The positive relationship between the three components makes the measure of individual political factoids relevant for a broader measure of political knowledge. The reason is that an increasing number of connections between facts – or their constraints, as Luskin puts it– helps organize the brain's recall mechanisms more efficiently, allowing politically sophisticated individuals to recall more facts. Under these circumstances, simple recall of facts actually works as a proxy to measure the broader underlying concept of political sophistication.

But having justified that knowledge of discrete political facts does constitute a valuable measure of political sophistication; we next face the question of precisely *which* facts are most important to developing political sophistication. Which is more important: knowing who the Vice President is, or understanding that the Supreme Court can rule on the constitutionality of laws? In addition to the question of relative importance, we also need to grapple with the idea raised by Luskin that political knowledge spans more than one domain. Extending above example, we might theorize that questions regarding the identity of national office holders (who is the Vice President?) and those measuring understanding of institutional structures (What does the Supreme Court do?) actually measure separate dimensions of political knowledge.

Delli Carpini and Keeter (1996) (1993) tackled both of these questions in their own work on political knowledge. First, they conceptualized what items are important components of political knowledge. Drawing from decades of research and theorizing on U.S. civic values, as well as a survey of experts, the pair concluded that citizens should understand four fundamental concepts in order to be considered politically sophisticated:

1. *Leaders:* Because democracy involves citizens choosing their leaders, potential voters ought to know who their leaders are and what they stand for (and/or what political party they represent) in order make effective decisions.
2. *Institutions:* Citizens should recognize the basic political institutions of a polity. These include both formal institutions like the U.S. Supreme Court, but also political values[6] like shared norms of citizen participation or the two-party system.
3. *Current political alignments:* The knowledge of what party and leaders control which institutions provide specific context of policymaking.
4. *Political history and political economy:* These two items provide a general context for understanding policymaking in a country.

In sum, residents of a polity need to understand what the institutions of government are, who the leaders are that man the institutions, how the two combine to produce policy, and the context in which that policy gets made. Delli Carpini and Keeter's work focuses on developing a concept of sophistication for American citizens. However, note how simple it is to expand their concepts to other countries' citizens as well, which provides valuable insight into how to develop comparable questions that measuring political knowledge across different polities. Surveys that cover multiple countries, notably the Eurobarometer, are particularly valuable as they have worked over many years to develop knowledge questions that can evaluate political sophistication across numerous countries.

[6] Formal institutions like Congress have sets of rules for their elections and how they make decisions, which makes them institutions in an economic sense. However, sociologists also view broader ideas like shared values or norms of a society as institutions because they function broadly to coordinate deliberation and decision making within the society.

Developing a Theory of Broadcasting Outlets and Political Knowledge

Commercial Competition and News Coverage

Having outlined a conception of political knowledge, why it matters for citizens and how the media play a principal role in spreading it, I now develop a theory of the relationship between public funding and government regulation of broadcasting on one side and political knowledge on the other. First, I outline relevant portions of Zaller's (n.d.) theory of media politics. Next, I develop a working definition of a public broadcaster to account for the influence that public funding and regulations have under Zaller's theoretical framework. After briefly discussing research that support elements of the theory, I derive predictions that increasing public funding levels for broadcasting will lead to higher levels of mass political sophistication.

Using basic precepts of rational choice theory, Zaller (n.d) sets up a simple model to explore the relationships among journalists, citizens and politicians. Though his model focuses specifically on coverage of American presidential elections, his logic detailing incentives of media members holds across countries. The key insight of his theory focuses on the actions of citizens. He draws on the research of previous scholars that posits citizens – regardless of whether or not they need information to make good political decisions – recognize that their votes are unlikely to make a difference in elections and therefore spend little time absorbing political information beyond what they believe is absolutely necessary. Though he notes that relatively large numbers of Americans report to paying close attention to political news, he draws on the research of Graber (1984). and Neumann (1991), which suggest that a significant portion of the individuals who say they pay attention and want more in-depth news don't actually take advantage of the opportunities to watch the political news that are already available (Zaller, n.d., pp. 18-19). This research into attitudes about politics and news consumption patterns conclude that citizens prefer entertainment to most public affairs programming. As a result, when media firms make decisions about programming to improve circulation or ratings, they tend to cut hard news and public affairs offerings (Bennet, 1996).

Circulation and viewership provide income for commercial media companies. Revenue flows come from two circulation-based sources. The first source is subscriber fees. Every new subscriber to the *New York Times*, for example, brings in an additional several hundred dollars in revenue a year to the media company. Subscriber fees are particularly important for print publications and some premium cable and satellite television channels. The second source is advertising revenue. Larger circulations and greater ratings points increase the number of people that advertisers can reach. As a result, high circulations and ratings make shows and publications more attractive to advertisers and let media companies charge premium rates for advertisements. This type of advertising is relied on by most free-to-air broadcast commercial television channels. Examples of these channels include the “big three” networks of ABC, NBC and CBS in the United States, ITV in Britain and CTV in Canada.

Funding media outlets through advertising and subscriber fees creates a clear incentive to reduce the levels of public affairs coverage. Under this dynamic, competition increases the pressure to reduce programming dedicated to public affairs. Increasing the number of outlets increases the competitive pressure, which reduces news holes more, and in turn accelerates the race to the bottom. Zaller (n.d.) has found clear evidence of this trend: He notes that American managers have drastically decreased the time dedicated to public affairs in the news programs of local TV stations since 1960. In contrast, the consolidation of the newspaper market that started in the early part of the 1900s tended to leave one major daily in most cities in the United States. With lower competitive pressure from similar platforms, Zaller's work uncovered that the remaining daily retained much stronger coverage of political news. The landscape is reversed in Great Britain, where a cut-throat national newspaper market delivers inferior public affairs coverage in comparison to the traditionally controlled competition between the BBC and ITV (Zaller, n.d., pp. 37-52). Of course, with increasing competition starting in the 1990s, ITV has drastically cut its political hard news broadcast at the expense of entertainment programming and "softer" news (Iyengar, et al., 2010), which again supports Zaller's theory.

From the perspective of civic-minded reformers, this discussion is depressing. Lack of interest in public affairs combines with commercial funding to conspire to eradicate high-quality television news and public-affairs coverage. However, scholars have also identified several potential mechanisms that counter these pressures. The object is to create some form of information-rich environment through which citizens either inadvertently absorb political information or develop a habit of watching for information (or potentially both).

Filling the Gap? Advertising and Soft News

Two potential mechanisms of inadvertent knowledge acquisition occur within the current system of commercial pressures. The first is political advertising and the second is soft news. In this section, I review the scholarship detailing the effects of both phenomena on knowledge I conclude that political advertising and soft news fill a few sectors of the political information gap opened by a reliance on competitive commercial advertising. However, both only provide information on certain narrow aspects of political knowledge, and leave out broad sectors of knowledge that citizens might find useful to hold leaders accountable.

The existence of political advertising shows that viewer preferences only play one part in setting television programming that might provide public information; public officials and political campaigns also play major roles. To showcase the effects on knowledge political advertising might have, I briefly outline the incentive structures facing politicians and public officials (who sponsor advertising). Zaller (n.d.) identifies politicians along with journalists and citizens as major actors in his theory of media politics. Politicians craft messages to push for their election. To maximize positive effects, political campaigns attempt to disseminate messages widely with little interference from journalists. Page (1996a) refers to this mode of dissemination as using the media as a "conveyer belt." One part of this process of attempting to use the media as a conveyer belt works through constructing a large public relations apparatus. Well-developed PR shops decrease the costs of journalists to covering politicians and may increase news coverage of a particular candidate or official (Cook, 2005). On the other hand, well-oiled PR machines may increase media coverage of issues that a particular politician has "ownership" over, which helps the candidate's position among voters (Petrocik, 1996). A similar advantage can happen when the press embraces the politician's desired framing on a certain issue, which may also sway the electorate (Gamson & Modigliani, 1987).

But pesky journalists sometimes ignore the bait. The unfortunate result (from the perspective of a political campaign) is that sometimes a candidate's message gets diluted with conflicting information or opposing quotes. Worst of all, a journalist might provide independent analysis that calls into question a prized talking point and shifts the debate to grounds less advantageous for the campaign. A deregulated commercial media system, however, offers an easy solution. Advertising offers politicians vastly more control over the timing and content of the message that appears on the air or in print. Instead of hoping that their campaign makes the six-o'clock news, campaigns can simply buy time during the six o'clock news or any other time they want. Advertising also allows direct control over the content of the spot, unlike attempting to coax, cajole or convince a journalist to run with the storyline the campaign deems most desirable.

Evidence about the effects of political advertising is mixed. Since the mid-1990s, the debate has focused primarily on political participation, not knowledge. Early works have suggested that political advertising – especially negative advertising – alienates citizens from politics and drives down voter turnout (Ansolabehere & Iyengar, 1995). Competing theories, however, have suggested that advertising engages citizens who would otherwise not be reached by political information. This engagement in turn leads to individual citizens being more likely to vote (Freedman, Franz, & Goldstein, 2004). Comparative studies have also linked increased levels of permitted political advertising – whether paid advertising or free air time distributed to parties – with higher levels of voting turnout (Baek, 2009)[7].

Several of these studies also discuss advertising's impact on political knowledge as a mediator between exposure to advertising and changes in turnout. Here again there is a divide. Studying the 2000 election, Freedman, Franz and Goldstein (2004, p. 725) suggested that advertising increases political knowledge in several ways. First, it exposes individuals who don't

[7] Note, however, that Baek's work examines *laws* permitting advertising, not the actual *amounts* of advertising.

usually seek out political information to an election campaign. Second, the professional packaging of campaign commercials helps drive the message home. In the memorable words of the authors, "Ultimately, if the political diet of most Americans is lacking in crucial information, campaign ads represent the multivitamins of American politics. Equally important, this informational content is contained in an easy-to-swallow emotional coating." (725). Freedman et al found that an increase in exposure to political advertisements correlates with a moderate increase in the ability of citizens to correctly recall the names of congressional candidates in their district. Notably they also find that more than 60 percent of ads had issue-specific content as opposed to character content, reinforcing the idea that advertising can educate (Freedman, Franz, & Goldstein, 2004). Another set of scholars have noted that Americans' level of political knowledge – specifically their ability to correctly identify the relative issue positions of presidential candidates – remained roughly consistent between 1952 and 2000 despite a notable shift away from issue-oriented political coverage on news programs (Gilens, Vavreck, & Cohen, 2007).

However, on the issue of advertising increasing political knowledge there is disagreement as well. Huber and Arceneaux (2006) argue that studies showing correlation between advertising exposure and knowledge fail to properly incorporate the effects of grassroots campaigns that simultaneously operate in battleground states along with massive advertising campaigns. Examining areas of non-battleground states that receive spillover advertising from media markets in competitive states, they find only weak or non-existent links between advertising and political knowledge. Instead, by building off of prior experiments conducted by Brader (2006), Huber and Arceneaux (2006) argue that voters find the emotional appeals of the advertising persuasive. Instead of functioning as a candy-coating that helps citizens swallow information that in turn influences their vote choice, their results suggest that the emotional content itself plays an important role in decision-making.

The second way that citizens might inadvertently pick up information is through the provision of soft news. According to Baum (2002), soft news differs from hard news by minimizing the focus on the broader public policy aspects of a story, which presumably bores many viewers. Instead, soft news presentations focus on human-interest themes, and stories with potentially dramatic angles that can be sensationalized. Topics particularly amenable to "soft" coverage include crime and war. Arguing that tabloid news shows, daytime talk shows and late-night comedians often provide coverage of political events, Baum's work suggests that the importance of programs that provide primarily soft news coverage is that they provide some news exposure to millions of citizens who wouldn't otherwise encounter any political information. Controlling for political interest, hard news consumption and socioeconomic status, Baum's analysis shows that individuals who say they watch more soft news pay more attention to foreign crisis than those who claim to watch small amounts of soft news programming (Baum, 2002).

Of course, attentiveness and learning are not equivalent, as other scholars cross-examining Baum have noted. For example, Prior (2003) found no link between soft news consumption and most knowledge items, even those having to do with scandals.[8] Baum countered that Prior's definition of knowledge was too stringent, as most of the knowledge items he used had

[8] Interestingly, Baum finds a strong negative relationship between consumption of local news (which he calls the "real villain") and political knowledge.

happened several months before Prior's survey was put in the field. He suggests that there might be short-term knowledge effects and provides data that shows soft-news consumers had a greater probability of knowing about then-Panamanian dictator Manual Noriega's flight to the Vatican Embassy in Panama City during the American invasion of Panama during 1989. This sort of thematic frame is exactly the sort of knowledge that Baum's theory of soft news would predict viewers would pick up while tuning into a tabloid news program.

Importantly, however, both Baum and Prior recognize that soft news is not a panacea. Although he argues strenuously that soft news consumption might have a few beneficial byproducts, Baum understands his theory predicts that soft news only improves viewer knowledge in a few constrained issue areas. Although it might help awareness of the foreign policy crisis and a few highly stylized personal stories like Noriega's attempted escape in Panama, these stories are divorced from any policy context – like the pending transfer of the Panama Canal from U.S. to Panamanian control (Baum, 2003). It is an open question whether this highly insular knowledge facilitates citizens' voting decisions.

But if advertising and soft news provide only weak levels of political information to the general public, what's left? To answer that question, I return to the economic logic of funding mechanisms. If we can't change citizens, or find a way to reach them outside of standard programming, perhaps changing the financial incentives of broadcasters might arrest the decline in information provision. This increase in turn can augment the political knowledge of citizens.

Enter the Public Broadcaster

Government subsidies and public broadcasters are the lynchpin of my argument. I theorize that differing methods of funding public broadcasting matter for content. These differences, in turn, translate into effects on individual levels of knowledge. Finally, I contrast funding levels and funding sources from several major national public broadcasters to show that there are meaningful differences in the funding variable.

What is public broadcasting? Past scholarship on the effects of public broadcasting provides a fuzzy and unsatisfactory definition. Most definitions note that there is an element of state regulation or ownership. For example, Hallin and Mancini (2004) state that public broadcasting is perhaps the most important form of “state intervention” in the media (p. 41). Another study examines patterns of media ownership among newspapers and television outlets in 97 countries, using majority ownership to determine whether or not a system is public or private (Djankov, McLiesh, Nenova, & Sheifer, 2003). Baek (2009) uses these classifications as a way to determine whether or not systems that are dominated by public broadcasting in market share help political knowledge.

Though helpful as a starting point, merely declaring that public broadcasting involves state ownership or intervention fails as a working definition. Sometimes state intervention does not involve public broadcasting. For example, after their discussion of public broadcasting, Hallin and Mancini (2004) also go on to list a number of other state interventions and regulations – like libel, right-of-reply and shield laws that are not necessarily associated with public broadcasting (43). And Djankov et al’s (2003) reliance on state ownership to define public media seems downright naïve. They do note that state ownership takes a consistently different form in the democratic United Kingdom than it does in the military dictatorship of Myanmar (351). However, they do not include these distinctions when they analyze the effects of state-owned media vs. privately held media.

Some scholars brazenly use a conception of public broadcasting that borders on American Supreme Court Justice Potter Stewart's definition of pornography: they know it when they see it. For example, Iyengar et al (2010) simply identify PBS, the BBC and certain TV stations in Denmark and Finland and Switzerland as public broadcasters. They note that those broadcasters tend to provide more informative current affairs coverage, recognize that those broadcasters make up a larger share of the viewing audience in Europe than in Britain or the United States, then declare by fiat that those European countries are "public" broadcasting systems. Their actual classifications of individual public broadcasters and private broadcasters are defensible, but their lack of clear definition for what is private and public can muddle scholarship.

To provide some order to this ad-hoc approach, I propose three key components to delineate a public broadcaster from a commercial broadcaster:

1. *Public broadcasters are non-profit*. Up until this point, I have implicitly assumed that broadcasters merely value making profits for investors. However, there might be other purposes unrelated to the narrow financial well-being of shareholders. Television has the power to entertain, to inform, to educate, to provide cultural exposure and to preserve and encourage the use of indigenous languages among other possibilities. Indeed, when creating national radio and television networks, most governments placed special emphasis on these alternative goals. Take the programming philosophy of

Ireland’s national broadcaster Radio Eireann expressed in its 1963 annual report, roughly three years after it began TV service:

> Radio Eireann… believes that broadcasting has a positive role in public life which, transcends, but includes the provision of entertainment…. It does not follow that its duty is to please most of the people all of the time. It must have regards for the needs and rights of smaller sections of the community….. In particular Radio Eireann continues to keep in mind its special responsibility toward the Irish language and the preservation and development of the national culture. (Quoted in (Emery, National and International Systems of Broadcasting, 1969, pp. 116-117)).

Or examine this 1962 statement from Henrik Hehr, an administrator for Severiges Radio, the Swedish National Broadcaster, regarding his organization’s programming code:

> The first clause of this article emphasizes the central position of sound radio and television in Swedish cultural life, and states that programmes shall strengthen the interest of the general public in broadcasting….. Sveriges Radio is required to disseminate, in objective, impartial and suitable form, information on current events and to orient the general public toward more important cultural and social issues as well as to encourage debate on such issues. (Quoted in Emery, 1969, p. 204).

2. *Public broadcasters have broad government involvement in their management, though not necessarily direct government ownership or funding*. The British Broadcasting Corporation (BBC) was a long-time public corporation, though it now is officially a non-profit trust. The governing board is appointed by Parliament. The American Public Broadcasting Service (PBS) is an example of a not-for-profit organization that is considerably more distant from direct government ownership or control. Instead, it is a consortium of non-for-profit television stations that are themselves owned by a variety of local sources – some belong to universities (private or public), others work with school districts, states, cities or private trusts. The money for PBS comes both from dues

from member stations (which garner their funds in turn from private donations, states and localities) and annual funding from the national Corporation for Public Broadcasting, whose board is nominated by the president and confirmed by the U.S. Senate. In the German public broadcasting system, one broadcaster, ZDF is managed by a board appointed by the national parliament, while its counterpart ARD, is a national network composed of broadcasters controlled by regional governments.

3. *Though there is a great deal of government involvement, public broadcasters have some sort of insulation from direct interference from the government of the day*. This part of the definition sets public broadcasters apart from state broadcasters. All public broadcasters have a charter or legal guarantee of some form that provides them with certain rights of editorial independence vis-à-vis the government. Beyond the charter, insulation takes a wide variety of forms, and many broadcasters have multiple methods. One obvious way is to provide the public broadcaster with an independent stream of funding that is renewed for long-term contracts. The BBC is funded by a license fee on television owners. The level of that fee is set by agreement with Parliament and lasts multiple years. Other ways of insulation are by having long-term appointments to the board of the broadcaster (so as not to overlap with the government of the day), providing proportional representation (giving multiple parties and interest groups cross-cutting leverage on the board), having staggered appointments, or requiring a parliamentary supermajority to appoint board members to the broadcaster.

Follow the Money

Notice how funding sources do not play a key part of the definition of a public broadcaster. Certain types of funding streams can serve to insulate broadcasters from government pressure, but there are enough other types of insulating devices to mean that funding styles can vary significantly. Funding variation is the critical variable of this dissertation.

In my definition, I've established that public broadcasters do not have the primary goal of making a profit. Instead, they measure success by a variety of metrics, like public education, reaching a variety of audiences and preserving cultural autonomy. Those parameters suggest that public broadcasters ought to behave differently than their commercial counterparts. But even with the removal of the profit motive and despite the goals that diverge from their commercially oriented counterparts, the fundamental truth is that running an effective broadcasting outlet requires large amounts of capital.

I predict that the operating cash source will be a critical determinant of the type of programming a public broadcaster airs, and the resulting level of political knowledge in its coverage area. On one end of the spectrum are public broadcasters that, at least in theory, earn all of their funding from selling advertising but meet the three points of classification I suggest that delineate public broadcasters. Among industrialized democracies, Spain's TVE and Portugal's RTE are the two most notable examples. On the other end of the scale are countries whose revenues come entirely from government. Three notable broadcasters here are the British BBC, the Danish DRK and the Swedish SVT, all of which are funded entirely by license fees charged to all television set owners. Not only is this source of funding completely independent from the whims of advertisers, but it is also largely isolated from the caprices of annual budget negotiations. In the middle are countries whose public broadcasting revenue sources are split between government funding and advertising, like the Canadian CBC, the Italian RAI and the Irish RTE. The American system probably fits closest to this middle group of broadcasters, though it has some anomalies. PBS receives considerable funding from the American government through the Corporation for Public Broadcasting and airs no direct advertisements during shows. However, many programs are sponsored by for-profit corporations, which is a form of advertising. Finally, unlike any other public broadcaster, individual viewer donations account for a significant part of PBS' revenues. Logically, in order to attract donations, PBS would have to fill some sort of public demand, so these viewer contributions create a somewhat similar incentive structure for programming that relying on advertisers would.

Public broadcasting outlets without any of the insulation that government funding provides should behave very similarly to commercial broadcasters in their programming decisions because they are subject to very similar pressures. Therefore, I expect public outlets funded by advertising to provide similar amounts of political information as commercial outlets. In turn, viewers of these outlets should have comparable levels of political knowledge as viewers of commercial broadcasters.

However, broadcasters with partial or complete insulation from commercial pressures ought to provide political information of higher quality and quantity (in line with the goals of their charters to educate and inform the population). In turn, this information-rich environment should trigger higher levels of political knowledge among viewers, because the quality of the information environment influences people's political knowledge (Iyengar, et al., 2010) (Jerit &

Barabas, 2006). To sum up, public broadcasting only helps to increase levels of public knowledge if it has a significant non-advertising funding source. I call this prediction the "subsidy hypothesis". The subsidy hypothesis advances our understanding of the debate over public broadcasting. Instead of merely debating the effects of public and private broadcasting on political knowledge or participation, my focus on subsidy helps us isolate an important variable, and specify a more precise mechanism for how public broadcasting works. This in turn can ultimately help policy makers in broadcasting design better incentive structures to help the media inform the public.

Finally, along the lines of previous scholars, I suggest that the information-rich environment provided by subsidized public broadcasters will level the gap in knowledge between those citizens who are very interested in politics and those who are not. (Iyengar, et al., 2010). I expand this logic to suggest that subsidized public broadcasters will also decrease the knowledge gap that exists between high and low income individuals, as well as those of different education levels (Robinson & Levy, 1996). Finally, I also suggest that it will help close the gender gap in knowledge that exists between men and women (Nadeau & Niemi, 1995), (Mondak & Anderson, 2004). I call this general leveling effect the "neutralization hypothesis."

Summary and Conclusion:

In a democratic society, individuals need information in order to hold leaders accountable and that need only increases with the complexity of government. In modern society, mass media, particularly television, provides the lion's share of the political information that citizens absorb. Scholarship has also demonstrated that news coverage has both indirect and direct effects on individuals' attitudes. Because citizens prefer entertainment to news, commercial broadcasters have an incentive to reduce provision of political information in order to increase audience and profits. The recent explosion of broadcasting outlets increases this competitive pressure to reduce news programming. Though soft news and advertising help counteract information reduction, they are a stopgap a best. Public broadcasters have different motives than commercial broadcasters. They act as a bulwark to maintain higher levels of political knowledge in society. However, public broadcasting can only play this role if it receives insulation from competitive pressures. In future chapters, I empirically test these predictions among industrialized democracies in Western Europe. But for now I turn to the question of how public broadcasters even managed to develop and maintain their audiences in the first place.

Table 2.1: Percentage of Respondents Getting News about EU by Medium					
Country	Newspapers	Television	Radio	Internet	N
France	40.1	75.3	36.3	22.1	1,031
Germany	60.3	79.4	46.6	22.0	1,531
Italy	36.2	69.0	14.6	12.6	1,044
Poland	30.3	74.9	46.6	22.9	1,024
Spain	33.9	67.1	24.1	9.5	1,019
Sweden	68.9	76.3	42.2	38.4	1,012
Turkey	42.0	87.6	20.5	6.3	1,005
UK	34.7	45.2	19.9	26.7	1,362
Source: (Papacostas, 2010)					

Chapter III

Present at the Creation: The Development of National Broadcasting Systems

Introduction

In the previous chapter I developed a theory predicting that subsidized public broadcasting would bring a number of benefits to democratic citizenries. A non-profit mission and subsidies provide the motivation and the means to break free from the economic logic of revenue maximization and shareholder returns. As a result, subsidized public broadcasters ought to provide more political information. In turn, this information-rich environment endows viewers with greater levels of political knowledge and helps to even out the knowledge disadvantages that insufficient education, income, or political interest create. More informed citizens are more likely to vote and more likely to vote in their own best interests. Normatively, subsidizing public broadcasting would appear to be a good investment.

However, before examining the benefits of watching public broadcasting, we need to inquire if enough people watch public broadcasting for it to make any meaningful difference in the first place. Any effects of public subsidies are realized almost exclusively by *viewers*; those who do not watch do not benefit. But to get the full story of the influence of public broadcasting, we have to examine effects at the *system* level as well by looking at the total numbers of individuals who are watching public broadcasting in comparison to those who are not. Public broadcasting may have positive effects, but those effects will be minimal if public broadcasters only attract a small audience share.

Two facts dominate the modern broadcasting. First, like most other terrestrial broadcasters, public broadcasters have lost market share as satellite and cable broadcasters have invaded the television marketplace over the last three decades. In 1982, the Canadian Broadcasting Corporation held 22.4 percent of the prime time viewing share of the English-speaking audience and 40.2 percent of the French-speaking audience (Canadian Broadcasting Corporation, 1983). By 2009, those shares had declined to 8.6 and 17.2 percent, respectively (Canadian Broadcasting Corporation, 2009). Other countries show similar patterns. In Ireland, the public broadcaster RTE declined from a 73.7 share to a 44.2 share during peak viewing times from 1978 to 2005 (Radio Telefis Erieann, 2006). Britain's BBC dropped from 49.5 percent of the weekly average audience in 1983 (British Broadcasting Corporation, 1986) to 33.8 percent in 2008 (British Broadcasting Corporation, 2008). New Zealand's public-service broadcaster, New Zealand Television, dropped from an 88 share in 1990 (Spicer, Powell, & Michael, 1996) to 54 percent in 2007 (New Zealand Television, 2008). Although public broadcasters have held their share as well or better than their commercial terrestrial counterparts (British Broadcasting Corporation, 2008), these declines in market share are noticeable and widespread.

However, despite the general declines in viewership, many public broadcasters still retain very large audience shares. Table 3.1 shows the viewing share of the top five broadcasting outlets held by public broadcasters in OCED countries in 1999 (Djankov, McLiesch, Nenova, & Shleirfer, 2003). The share of total broadcasting is given in the second column.

Clearly, the share varies widely across countries, with the countries of Northern Europe, especially Scandinavia, having the largest viewing shares, while parts of southern Europe – Spain, Portugal and Greece and former English-speaking settler colonies of Australia, Canada and New Zealand have much lower shares for their public broadcasters. At the very bottom are most of the Latin American countries and the United States, which is a notable exception to the usual pattern for industrialized democracies.

How did this state of affairs come about? This chapter takes a historical analysis approach. Using the logic provided by critical junctures and increasing returns, I analyze the development of public broadcasters within their respective national broadcasting systems. My argument is simple: Public broadcasters that gained favored positions early in the development of radio and television broadcasting systems gained market dominance. That early dominance led to a powerful market position that allows these stations to weather increasingly competitive marketplaces. In contrast, regulators in other countries locked public broadcasters out of the market. Here, public broadcasters never gained a competitive position and remain marginalized 90 years later. I analyze the contrasting cases of Britain (public dominance) and the United States (private dominance) to illustrate this dynamic. Canada serves as a case with intermediate policies and intermediate results.

I conclude that future prospects for expanding the positive influences of public broadcasting on political knowledge and participation are bleak – in a rapidly segmenting marketplace there is no realistic possibility of public broadcasters establishing dominance or increasing their market share in most areas. However, historical endurance tempers this pessimism: Where existing public broadcasters are already strong, current social norms and historical reputation combine to slow the long decline of public broadcasting in an increasingly fragmented media market. As a result, these public broadcasters will continue to wield a large residual effect even in their twilight. I close with a speculative discussion on factors that may increase public broadcasting's endurance or exacerbate decline.

The Shadow of the Past: Critical Junctions, Increasing Returns and Public Broadcasting

As a mutual fund prospectus might warn, past performance does not guarantee future outcomes. However, early critical policy decisions often entrench structures that develop a gravity of their own and endure far beyond their initial establishment, sometimes in increasingly hostile policy environments. Several strains of historical or institutional analysis in political science have noted this phenomenon. In their tome that details the role of the labor movement in the development of Latin American political systems, Ruth Bierns Collier and David Collier (1991) develop a mode of analysis that focuses on "critical junctures." The Colliers describe a critical juncture as the period during the occurrence of some sort of crisis in countries with similar antecedent conditions in which a critical cleavage of social groups struggles for dominance. The constellation of dominant forces that arises out of that crisis then sets and re-enforces the legacy. In the case of national broadcasting systems, the antecedent condition is the pre-broadcast policy environment, the "crisis" is the introduction of widespread radio broadcasting and receiving ability and the critical cleavage is between organizations that wanted government-supported public broadcasting and industry groups that wanted a commercial broadcasting framework (Collier & Collier, 1991).

The concept of increasing returns[9] implicitly underpins the critical junctures approach. As summarized by Pierson (2000), the idea has four critical components. First, events early in a process play a disproportionate role in setting long-term outcomes. These events can be random, but their impact will not be. Second, the process becomes more inflexible as it moves forward; early events or choices constrain policy development or outcomes to a narrower set of alternatives. Third is the recognition that we may not live in the best of all possible worlds and that the ultimate path may not be an “ideal” policy (Pierson, 2000). In these cases, policymakers’ initial choices in the 1920s and 1930s drastically constrained the future shape of their respective broadcasting systems, leaving public broadcasters in a de facto dominant position or in a marginal one.

The most interesting aspect of how this process works is how random events, conscious policy design and unintended consequences create the self-reinforcing legacies described by the Colliers’ approach to critical junctions. Random events or outside shocks can often undermine or reinforce a fledging policy’s credibility, as the British General Strike of 1926 legitimized the BBC as a news provider and greatly increased its popular clout as a publicly funded, autonomous institution. However, policymakers often have clear goals in mind when they build political institutions. Principals use a variety of instruments to control their creations and ensure that their preferred policy aims are gained over the long term. In their seminal work on administrative procedures to enforce control of the bureaucracy, McCubbins, Noll and Weingast discuss the idea of *deck stacking*, a manner of designing an agency’s decision-making

[9] In line with Pierson, I use the terms “increasing returns” “self-reinforcing process” and “positive feedback” interchangeably (2000, p. 251).

processes to reflect the preferences of the coalition of interest groups that backed a law or the creation of an agency well after the original coalition might have lost electoral power or legislative clout (McCubbins, Noll, & Weingast, 1987). In the United States, the Radio Act of 1927 created the Federal Radio Commission, which oversaw the licensing and regulation of radio broadcasters in the United States. However, the law adjusted the FRC's procedures in such a way to favor the awarding of the best and highest-powered frequencies to large commercial broadcasters at the expense of public service or other non-profit oriented stations.

There is also the issue of public opinion. McCubbins, Noll and Weingast probably would not include public opinion as a formal deck-stacking device. However, if a highly visible policy provides acceptable results (e.g. widely accessible broadcasting service for a mass public), public opinion will tend to at least implicitly support the status quo, even if a better system is theoretically possible. A modern-day example in the United States is that most Americans tend to be satisfied with employer-based health insurance, although America as a whole provides health insurance to a lower percentage of its population, pays far more per capita for medical treatment and has worse health outcomes than its peer countries. As we shall see, scholars of broadcasting noted the same general public satisfaction with and support for the broadcasting outcomes in the United States, Britain and Canada, despite the three countries' sharply divergent regulatory paths. This latent public support helps reinforce the legacy of the critical juncture in broadcasting policy making.

Finally, although policymakers are often quite crafty about building institutions to obtain their preferred outcomes, all policies have unintended consequences. Building new institutions often creates large new bureaucracies, sometimes in public agencies, sometimes in private firms affected by the changing legal landscape. These large new bureaucracies contain many workers with technical expertise. This concentration of skills tends to reinforce the legacy for two reasons. First, the new bureaucracy becomes the go-to place to receive appropriate technical services. Second, the amalgamation of skills makes the new agency a natural locus for research and development future advances in technology. These advances, in turn cement the agency as indispensable over the short and medium term as a way to move a given industry forward. In broadcasting policy, the BBC attracted the skilled engineers, technicians, artists, actors and screenwriters that helped reinforce its dominance as a broadcasting leader. Similar constellations of talent formed around commercial broadcasting networks in the United States, entrenching the principle role of commercial broadcasters in the American system.

Finally, any organization wants to survive and thrive, and its leaders and staff are often adept at protecting their political interests. Once initial broadcasting policy institutionalized their space in the political arena, the army of staffers employed by the BBC, American networks and Canadian broadcasters became quite effective at using their expertise and clout to lobby politicians, appeal to the public and exert outsized influence in developing policy. Unsurprisingly, these policies reaffirmed their primary place in their respective countries' broadcasting systems.

Cases and Timing

I analyze the three countries of Britain, Canada and the United States. All three countries shared similar circumstances at the beginning of the broadcast era in the early 1920s. They were all primarily English-speaking, industrialized democracies with a shared cultural heritage. All three also possessed access to the technical know-how and resources necessary to begin large-scale broadcasting. In their study of Latin America, Collier and Collier (1991) note similar critical junctions occur at different times. The three countries I study here have very similar timing of their critical junctures, though Canada lags several years behind its British and American counterparts. I date the beginning of each juncture to the first wide-scale broadcasts of radio. In all three countries, regular broadcasting dates from the early 1920s – roughly 1922 in Britain and Canada, and 1920 in the United States. The general regulatory landscape is set in Britain and the United States by 1929, at which point the critical junction closes. Canada finished setting the basic parameters of its regulatory regime by 1938, at which point I mark the end of its first critical juncture in broadcasting development. Each country also underwent a secondary critical juncture with regards to television development in the early 1950s, though the combination of events only forced major policy changes in Great Britain. By 1960, all three countries had set their basic television regulations and had determined the basic long-term fate of their public broadcasters.

Developing the BBC's Dominance in Britain

The classic case of the development of public broadcasting is the creation and growth of the British Broadcasting Corporation during the 1920s in the United Kingdom. During the First World War, the British government tightly controlled the radio spectrum to secure sensitive government and military communications. Not surprisingly, the government also supplied the lion's share of the money that underpinned research into radio reception during the war. Much of the early efforts to develop radio communications before 1910 focused on developing point-to-point communication, primarily for naval use. However, wireless communication had an interesting byproduct: a message sent into the air could be intercepted by anyone who happened to be listening on the right frequency. Most famously, British code breakers took advantage of this fact by listening in on German diplomatic communications distributed by wireless broadcasting stations after the Royal Navy destroyed the transatlantic telegraph cables that linked the German Empire to the New World August 1914. As a result, the British intercepted and decoded the infamous Zimmerman telegraph that sped the United States' entry into World War I (Tuchman, 1985 [1958]). Other armies turned the omnidirectional nature of radio transmission to their advantage as well – notably the German Eighth Army, which used intercepted Russian Army transmissions to great effect when it routed the Russians at the Battle of Tannenberg (Tuchman, 1994 [1962], p. 269).

Only after the war did people truly realize the potential of this phenomenon of radio had for a mass audience. If anyone could listen in on radio transmissions, then someone sending transmissions could intentionally reach a mass audience – the potential for radio to provide mass entertainment and education suddenly seemed limitless. The idea of sending radio transmission to reach a mass audience fittingly became known as *broadcasting*, and the manufacturers of radio receiving sets saw a business opportunity in the civilian world to offset the crash in military orders that happened with the end of the war in 1918. Soon after, radio manufacturers approached the government with a request for a license to broadcast on part of the spectrum.

Ironically, the most prominent public broadcaster in history started life as a private corporation in 1922. Manufacturers of radio receiving sets negotiated an agreement with the government to form a company to broadcast radio programming. On one level this was purely a practical venture – the radio producers desperately needed the civilian market for their sets, and they needed permission from the British government, which controlled the radio spectrum, to broadcast (Briggs, 1961) (Crissell, 1997). However, there were two aspects of the deal between the industry and the government that would grow to typify public service broadcasting arrangements in many countries. The first was a monopoly on broadcasting service. At first the monopoly was de facto; the postal ministry simply never granted anyone else a license to broadcast, though later the monopoly became formalized. Second, a small annual fee was levied on the holders of radio sets that in turn gave them the right to listen to the radio. The fee was at first only part of the funding for the broadcasting company, and was combined with a tax on the radio sets and selling stock in the new company to help fund the new broadcasting venture.

The twin innovations of monopoly control and license fee for service constitute the traditional public-service broadcasting model in industrial democracies. Though foreign and pirate radio stations provided memorable distractions in British broadcasting history in both the 1930s (Briggs, 1961) and the 1960s (Crissell, 1997), the monopoly shielded the fledging British Broadcasting Company from competition. The resulting breathing space allowed the BBC's directors to sort out exactly what sort of broadcasting programming was "best" for the national interest while the annual income guaranteed by the license fee provided the independent financial wherewithal to build that service. These goals contrast markedly with the narrow financial motives of pleasing investors or owners. The appointment of John Reith to be the first general manager of the BBC cemented the early attitude to aim for quality, as Reith declared that he only wanted the "best of the best" for the broadcaster, emphasizing culture over mass entertainment as well as pushing for operational independence from the government (Crissell, 1997).

The market for radio sets increased rapidly in the early 1920s, rising from 80,000 in 1923 to more than 1 million in 1924 (Crissell, 1997). With the smashing success of the BBC, the government appointed a commission under the chairmanship of Sir Frederick Sykes to determine precisely what shape the rapidly emerging broadcasting market should take and what role the BBC should play in it. After its investigation in 1923, the Sykes Commission recommended formalizing the BBC monopoly, funding it fully through the license fee and making it a public rather than a private corporation (British Broadcasting Corporation). Henceforth, the radio manufacturers would focus on producing radio sets, while the independent BBC focused on broadcasting and programming.

By the mid-1920s, the BBC was attracting millions of listeners to its entertainment, cultural and educational programming. However, newspapers fearful of the BBC's potential competition had used their influence with the government to prevent the rapidly growing radio broadcaster from reporting the news, except for merely rebroadcasting the newspapers' own bulletins and headlines after they hit the streets. As a result, the BBC did not initially develop a news division. But in 1926, a general strike that included employees of most of the major London press outlets left the print media on the sidelines of one of the largest news events of the decade. Recognizing that the population needed information in the absence of newspapers, the government temporarily lifted news broadcasting restrictions in place on the BBC. Reith and other BBC employees improvised a news service from scratch and broadcast five daily news updates throughout the days of the strike. Sifting through government and wire reports the skeleton team gained experience and through trial-and-error began developing more effective ways to present reports in a succinct, timely and effective manner (Briggs, 1961).

The BBC's performance during the strike of 1926 was a watershed in the organization's history not only because it was the first time it took on a news broadcasting role independent of the print media, but also because it managed to maintain its independence from the government of the day. The organization walked a fine line between attempting to report the news as it happened and keeping the cabinet (eagerly urged on by Winston Churchill) from seizing direct control of the BBC's operations and broadcasting. As a result, the organization didn't broadcast direct appeals from the workers on strike, and delayed a broadcast of the Archbishop of Canterbury proposing a compromise settlement for the job action. However, despite its partial reliance on government reports, the BBC also did not openly embrace the government's line. By choosing what government information to present and the manner in which present it, for the first time BBC conducted the functions of a professional journalistic organization. It set itself up as a presenter of information without taking a side in the story. The historian Asa Briggs argues that by being on top of breaking news, serving as a filter against government propaganda and presenting information, the BBC "moderated" the conflict between labor and the government without taking a side and managed to neuter a faction of the cabinet calling for more extreme measures against the strikers. As a result of focusing on presenting information, it drastically increased its credibility among the population and even the government, which found information from news reports useful. Striking miners were disappointed that the BBC did not give them direct access to make their case to the public, but one of them noted that at least “there was very little said against the miners” by the organization (Briggs, 1961, p. 100).

Thanks to its respected performance during the strike of 1926, the government enacted the recommendations of the Crawford Commission report from early 1926. The commission advocated removing the organization from direct Parliamentary control and making the BBC a public service corporation with a royal charter. The report also recommended continuing the license fee, the broadcasting monopoly and the ban on advertising for 10 years (British Broadcasting Corporation). As a result, the BBC gained a much wider scope of power over its own broadcasting decisions without the immediate potential for government interference, including the power to report the news. Enacting the recommendations of the Crawford Commission entrenched the basic template of the BBC by the 1920s, which continues into the early decades of the 21st century.

Notice how the results of several distinct events combined to create the peculiar result of the BBC. The ability to broadcast radio to the masses and the newfound opportunity after the end of World War I opened up a brand new period of mass communication. While this disequilibrium is hardly a “crisis” in the sense of a the massive clash between social forces that the Colliers discuss (1991), existing economic and state interests in the United Kingdom had to readjust themselves to a new reality. Antecedent conditions certainly helped shape the form that the BBC eventually took. As a legacy of the First World War, the British government maintained tight control over the airwaves, and radio set manufacturers had an immediate economic interest in generating a market for radio sets – though not necessarily for radio broadcasting. These conditions differed in the United States and Canada, countries who maintained looser regulation over the airwaves throughout most of the 1920s. However, there was nothing deterministic about the government and the radio manufacturers' agreement to set up a de facto monopoly. One could easily imagine a scenario where the government granted several licenses or under which several radio manufacturers asked to form their own distinct broadcasters. But once the BBC took the early form it did, its own early success contributed positive reinforcement to its continued growth along its original lines. The government was satisfied with the parameters of the service and its goals. The public was happy to gain access to new technology, entertainment and information. The radio companies were happy that an explosion of consumer demand for their product picked up the slack caused by the end of the war. No one saw a reason to tinker with a policy that seemed to be working. Every month the BBC added staff, improved its technical acumen and grew its brand with the public made it more difficult for the government to change policies to end the monopoly, introduce advertising, or otherwise drastically change the terms of service. The process of consolidation illustrates the heart of the logic of increasing returns.

Finally, a combination of its own success and several exogenous events early in the BBC's tenure allowed it to outflank potential competitors and entrench itself. After the public rapidly embraced it during the early 1920s, its performance during the general strike of 1926 removed the obstacles print media had thrown in its path to its becoming a news organization. It also managed to assert its independence from the government when there were powerful cabinet officials like Churchill who wanted to put it under direct governmental control. Parliament enacting the recommendations of the Crawford Commission cemented BBC's legacy. From there it had enough technical expertise, public standing and institutional clout to chart its own course and reproduce its own success. Its early managers, staffers and performers piled up awards, acclaim and royal recognition (Director General Reith was ennobled for his service) that helped gain clout with government ministers.

Because of its technical expertise in developing TV systems, the Selsdon Commission recommended it to manage the experimental television services set up in London in the late 1930s, while the Hankey Television Commission of 1943 and the Beveridge Commission of 1949 advocated that the BBC should have a monopoly on TV service. The corporation's technical expertise in expanding radio and radio programming led the Ullswater Commission of 1937 to recommend it developing and managing a worldwide service. The BBC's success during the strike in 1926 led to its formal independence from Parliament as recommended by the Crawford Commission, which was reaffirmed by the Ullswater Commission for its foreign services, except in times of extreme emergency (British Broadcasting Corporation).

In turn, these precedents encouraged the government to keep the BBC independent (excepting some military censorship) during the Second World War, even when Churchill, the broadcaster's old nemesis from the 1926 strike, became Prime Minister in 1940. This decision led more success and innovation: reports from the front lines, interviews with soldiers, and a BBC that not only stood astride Britain's broadcasting universe, but much of the world. As Crissell argues, this success only increased the broadcaster's credibility:

> "Pehaps the BBC's greatest wartime success was to honor its original decision to tell the truth as far as it could, rather than create propaganda. Because its sources were limited and because national security sometimes called for the suppression of certain facts, it could not tell the whole truth; but it consciously eschewed lies and distortions and thus gained an immeasurable advantage over the stations of the enemy. Since it told bad news – and there was nothing but bad news to report until the victory at El Alamain in November 1942 – its good news could also be believed." (Crissell, 1997)

This institutional clout became so great by the early 1930s, that even when the BBC stumbled, it was able to deal with the outside criticism and challenges on its own terms. In the 1930s, private offshore broadcasters like Radio Normadie, the International Broadcasting Corporation and Radio Luxemburg beamed in audience-pleasing light entertainment that cut into the BBC's listening share, especially on Sundays when the public service provider only broadcast church services. The BBC eventually relaxed its policies: allowing for some entertainment broadcasting on Sundays and reducing the number of ultra-serious "talks" given during the week (Briggs, 1961, pp. 129-130, 150). However, the broadcaster made these decisions internally; there were no members of Parliament or the cabinet threatening the BBC or scheming to take away its monopoly or license fee unless it provided popular entertainment.

The United States Unleashes a Commercial Broadcasting Juggernaut

Britain established a broadcasting system dominated by a single public-service broadcaster. However, events and the self-reinforcing process of increasing returns led to the United States established a mirror-image system in which a small group of commercial broadcasters became dominant and nearly eliminated any non-profit public-service competition.

As in Britain, the American story starts with the potential mass broadcasting around 1920. Like the British experience, much of the research into radio during World War I had been conducted by the government, especially the Navy. And like Britain, the government for military reasons had maintained tight control over the spectrum during the First World War and had instituted some regulation of the spectrum in the pre-war years.

But there were a few differences between Britain and the United States' underlying conditions at the start of the 1920s. First, the dominant act of American broadcasting regulation was the Radio Act of 1912, which reserved some of the most lucrative spots on the radio spectrum for government, but left others for well-established wireless companies like AT&T, while relegating everyone else to a small, overcrowded area of bandwidth (Douglas, 1987). Second, the 1912 law also had very liberal licensing procedures in comparison to British regulations. After the federal government lifted emergency restrictions on broadcasting upon the end of the First World War, potential broadcasters who wanted a license simply applied to the Secretary of Commerce. Anyone who met simple criteria was granted a license because the law gave the department very little discretion about who should be favored for what sorts of licenses. Legally, the Department of Commerce also had little power to establish technical guidelines for the hours, frequency and power at which a license holder could operate, or even set a term for the license (Emery, 1971).

The extremely loose regulations made the 1920s a chaotic time for American radio, as stations routinely interfered with each other's operation. Letters from listeners furious about the interference caused by multiple stations broadcasting on the same frequency poured into the department of Commerce. In response, Secretary Hebert Hoover organized informal conferences throughout the 1920s to work with major radio broadcasters to set informal guidelines on interference and frequency usage. Though the conferences laid groundwork for future regulations, voluntary agreements failed to produce an orderly spectrum. In 1926, a federal court ruled in *United States vs. Zenith* that the Commerce department did not have the power to punish a license holder for broadcasting on frequencies other than the one assigned by the government. An advisory opinion from the attorney general later that year concluded that the Federal Government had no authority to regulate frequency, power or the time broadcast used by any station with a license (Emery, 1971). The writing was on the wall for the Radio Act of 1927, which would finally bring order to the chaotic landscape of the broadcasting spectrum and set in concrete the dominance of commercial broadcasting in the United States.

Even before the 1927 law, self-reinforcing processes already existed that would dictate the outcome between the advocates of public-service broadcasting and commercial radio. During the early and mid-1920s, the U.S. government's largely hands-off policy let a thousand flowers bloom – or more to the point, a thousand radio stations broadcast. In this environment of weak regulation, anyone who wished to broadcast simply applied for a license and set up an antenna. By 1924, more than 500 regular broadcasting stations were on the air in the United States and providing mass radio service and under the separate ownership of scores of organizations from churches, schools to large businesses (Emery, 1971).

But not all radio stations were created equal. I already noted that the Radio Act of 1912 privileged large businesses over amateurs and other small operators into having access to the spectrum, which likely helped slant the playing field. The resources and expertise needed to build and operate radio stations also gave larger organizations an upper hand. Finally, Hoover's conferences involved the largest radio manufacturers and broadcasters, generally associated with the largest electronics corporations in the United States like Westinghouse, General

Electric, RCA and AT&T[10]. That the largest corporate players were the ones routinely meeting with policymakers in annual conferences that set informal radio policy, suggests that any radio regulations would end up being favorable to large businesses. The provisions of 1927 Radio Act and the later regulations issued under that act mirrored many of the recommendations of the major radio manufacturers and commercial radio stations made to Hoover at their semi-annual conferences.

These commercial interests were organized around the principle of profit. Scholars contest the idea of when precisely advertising became the dominant mode of funding radio broadcasting in the United States. Emery (1971) implies that it began in the early 1920s and was dominant by the mid-1920s. McChesney (1993) argues that advertising as we know it today did not begin to develop in earnest until 1926 with the formation of NBC and did not engulf all of radio until after the new regulatory regime went into effect in 1927. Douglas (1987) leans more toward Emery's take. She argues that forms of advertising (e.g. sponsorship) and other attempts to monetize broadcasting, like AT&T's "toll broadcasting" format, were at the forefront of most radio executives' minds by the early 1920s, even if the advertising did not evolve into its modern forms until later in the decade.

Although for-profit radio had several resources, access and organizational advantages in the 1920s' U.S. broadcasting landscape, its ultimate dominance was not assured. McChesney's passionate and thoroughly documented history of the broadcast reform movement in the

[10] An agreement among these four groups combined the stations of GE, RCA and Westinghouse to form the National Broadcasting Company, America's first radio network. AT&T won the right to link all of NBC's stations via its telephone wire, guaranteeing it a cut of the radio business (Engelman, 1996).

1920s show that there was still much doubt over what forms successful radio might take or what sources might fund it. In 1926, 126 radio stations were run by schools or colleges, and only 25 percent of stations were actively commercial, though these tended to be larger. Several non-profits ran large, technically advanced and successful stations with millions of listeners, like The AFL-CIO's WCFL in Chicago or the Catholic Paulist Fathers-managed WLWL in New York City. The success of these stations and others like them shows that the public did not have a decisive preference for commercial radio over alternative stations when those alternative stations assembled the capital and technical ability to compete. One nationwide contest put on by a radio listener's group sought suggestions for the best way to organize the American broadcasting system; the winning entry outlined a British-style public-service system. In 1925, even Hoover suggested a small tax on radio parts as a reasonable way to fund broadcasts (McChesney, 1993). In the United States, commercial radio would decisively win the battle with public-service advocates. Despite their structural disadvantages, however, the public-service advocates, backed by several major organizations with hundreds of thousands of activists, put up a noisy fight between 1927 and 1935 (Engelman, 1996).

After *Zenith vs. United States*, Congress passed the Radio Act of 1927. The law created the Federal Radio Commission and gave it broad discretion to sort out the technical and financial issues that plagued the disorderly American radio market of the mid-1920s. The FRC began by holding hearings and inviting testimony. Unsurprisingly, given the history of informal conferences between Hoover and industry executives, most of the 50 witnesses it invited to speak were representatives from major radio manufacturers and large radio stations. The trend continued when the FRC appointed a formal task force consisting of engineers from the major players in radio early 1928. Unsurprisingly, the group came back with recommendations that favored large commercial operators (McChesney, 1993). By August, the FRC codified the recommendations into formal regulations embodied in the FRC's General Order 40, which became the broom commercial radio operators used to sweep their non-profit and public-service competitors into the musty corners of the American broadcasting arena.

General Order 40 brought order to the American airwaves by dividing up frequencies into 40 "clear channels" that would allow their licensees to beam nationwide, with 34 regional frequencies subdivided into regions and 30 frequencies for local broadcasting within each region. In order to receive a license, a station had to show that it had the technical equipment and staff that would merit the size of the area – requirements that locked most small public-service broadcasters entirely out of the most desirable national clear channels and regional frequencies. The regulations, as interpreted by the FRC Chief Counsel Louis Caldwell, also favored stations that funded themselves by advertising. Caldwell argued broadcasters existed to serve the public with a well-rounded program. Consumers in the free market would determine what "well-rounded" programming looked like through their choices. Caldwell then reasoned that stations unable to compete commercially were not well-rounded and undeserving of a license. Caldwell referred to these stations as "propaganda" outlets. He sympathized with the idea that all parties had a right to speak. However, since frequencies were limited and not every point of view could get a license, Caldwell concluded that no political stations should have one. Finally, General Order 40 allowed anyone to challenge the license of an existing holder through the FRC administrative process (McChesney, 1993).

The combination of technical requirements, the need for large audiences, the branding of non-advertising funded stations as propaganda outlets, and the ability of anyone to challenge the license of an existing license holder effectively declared open season on non-profit broadcasters. Even the stations that had large audiences and technical expertise to justify high-powered licenses found themselves pinioned by the idea that they were propaganda stations. Even if they survived challenges, they often found that FRC assigned them to less desirable frequencies, cut their broadcasting strength and limited their broadcasting hours – usually stripping them of broadcasting rights during the critical 7 to 11 p.m. block when most audiences were home (Engelman, 1996, p. 24). When audience share and advertising revenue (if any) declined, further rounds of challenges would continue to cut their signal strength and broadcast hours and the vicious cycle continued. The experience of Chicago Federation of Labor's WCFL embodied this process when multiple FRC hearings forced it to broadcast during progressively less useful hours and with weaker signal strengths. Finally, the legal fees required to defend their licenses in front of the FRC against commercial stations drained valuable resources from the non-profits that could have been used to improve programming (Engelman, 1996). In many cases, the FRC did not even have to formally take away broadcasting licenses from non-profit institutions – they just gave up. As the proprietor of the University of Arkansas' soon-to-be defunct station put it:

> ….the Federal Radio Commission has come along and taken away all the hours that are worth anything and has left us with the hours that are no good either for commercial or for educational programs. The Commission may boast that it has never cut an educational station off the air. It merely cuts off our head, our arms, and our legs, and then allows us to die a natural death. (qtd in McChesney 1993 31).

Scores of acrimonious license hearings filled up the calendars of 1928 and 1929 as commercial broadcasters moved in to challenge for the rights to broadcast on lucrative frequencies assigned to educational, non-profit and other non-commercial organizations. At times, the fight between commercial and non-profit broadcasters became more literal than metaphorical: One particularly contentious FRC hearing had to recess when a heated argument between two lawyers representing opposing stations degenerated into a fistfight.

History doesn't record which side won that particular bout, but with the regulations stacked in their favor, commercial radio's conquest was quick, total and has proven irreversible over the last eight decades. Between 1927 and 1930, the number of college-owned radio stations declined from 95 to fewer than 50. The number of non-profit stations went from 200 in 1927 to 65 in 1934. The desirability of the frequencies and times assigned to various broadcasters also illustrates the marginalization of the public-service stations. In 1934, non-profit radio stations broadcasts accounted for only 2 percent of the total radio airtime. Of the 40 national clear-channel frequencies, 37 were occupied by NBC and CBS, the two major U.S. networks. NBC and CBS affiliates were fewer than 7 percent of the stations in 1927, but more than 30 percent by 1930. And those 30 percent of stations controlled 70 percent of the broadcasting power (McChesney, 1993) (Engelman, 1996).

The consolidation of commercial broadcasting in the United States proved remarkably durable despite a coalition of forces initially arrayed against it in the early 1930s. McChesney (1993) argues that the reformers had a broad swath of public opinion behind them, though formal polling did not come into widespread use until a decade later. What is certain is that educators, organized labor, religious groups and a variety of good-government organizations like the American Civil Liberties Union gave up working with the FRA to around 1930 and focused on influencing Congress to improve broadcasting law. They used both inside direct lobbying and outside pressure in the form of thousands of letters sent to individual senators and representatives. With the Radio Act of 1927 up for renewal annually, reformers had a clear recurring point of attack. And in 1932, reform appeared to gather momentum when President Hoover (the former Commerce Secretary who was so accommodating to commercial radio) was swept from the White House and Republicans sustained massive losses in the Congressional elections. The incoming New Deal Democratic majority seemed more receptive to the reformers concerns than the outgoing administration.

However, despite the newly favorable political climate, the reformers completely failed in their objectives. The Broadcasting Act of 1934 created the Federal Communications Commission, which essentially accepted the status quo of commercial dominance and made no major reforms. Why did the reformers fail? The patterns of positive reinforcement explain why. As I have shown above, commercial radio operators completely took over the U.S. broadcasting market by 1930. The fact that they were entrenched on the high ground of the most powerful frequencies gave them an advantage. Perhaps many elected officials would have preferred another configuration of radio, but they also saw that there would be many costs of disruptive to achieve better broadcasting while the current system seemed to work passably well. After all, most American listeners had clear reception to several radio stations and the burgeoning NBC and CBS networks were investing millions into building transmission and studio frequencies. Things were better than they were in the chaotic years of the mid-1920s, so why upset the apple cart?

Second, with the non-profits relegated to the dark corners of the broadcasting landscape with weak signal strength and low budgets, the technical expertise in the radio industry became even more concentrated in the large commercial networks and their flagship stations. Most of the technical experts that could testify in front of Congress now had interested aligned with commercial radio – which was the exact opposite of the situation in Great Britain in the early 1930s.

Third, as in the 1920s, all of the executives in private radio worked closely together in the National Association of Broadcasters, which had a unified front lobbying against changes to the status quo. Finally, commercial radio was very profitable, so it had the ability to give generously to election campaigns, as well as generously fund lobbying activities through the NAB and other organizations (McChesney, 1993).

In contrast, the reformers had a broad coalition, but they lacked the clear, commanding position and unified front of the broadcasters defending the status-quo. Some reformers tried to initially work within the FRA framework, while others immediately attempted to overturn it. Some wanted to overthrow the whole system and implement a British-style one, while others (notably the ACLU) were as worried about a non-profit monopoly as they were about a few commercial networks monopolizing the airwaves. Some reformers like the National Advisory Council on Radio in Education (NACRE) tried to work with the for-profit radio holders to get more educational shows on their broadcasts, while others like the National Committee for Education by Radio (NCER) implacably opposed any accommodation. The divided coalition had trouble focusing on one objective and was defeated by the unified, “expert” well-funded message and lobbying of the NAB and its allies (Engelman, 1996). Even the reformers’ last-ditch attempt to erode the power of commercial networks in 1934 fell short: A proposal requiring 30 percent of all air time on the for-profit stations to be devoted to educational programming few short by several votes in the final version of the Senate bill that ultimately creating the FCC (McChesney, 1993).

Unsurprisingly, the new FCC accepted the status-quo of the radio market, though its New Deal appointees did from time to time move to break up the most obvious excesses of private control. Most notably, a 1941 FCC ruling forced NBC to break up into multiple networks in order to avoid monopoly control over the airwaves. However, the commercial domination of American radio (and later television) markets remained unchecked. After some of the ferment of the early 1930s, Americans settled down and accepted the status-quo. For most Americans, radio seemed to work fairly well – most members of the population had access to radio, technical advances continued to improve reception and the entertainment-oriented nature of commercial radio provided a continuous string of popular shows. As with their British counterparts who were satisfied with the BBC, there seemed no reason to upset the apple cart. Even some of the groups that originally opposed commercial consolidation began to openly support the system, most notably the ACLU (McChesney, 1993).

The United States ended up at the opposite pole of the broadcasting policy from its British counterpart. Somewhat favorable initial conditions for private broadcasters combined with early lassiez-faire development to allow for-profit broadcasters to become established independent of the government, unlike Britain where radio manufacturers signed a joint agreement with the government to provide a single broadcaster. Widespread broadcasting became popular in both countries. In Britain, the BBC went from strength to strength through both sound management and good luck (as in the 1926 strike) and solidified its legacy with each new success. In contrast, the American broadcast landscape became cluttered and disordered by the mid-1920s. At this point, the private broadcasters had built up enough financial and political clout to force a settlement of the problems in the American broadcast spectrum on terms favorable to commercial dominance. The critical juncture of broadcasting development in both countries closed around 1930. At this point, both the British public monopoly and the American commercial system had gained enough self-reinforcing power through consolidated technical expertise, powerful lobbyists and leaders, and public acceptance of the status-quo (though this only came fully later in the United States) to cement their broadcasting dominance in their respective countries.

Canada: Rural Service, National Identity and Mixed Broadcasting

When developing its own broadcasting system, Canada set a distinct policy that charted a middle course between the public-service monopoly of Britain and the commercial-dominated juggernaut of the United States. Like the United States and Britain, Canada strictly controlled its spectrum through the First World War, and began to explore commercial broadcasting as restrictions of the war eased. The Canadian law initially governing broadcasting was the 1913 Radiotelegraph Act, which gave the government broad discretion to grant licenses, and subsequently gave Canadian regulators more leverage when dealing with broadcasters than their American counterparts. This regulatory oversight subsequently helped sort out issues of interference while somewhat limiting large private companies (Armstrong, 2010).

However, in most aspects, early radio in Canada looked much like radio in the United States. 1922, the government approved the first license for regular broadcasting to the Marconi company for a Montreal radio station. A year later, 34 regularly broadcasting private stations were in operation, primarily in urban areas. By 1930, 80 commercial stations broadcast throughout the country, with Canada's principal cities of Montreal and Toronto accounting for half of the operators (Emery, 1969). These commercial operators mixed with a hodgepodge of non-profits and educational stations. One notable public venture by Canadian National Railways located broadcasting stations along the Canada's transcontinental railway so that passengers could listen to the radio on the train. Of course, residents of towns along the tracks could also listen in if they wished to do so, establishing an early precedent for government-subsidized broadcasting (Armstrong, 2010).

One other quirk in the Canadian system also set it apart from the American system to the south and linked it more closely to their British counterparts across the ocean. Despite no nationwide public service, the Canadian government instituted a $1 annual license fee on radio listeners in 1922 as a revenue generator (Emery, 1969). The fee was small and initially not used directly to subsidize public radio. However, the existence of this tax and the willingness of the public to pay it likely became an entering wedge to smooth the development of a national broadcasting system a decade later.

At about the same time as the American FRC was eradicating public broadcasting under the logic of Order 40, the Canadian government appointed a commission under the leadership of Sir John Aird to examine the state of Canadian broadcasting and recommend improvements. Canada and the United States shared many problems with their respective radio systems: technical specifications, frequency allocation, funding and development all were part of the Aird Commission's brief, as they were with the FRC. However, Canadians had three distinct concerns from their American counterparts. First, Canada had a more difficult challenge to serve its entire population with radio. Despite being nearly double the size of the continental United States, Canada had only a fraction of its southern neighbor's population, meaning that people were scattered far wider than in the United States. Half of the radio stations in the country were located in Montreal and Toronto, while many farmers and small towns in the interior Prairie Provinces and in the northern wilderness had no access to radio service at all. Second, this population density issue also aggravated funding problems and complicated business plans for many Canadian stations, which were already struggling with similar start-up problems of developing sustainable business plans of their American counterparts. This economic weakness drove Canadian stations to seek out growing radio networks for financial sustainability. As a result, the newly successful U.S. networks began working to sign up Canadian stations and actively spoke of Canada as part of their "market" (Armstrong, 2010, p. 26).

The increasing collaboration of Canadian radio stations with the Americans to the south struck a nationalist nerve among many Canadian citizens and policymakers.[11] Unlike the FRC hearings, which were dominated by testimony from technical experts from commercial radio and Louis' Caldwell's stringent interpretation of Order 40, the Aird Commission members were openly skeptical of the commercial-dominated status-quo in Canada. Unsurprisingly, in 1929 the Aird Commission recommended the nationalization of broadcasting in Canada along the

[11] In fact, much of Canadian broadcasting history has a focus on Canadians fretting about too much influence from their southern neighbors, as McPhail and McPhail observe (1988).

lines of the British BBC (Armstrong, 2010). The recommendations joined the battle for broadcasting in Canada. As in the United States, commercial operators had considerable power and influence. The Canadian Association of Broadcasters (CAB) lobbied hard to stop the Commission's plan, just like the NAB had in the United States. Groups favoring non-profit broadcasting, notably the Canadian Radio League, worked with veterans' groups, educations and labor organizations to lobby hard for a national broadcasting system.

But in Canada, the struggle was much more evenly matched than in the United States. First, the reformers had a blue-ribbon commission report backing them. Unlike reformers in the United States, the Aird Commission report not only gave legitimacy to the reformers, but also gave them a proposal to rally around, unlike the divided reform movement in the United States. The issues of providing a national service that benefitted all Canadians – not just those in major cities helped reformers gain support. Finally, the idea that Canadian Broadcasting should be truly *Canadian*, not merely a rebroadcast of American producers, resonated powerfully among policymakers of a young, multilingual country attempting to establish its unique identity.

The result was the reformers won most of what they wanted in the Canadian Radio-Broadcasting Act of 1932, which created the Canadian Radio-Broadcasting Commission. Like the BBC, the CBRC had both the power to regulate the allocation of frequencies and to run a national public broadcaster funded by an annual license fee on all radio-owning households of $2. After some initial missteps, Parliament reorganized the CBRC as the Canadian Broadcasting Corporation (CBC) in 1936. Originally, the legislation was supposed to eventually nationalize all private broadcasters, though through the urging of the commercial radio companies, existing license holders were eventually allowed to remain in the field. The result was a hybrid network, in which the CBC was a large, bilingual, national broadcaster and numerous local stations were held privately, some working as affiliates of the CBC and others remaining completely independent. When a new private station wanted to form, the CBC would determine whether it should affiliate with the CBC or broadcast independently (Armstrong, 2010). By the mid-1940s, this dual commercial-public network was entrenched in Canada and has endured through the last seven decades.

The Canadian broadcasting system, then, settled on equilibrium between the American and British systems. Initial conditions allowed for a similar early development to the American private system. However, mitigating factors left Canada's commercial broadcasters in a weaker position than their American counterparts: the imposition of the license fee, more government discretion in granting licenses, the establishment of some public networks through Canadian Railways and the vast empty spaces of Canada, which made profitable commercial radio a more difficult proposition than in the United States. These factors slowed the consolidation of a commercial radio system enough to give reformers a chance.

The ultimate factor that equalized the playing field between reformers and commercial radio was the worry of imported American radio eroding Canadian sovereignty and identity. This fear motivated the government to approve a national broadcaster, though the commercial broadcasters were well organized enough to retain a position for commercial radio on the Canadian spectrum. From this hybrid system, both commercial operators and the CBC developed internal technical expertise, organized leadership to lobby for their interests, and general public acceptance that consolidated their spaces in Canadian broadcasting universe.

The Role of Subsidies in the Development of Broadcasting Systems

Now that I have outlined the general factors behind the consolidation of three distinct broadcasting systems in Britain, Canada and the United States, I want to pause the march of history to highlight the distinct role that subsidies played in shaping programming in each of the three countries, which is critical to the theory I outlined in chapter 2. The argument over subsidies for broadcasting played a central part in the establishment and early development in Great Britain, Canada and the United States. In each case, who provided the subsidies sometimes differed, as well as some of the ultimate purposes. However, the ultimate idea was that subsidies themselves drastically shaped programming choices.

The systems in Canada and the United States illustrate programming differences more dramatically because the two countries contained a wide variety of radio station types in the 1920s, while Britain relied on output place out by the monolithic BBC. Commercial stations in the two countries focused on programming that was cheap and drew in the largest possible audience. Programs from commercial stations in both countries focused on entertainment. The growth of networks in the mid and late 1920s saved costs by providing content from a single centralized source (by 1930 this was Radio City in New York for NBC), while discouraging variety of programming (it's expensive to maintain multiple complex studios across the country) (Engelman, 1996). In Canada this networking had the added effect of shutting out homegrown Canadian programs and performers (Armstrong, 2010). Every commercial broadcaster was angling for the broadest possible audience to maximize revenues from advertisers. As a result, a radio monoculture evolved among commercial broadcasters – American stars employed by NBC or CBS providing similar types of sponsored entertainment shows.

Compare the coast-to-coast national programming that developed among commercial stations with local stations funded by other entities. For example, take the Canadian National Railways network, built in 1924 by the Canadian national government to serve Canadian rail travelers. Armstrong (2010) doesn't directly discuss the programming of the network, but he does note that the system employed only Canadian artists, performers and commentators. This focus on showcasing Canadian talent later became a central goal of the CBC. Although the programming genre itself may not have changed, the funding source did drive important hiring decisions, which in turn served a goal that might not have made sense if using a simple profit-maximization rubric.

For subsidies affecting programming choices, one needs to look no further than the scores of educational and non-profit stations set up in both the United States and Canada throughout the 1920s. CKUA, the University of Alberta's radio station that opened in 1927, devoted its entire air time to educational programming. The funding source for operating costs was the university, which had an educational mission and underwrote educational broadcasting, in contrast to NBC. Similar logic underwrote the educational lectures and discussions of culture and arts broadcast from scores of radio stations funded by U.S. universities and school districts (Douglas, 1987, p. 310).

Subsidies did not even have to be provided by a public entity to affect programming. WCFL in Chicago, the station owned by the Chicago Federation of Labor and partially subsidized by the nation American Federation of Labor. WCFL strove to provide its working class listeners with a variety of entertainment and news, but also focused on providing public affairs information from a labor perspective – especially its coverage of work stoppages and union local negotiations with employers, which often were ignored by commercial newscasts. The subsidy here came from a labor organization, not the government, but altered both the mix and the tone of the programming. Notably, as the station was forced to sell more advertising to pass muster with the FRC, its programming strayed away from labor's perspective and public affairs programming and became more and more generic commercial entertainment (McChesney, 1993, p. 68). WLWL, a large Catholic radio station sponsored and run by the Paulist Fathers, an American order of priests dedicated to democratic political government and education, also was able to maintain a unique blend of educational and public affairs programming on its station in the mid-1920s until the FRC started reducing its air time in favor of a rival commercial broadcaster. To curry favor with the FRC, the fathers sold off blocks off air time to commercial interests which ran entertainment programming, while trying to retain an ever-shrinking core of their own programming (McChesney, 1993, pp. 73-75).

Finally, within its monolithic BBC, Britain's experience showed that subsidies insulated programming directors from worries about increasing profits by currying favor with the broadest possible audiences. Director-General Reith wanted the BBC to provide the "best of the best" to the British people by giving them lectures on science and culture, spiritually improving church services every Sunday, classical music and opera and high-end discussions of current affairs. The crude word "profit" certainly never passed his lips. He perhaps overplayed his hand a bit as the BBC lost a third of its market share to continental and pirate radio commercial stations playing dance music in the early 1930s, though the BBC loosened its standards a bit and was able to win much of its Sunday audience back when it cut back on its church service broadcasts (Briggs, 1961).

The Introduction of TV: Stability and Evolution, not Upheaval

Despite the many revolutions in broadcasting since the 1920s, the underlying contours of the American, Canadian and British broadcasting system remained remarkably consistent until the cable and satellite revolution of the 1980s and 1990s. Take the introduction of television in the 1940s and 1950s in each country. The introduction of television opened up a massive new frontier for mass media in each country. Citizens adopted it quickly and TV became the dominant form of mass media in each country by the mid-1960s. At first glance, the large addition and mode shift to television would seem to offer a chance to radically alter the balance of broadcasting power in each country.

But the shift never happened. Television was a radical advance, but a conceptually simple one – adding the ability to broadcast pictures to the existing ability to broadcast sound. The forces that generated and reinforced the radio broadcasting systems of countries remained in place as those countries considered policies to develop and deploy television. Technical expertise needed to develop television unsurprisingly grew in part from the research departments within the existing large radio broadcasters – the BBC in Britain, the three major commercial networks in the United States and a mix of the CBC and private broadcasters in Canada. The interest groups and leaders developing television policy came from the same constellation of already successful groups in each country. Finally, the population easily gravitated toward the existing major radio providers transitioning into television.

In the United States, the commercial networks remained dominant: NBC, CBS and ABC (spun off from NBC in the FCC's 1941 antitrust action) developed and deployed television in most major cities in the U.S. by the early 1950s. A few non-profit broadcasters were able to scrape together the funding and equipment to get on the air and staggered along at the less-desirable corners of the broadcasting frequency.

Nationalism played a role in Canada's broadcasting policy again. As Canadians explored moving ahead with television around 1950, policymakers noticed that many Canadians living near the American border were already watching U.S. television. As a result, the government declared that the CBC would take the lead on television development in Canada, and added that no private broadcaster would receive permission to broadcast until CBC television was accessible nationwide. Once this goal was achieved by 1960, several private networks began broadcasting (Armstrong, 2010). The competition between the private broadcasters and the CBC remained in rough balance. The CBC gained the initial green light to develop TV, but lost its ability to regulate private networks in 1957, when Parliament voted to create the Broadcasting Board of Governors, which regulated all broadcasters. Also, Parliament abolished the license fee, but replaced it with a sales tax on radio and television parts, which combined with direct parliamentary grants and advertising revenue to fund the CBC (Emery, 1969).

Of the three countries, only the UK experienced a change in the status quo as it introduced television. On the surface, the introduction of the advertising-funded Independent Television Network to compete with the BBC seems a radical departure from pre-existing policy. However, the change, while major, actually is not as large of a shift as it first appears. First several parliamentary commissions appointed to study the development of television throughout the 1930s and 1940s all recommended that the BBC take the lead in developing television and extended its monopoly to the new medium (British Broadcasting Corporation). Parliament approved all of the requests and the BBC took the technical lead in developing and deploying television service. By the late 1930s, it had well-subscribed experimental service running in the London area, with thousands of viewers (Briggs, 1961). In 1939, World War II intervened to halt service. However, development continued after the war and the BBC began deploying the system nationally in the late 1940s.

The Beveridge Commission of 1949 recommended maintaining the monopoly for television and awarding the BBC two television channels, though a minority report recommended privatizing TV and funding it with commercials, as well as ending the BBC's radio monopoly as well. The Labor-backed government was poised to accept the report, but lost power to the Conservatives in the 1951 election. As a result of this sudden change of government, the new majority were open to the ideas in the minority report.

Despite the change of electoral fortunes, the new Conservative cabinet was not eager to embrace commercial television. This reluctance occurred despite even Churchill, the man who advocated seizing the BBC during the 1926 strike and attempted to place the BBC under the direct supervision of the Ministry of Information in World War II, becoming Prime Minister again. The BBC's backers and popular standing again proved powerful enough to save the core of the network.

The resulting deal in 1954 broke up the BBC's monopoly in television, but granted it one of the two channels and maintained its license fee as a source of income. The agreement also kept the BBC's monopoly in radio. Finally, the regional franchisees of the new private broadcaster, the Independent Television Network, faced high levels of public service requirements and strong regulation from the Independent Broadcasting Authority. The IBA set strict limits on the type and quantity of advertisements, forbid direct sponsorships of programs, placed high standards for public affairs programming, and evaluated potential franchisees not just for their financial fitness, but also their commitment to providing television programming that struck a balance among news, education and entertainment (Crissell, 1997). If the FCC had attempted to impose any of these requirements in the free-wheeling United States, outraged network executives would have likely quickly filed lawsuits.

Although fickle election returns dented the public service broadcasting in Britain, the introduction of ITV did not undermine the BBC's central role in broadcasting. Indeed, ITV found itself subject to many similar standards that the BBC did. Thanks to the three decades of expectations and respect generated by a successful British public service monopoly, public-service expectations and norms applied across both public service and commercial British broadcasting, even as ITV did focus more on mass entertainment.

The Oasis in the Wasteland: 1960s Public Broadcasting Reform in the United States

All strong arguments need a negative case to support their point, lest a researcher be accused of the cardinal sin of selecting on the dependent variable. I have argued that the initial systems established at the dawn of the broadcasting age in the 1920s have tended to perpetuate themselves despite evolving broadcasting technologies for three reasons. First, success breeds acceptance among the public and politicians. Even reformers who might want a different system in theory recognize that the costs of attempting to overthrow the current system might outweigh the ultimate gains. Second, the existing broadcasters are often technically best able to exploit new technologies. Finally, the members of the status-quo are well placed to politically protect the system. These three reasons explain the relatively high modern ratings of the BBC as compared to the moderate ratings of the CBC and the dismal ratings of American public television.

The relative success of the BBC in the 1950s at maintaining its supremacy despite facing a hostile government counts as one case illustrating the power of the status quo. The American attempt to create a robust public broadcasting system in the 1960s is another. After a series of quiz show cheating scandals rocked American television in the late 1950s, prominent figures again began agitating for cracking down on commercial television. In 1962, new FCC chairman Newton Minnow famously decried American broadcasting as a "vast wasteland" that was creating a "nation of morons." Minnow's calls for reform accomplished little, except possibly getting the shipwrecked boat on the popular 1960s TV show *Gilligan's Island* (the S.S. Minnow) named after him by a vengeful television executive (Zarkin & Zarkin, 2006).

But if the FCC was relatively weak in the area of regulating television content, the reformers had other avenues to push for better broadcasting. Educational television received a small boost in the 1962 Educational Television Act, which provided a modest $32 million over five years to improve the technical equipment of educational stations (Gibson, 1977). When the landslide election of 1964 brought large and liberal Democratic majorities to both houses of Congress, Lyndon B. Johnson's massive reform agenda received a sudden impulse. Tucked away in the Great Society programs like Medicare, the War on Poverty and Civil Rights was the 1967 Public Broadcasting Act. The act created the Corporation for Public Broadcasting, which injected government money into the long neglected non-profit educational and other public-service radio and television stations. On one hand, money from the CPB made a great deal of difference. Starting in the late 1960s, grants helped set up robust non-profit networks in radio

(National Public Radio) and television (the Public Broadcasting Service), which greatly increased the ability of different stations to share content quickly, improving the diversity and timeliness of programming. Other CPB monies allowed individual stations improve the quality and technology of their broadcasting equipment. Finally, federal grants created a boomlet of original high-quality educational and public affairs programming. *Sesame Street* and its beloved Big Bird, icons of American public broadcasting, were created with support from the CPB.[12] (Corporation for Public Broadcasting, 1986).

But for the great improvement in programming available with the creation of the CPB, public broadcasting viewership in the United States remained minimal, as Table 3.1 demonstrates. The CPB managed to create an adequately funded refuge in the "wasteland" of American commercial broadcasting. However, without the ability or drive to aggressively regulate the content of commercial broadcasters, relatively few Americans would take advantage of public-service broadcasting or reap the benefits discussed earlier chapters.[13]

Generalizing the Case Studies

This detailed discussion of three cases illustrates the importance that initial broadcasting decisions make in the long-term ability of public broadcasting to endure and provide its benefits to broad swaths of people. But does the analysis of three countries generalize to the media

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[12] And CPB grants have helped keep the show on the air for nearly four decades (with some generous help from the letter J and the number 8, of course)

[13] One partial exception to this lack of viewership might be in children's programming. American commercial broadcasters stringently resist any "nanny-state" attempts to regulate content, however parents do serve this purpose with their children. It is possible that children's viewing habits are more strongly monitored by parents and teachers (this author happily remembers watching episodes of the *Letter People* on WVIZ, Cleveland's local PBS affiliate, during Kindergarten), which drives viewership of children's shows on public broadcasters.

systems of most developed democracies? To shed light on this question, I rearranged the countries in Table 3.1 in three groups representing systems that began as public broadcasting monopolies, mixed systems and commercially dominated systems respectively. According to Table 3.2, the average public broadcasting viewership share among the top five networks was 56 percent for monopoly systems, 30 percent for mixed systems and 0 percent for commercial-dominated systems. The shadow of the past is both long and broad indeed.

The Twilight Hours: Other Factors That Affect Public Broadcasting's Decline

The weathering generated by the onslaught of cable, satellite and other pay television providers are eroding market shares of public broadcasters with even the strongest foundations. However, merely because broadcasting systems all face similar competitive pressures does not mean that they will converge on the same model of hypercompetitive private television at the same pace. Inglehart and Welzel's (2005) approach to political culture is instructive on this point. They argue broad shifts generated by economic development change individual attitudes across all societies in similar directions. However, societies start from vastly different locations. As a result, broad tides of economic development driving nations in a similar direction may not push different countries to converge on the same homogenized culture (Inglehart & Welzel, 2005).

Broadcasting consumption patterns reflect this logic. The initial development of broadcasting institutions entrenched a variety of country-level approaches to providing broadcasting services. Since the 1970s and 1980s, cable and satellite systems have been applying pressures on the ratings of all public broadcasters – but those public broadcasters with a larger viewing base and stronger traditions will, all else being equal, retain their influence for much longer than their weaker counterparts. Thus for the foreseeable future, distinctive broadcasting systems will remain.

Institutional entrenchment plays the critical role in conserving the influence of existing strong public broadcasters. However, other influences may act to slow or speed the erosion of public broadcasting viewership within different countries. Some of these influences relate to policy making and therefore have close connections with the strength of existing institutions – like laws regarding the development of cable systems for example. Other factors are fairly static in nature – like linguistic distinctiveness. To close this chapter, I briefly speculate on the role that partisanship and static factors like market size and geographic and linguistic isolation might play in reinforcing or decimating public broadcasting's role in a national system.

Partisanship

Broadly speaking, party control of the national government has influenced the extent to which commercial television operators have been able to penetrate national broadcasting markets in which public broadcasters long held the institutional high ground. Most European countries at least partially opened their broadcasting systems to competition in the 1980s, but the extent varies considerably depending on the politicians who controlled the opening. In this context, Partisanship is a straightforward variable. Parties of the right – particularly those with a libertarian rather than a Christian-Democratic bent—tend to prefer less interference in the market and tended to promote private entrants into the broadcasting market, whereas parties of the left are at least somewhat more hospitable to government intervention in the broadcasting market, whether it be limitations on advertising, government subsidies for broadcasters, and requirements for the diversity of programming.

The effects of the alteration of left and right parties are perhaps most clearly seen in the United Kingdom, where a first-past-the-post electoral system and a fused, centralized government often leave a single party in nearly total control of the country's policymaking. I have already explored the role that a sudden partisan shift made in eliminating the BBC's broadcast monopoly in 1951, and British broadcasting policy would further oscillate following decades according to which party controlled the House of Commons. In the mid-1960s under the labor government of Harold Wilson, the BBC won the rights to control the third television channel under development, and gained a generous revenue boost to its license fee to fund its development of color television services in the 1960s (Briggs, 1961). In contrast, when a fourth television channel was added in 1982, the Conservative government under Margaret Thatcher awarded ITV the controlling rights it (Crissell, 1997).

However, the Conservative governments' largest contribution by far to the development to British broadcasting policy was the changes to the regulation of ITV and its handling of cable and satellite systems. Under Thatcher, in 1985 regulation of cable TV and the satellite feeds that gave many operators a wider variety of channels, was left to the smaller and more lassiez-faire Cable Authority instead of the more robust IBA, which evaluated ITV franchises both of financial capacity and by the quality of their programming (Madge, 1988). A further blow to the prestige of the IBA regulators came in 1989 when Rupert Murdoch's successful Sky-TV bought out the failing ITV-associated satellite provider BSB over the objections of the IBA. The Broadcasting Act of 1990, passed by John Major's Conservative government, drastically reduced public service requirements and shifted the evaluation criteria for the consortia bidding for ITV franchises from programming potential to merely handing the franchise over to the highest bidder. The act also merged the IBA and Cable Authority into a single entity whose regulatory actions mirrored the more permissive policies of the latter, rather than the tighter style of the former (Crissell, 1997).

I emphasize that the Conservatives never dismantled the core of the BBC and left the license fee intact. However, they did sharply curtail the growth of the license fee while drastically loosening ITV's regulation and neglecting to regulate satellite and pay-cable providers. The result was a system in which central institution of the BBC retains a great deal of clout, but sits in a far weaker ratings position than it would have been without the large concessions the Conservatives granted private competition.

What if Labor had been in power during the broader segment of the postwar period either when the Conservatives first decided to provide a private competitor to the BBC in the 1950s or drastically loosened cable requirements in the 1980s? Though all western European countries generally opened up their networks to some private competition in the 1980s, none introduced private competition as early as Britain did. When for-profit competition called, those countries with coalition or left-wing governments were less welcoming. The one country that took similar policy stance to the UK during the 1990s, Ireland, was dominated by a market- and business-friendly coalition that embraced "light touch" regulation (Truetzschler, 2004).

No European country introduced private competition when they extended the number of television channels from one to two. Germany set up a second television network, the ZDF, to compete with the existing ARD in the early 1960s, but both were public (Humphreys, 1994).[14] All others simply awarded the existing public broadcaster the new channel. Later, some countries sought to break up the monopoly run by one public broadcaster by simply creating a second one. Denmark took this route under a centrist four-party coalition when it ended the monopoly on its existing public broadcaster in 1988 (Mortensen, 2004). Under Christian Democratic - Liberal and CD-Labor coalitions, the Dutch retained their public monopoly system through the 1980s with minor changes, only legalizing private television in 1989 (Brants, 2004). Sweden, dominated by the Social Democrats for nearly 30 years, only legalized private cable channels in 1986 (Tomlinson, 1988). Private TV funded by advertising came by satellite in 1989. Only in 1992 did the Swedes finally allow in free-to-air private television funded by advertising (Hulten, 2004). In all cases, however, the Swedes retained considerably stricter advertising regulations and public service requirements for their systems than the British did.

Other Environmental Factors

Entrepreneurs do not value all markets equally. Legislation does not directly affect language, geography and population size that same way it can affect restrictions on advertising. Before closing, I briefly discuss the role that these three factors might play going forward.

Market size is an obvious factor in how attractive a country might be to a private television operator. Countries with large populations provide many consumers, opportunities for economies of scale, and the opportunities for larger profits that accompany those two

[14] The conflict here was not between private interests and public ones, but between the central government (which would control the ZDF) and the regional Lander governments (which controlled the ARD and made the constitutional claim that they had the sole right to set broadcasting policy).

characteristics. In contrast, small countries may lack the customer base necessary to recoup the large start-up costs often associated with providing television service. With nearly 60 million residents, the United Kingdom is clearly a much more lucrative market to broadcast to than neighboring Ireland with fewer than four million inhabitants.

Geographic isolation also can play a role in a would-be entrepreneur's economic calculus. A country that is long distances from manufacturing centers of the technical equipment needed to run a television company can create steep financial hurdles for business people interested in investing in a broadcasting system. Investors would find Ireland to be a much more manageable market than New Zealand due to the former's proximity to European industrial and commercial development.

Language is a third environmental factor that can influence the vulnerability of existing strong public broadcasting systems to competition. Countries whose inhabitants speak languages that are common throughout the world or a region make inviting targets for private broadcasters. Entrepreneurs have often seen English-speaking Canada, for example, as a logical northern extension of the U.S market. Even in the pre-CBC days of the 1920s, U.S. broadcasters NBC and CBS began signing up local stations in Toronto and (English-speaking) Montreal as affiliates to their U.S. networks. In contrast, French Canada represents a much smaller opportunity. The need to translate shows into French (or create new ones from whole cloth) reduces the profit margins. Denmark, Norway and Finland with their small, unique language groups have never been very attractive to private investors in the way that English-speaking countries are.

Conclusion

I predict that Public Broadcasting benefits citizens by providing them with political knowledge and may increase voter turnout, two necessary tools for political accountability in democratic societies. However, these effects will be small unless large swaths of the population consume public broadcasting. Although public broadcasting viewership has been declining slowly and steadily across most developed democracies, significant gaps in viewership remain. I argue that the conditions and decisions made in setting up radio broadcasting networks in the 1920s, set up a self-reinforcing pattern that cemented the early dominance of public or commercial broadcasting. Countries in which a public broadcaster managed to establish itself as the dominant player at the beginning of the radio era tend to retain much higher levels of public broadcasting consumption among the population 90 years later than mixed systems or systems in which commercial firms seized the regulatory high ground. Though the power of public broadcasters appears to be on the wane in all countries, societies that set up a strong public broadcasting system early will maintain relatively large effects in their countries for longer periods. In summary, public broadcasters do retain enough viewership in many countries to make the modern-day impact of subsidies worth examining. It is to these influences of subsidies on political knowledge and political participation I now turn.

Table 3.1: Public Broadcasting Audience Share by Country for Top 5 Networks, 1999	
Country	Public TV audience share
Austria	78
Australia	17
Belgium	41
Brazil	0
Canada	34
Denmark	80
France	43
Finland	48
Greece	8
Germany	61
Ireland	68
Italy	61
Japan	39
Mexico	0
Netherlands	57
New Zealand	71
Norway	47
Portugal	38
Spain	43
Sweden	51
Switzerland	89
United Kingdom	60
United States	0
Source: Djankov et al. 2003	

Table 3.2: Public Broadcasting Audience Share by Country for Top 5 Networks, 1999 and Initial Treatment of Public Broadcaster		
Country	Public TV audience share	Initial broadcast policy
Austria	78	Monopoly
Belgium	41	Monopoly
Denmark	80	Monopoly
France	43	Monopoly
Finland	48	Monopoly
Greece	8	Monopoly
Germany	61	Monopoly
Ireland	68	Monopoly
Italy	61	Monopoly
Netherlands	57	Monopoly
New Zealand	71	Monopoly
Norway	47	Monopoly
Portugal	38	Monopoly
Spain	43	Monopoly
Sweden	51	Monopoly
Switzerland	89	Monopoly
United Kingdom	60	Monopoly
Average Monopoly	*56*	
Australia	17	Mixed
Canada	34	Mixed
Japan	39	Mixed
Average Mixed	*30*	
Brazil	0	Commercial
Mexico	0	Commercial
United States	0	Commercial
Average Commercial	*0*	

Chapter IV

Understanding the Relationship between Public Broadcasting Subsidies and Political Knowledge

Introduction

Now that I have established that enough people still watch public broadcasting in advanced industrialized democracies that it might have widespread effects on public opinion, this chapter applies my theory of public broadcasting to a group of 14 industrialized democracies in Western Europe. Using individual-level and country-level data from the Eurobarometer in 1999 and 2006, I determine institutional differences in public broadcaster funding influence the size of the positive effect that public broadcasting consumption has on individual levels of political knowledge. I also find subsidizing broadcasting helps equalize political knowledge between different social and economic classes.

Hypotheses

My theory of public broadcasting has two testable hypotheses. Public broadcasting eases commercial pressure on broadcasters to produce entertainment. As scholars note, these differences lead to a greater volume of news shows (Brants, Netherlands, 2004). Also, numerous scholars have demonstrated that news programs in public broadcasting systems provide more information than corresponding public affairs programs do in commercialized systems (Iyengar, et al., 2010).[15] I build on this knowledge with the subsidy hypothesis, which predicts that government subsidies are the mechanism that economically allows for greater production of news and public affairs programming. It follows that the viewership of public broadcasting has a larger positive effect on political knowledge in countries that subsidize their public broadcasters than in those countries that force public broadcasters to rely entirely on advertising revenue.

The neutralization hypothesis predicts that the information-rich environment created by subsidized public broadcasters will lead to lower knowledge gaps as traditionally disadvantaged or uninterested groups increase their political knowledge. Iyengar et al. (2010) document this narrowing knowledge between citizens with differing levels of political interest in the public broadcasting-dominated system of Denmark in comparison to the market system of the United States. Here, I expand the test to 14 countries covered in the Eurobarometer survey. Additionally, I investigate the potential of subsidized public broadcasting to narrow the knowledge gaps caused by other variables that scholars have found contribute to differences in political knowledge, namely gender, socioeconomic status and education (Nadeau & Niemi, 1995).

[15] Also note Crissell's discussion of the degradation of Britain's Independent Television News when internal policies at ITV shifted the news division from a "supported" --i.e. subsidized—part of the corporation to a division that needed to show a profit. (Crissell, 1997)

Cases and Data

Western Europe makes an ideal place to test these hypotheses. Fourteen of the region's members are both in the European Union, therefore surveyed by the Eurobarometer, and have a national public broadcaster. The Eurobarometer fits especially well with this project because it finds large representative national samples for each EU country and allows analysis of both individual-level variation within each country as well as cross-national variation. While developing this project, I reviewed every survey fielded by the organization between 1970 and 2010 to check for measures that would allow me to test my hypotheses on public broadcasting consumption and political knowledge. After an initial cursory review, I catalogued potential political knowledge questions in 22 waves of the study. Following this analytical process, I determined that two studies, 52.0 (Melich, 1999) and 65.2 (Papacostas, 2006), provide workable measures of media consumption, political knowledge and other individual-level socioeconomic data needed to test the subsidy and neutralization hypotheses.

Measuring Knowledge

As any educator knows, measuring knowledge is a difficult affair. Several hurdles additionally complicate evaluating political knowledge in a comparative context. The first issue is creating questions of similar difficulty across countries. At first glance, the simplest solution might seem to ask the same question across a variety of countries. However, this strategy is problematic because the importance of the same questions varies in different countries. For a citizen of Botswana, for example, knowing the president of Botswana is a basic measure of political competence, as the figure plays a large role in what goes on in Botswanan lives. However, from the perspective of American citizens, the president of Botswana is a marginal figure with little impact. So it would be inappropriate to conclude the Botswanans knew more about politics because they could identify their president more often than Americans.

Even assuming that the questions are of similar difficulty and on comparable topics, a second difficulty is developing a consistent survey design across countries. For example, it might be inappropriate to directly compare political knowledge between the United States and Canada by comparing outcomes of the Canadian Electoral Surveys and the American National Election Studies. Though both studies meet high standards of professionalism and rigor, differences in survey design make it suspect to compare values. Differences in survey method (e.g. telephone vs. face-to-face vs. internet) and answer structure (Are answers closed or open-ended? Do interviewers push respondents to guess?) can affect response structures in ways beyond simple knowledge measurement. Researchers need to take care when they use two different national surveys to directly contrast knowledge or public opinion.

However, the Eurobarometer partially overcomes these obstacles. First, researchers specifically design the survey to measure the attitudes of its member states' citizenry toward the EU and EU policy. Therefore most of the knowledge questions investigate facts about political institutions common to all member states. For instance, one question asks respondents to identify the president of the European Commission. Since the president represents all EU members, the question should represent a similar level of difficulty for all citizens of EU countries. A second comparable knowledge measure asks respondents a question regarding the occupant of an important cabinet officer in their national government. For example, the financial minister is usually one of the two or three most important members of a cabinet, so asking respondents to identify the finance minister should yield comparable measures across countries.

The two surveys of the Eurobarometer this study uses provide different measures of political knowledge. On the downside, these differences create difficulties in directly comparing knowledge over time, making it impossible to examine temporal trends in European political knowledge. Nonetheless, the measures do allow for two separate single-shot, cross sectional tests of my hypotheses, which acts as a robustness check on my theory.

The 1999 Eurobarometer asks respondents four questions regarding their knowledge of political leaders, which scholars identify as a key dimension of political knowledge (Delli Carpini & Keeter, 1993). Two questions focus on EU-level policymakers and ask respondents to identify their own country's appointed representative on the European Commission as well as the Commission's president. Two other questions evaluate the respondents' knowledge of domestic political leaders. The first asks respondents to identify their country's finance minister and the second inquires about the identity of the foreign minister. Because these two positions are generally the most prestigious cabinet positions after the office of Prime Minister, a similar percentage of citizens would identify the occupants of these offices in different countries, all else equal.

Instead of focusing on political leaders, the 2006 version of the Eurobarometer contains items that assess respondents' knowledge of the political institutions of the European Union, another relevant dimension of political knowledge (Delli Caprini & Keeter, 1993). The survey uses two true-false questions regarding the number of EU members and whether or not the

European Parliament has direct elections. A third true-false question asks respondents if the EU spends a majority of its budget on administrative costs.

To adapt these knowledge measures to my purposes, I score correct answers as “1”, and incorrect answers and “don’t know” answers as “0”. I then group the scores on each question into an additive index of political knowledge, which is a five-point index for the 1999 data and a four-point one for the 2006 data. Higher scores indicate greater political knowledge. Since these items vary in terms of difficulty, we would not expect the answers to be highly correlated and therefore the index is closer to a Guttman scale, with those able to correctly answer the most difficult questions also able to answer less difficult ones.

Measuring Media Systems

The critical variable is the public broadcasting funding source for the 14 countries in my data set. Ideally, I would be able to use a continuous measure to delineate among various levels of subsidy. For example, I would code a country whose public broadcaster derives 57 percent of its funding from government subsidies as .57. However, information is not readily available for more than half of the 14 countries I examine here during the years I use in my analysis. Therefore, I dichotomously operationalize this country-level variable. Countries that fund their entire public broadcasting system through advertising score “0”, while countries that subsidize their public broadcasters score “1”. Here, I use a generalized definition of public subsidies; systems funded at least in part by a dedicated license fee, sales taxes or general government revenues get classified as subsidized systems. Neither Spain nor Portugal subsidized their systems during the time period of this study (Portugal provided subsidies until 1990, while Spain began primarily funding its public broadcaster, RTVE, with public funds in 2011). The other 12 countries provided their public broadcasters with a considerable amount of government funding, ranging from about 45 percent of revenues for the Irish and Italian broadcasters (RTE and RAI respectively,) to about 95 percent of the revenues for the British and Swedish public broadcasters (the BBC and SVT). I call this variable "subsidy."

I predict that this measure of government subsidy should have a positive relationship with political knowledge. Subsidies give public-service broadcasters financial space to provide superior public affairs programming without having to please advertisers with ratings. As a result, countries that subsidize their public broadcaster should see elevated knowledge scores among its general public. Individual viewership of public broadcasting also however plays a key role in enhancing the effect of subsidies; the best public affairs programming will have minimal effects on a person who does not watch it. Therefore, part of the subsidy hypothesis predicts that viewers of public broadcasting in countries with subsidies will display the largest knowledge gains.

Measuring Media Use

Both surveys contain reasonably detailed measures of media consumption, including television use. However, I predict that a difference in question wording between the two surveys will create different results between the two studies. The 2006 study requests that respondents to identify the specific television channels they spend some time watching five days a week or more. This method is merely a measure of *exposure*, which is only slightly correlated with political knowledge. The 1999 survey asks a more specific version, inquiring which TV channels respondents watch regularly for *news* programs. Since news is one of the major providers of political information on the air waves and the 1999 question is asking which channels respondents watch to encounter news, this item measures *attention*, which is more strongly correlated with knowledge.[16] As a result, the 1999 question is a much better measure to determine any connections between public broadcasting and political knowledge.

At first glance, this difference seems to be a setback to my aims, because it only leaves me with one dataset with an appropriate measure to test. However, the difference in question wording actually can be used to the study's advantage. My theory implies that that quality and the quantity public affairs programming (of which news is a major example) drive political knowledge gains among the population. Subsidies to public broadcasters play a critical role because they allow those broadcasters to provide more and better news content. Therefore only questions that directly tap attention and exposure to specifically public affairs programming will be able to sort out that differences in these types of programs across public and commercial broadcasters have on the public's political knowledge, given a level of subsidization. From this logic, I can predict that the 1999 wording of the question will generate the predicted interactive effects, while the 2006 version will generate null results or greatly muted effects.

Other than this fundamental difference in the question, the measurements in 1999 and 2006 are conveniently identical: They provide respondents with a list of television channels generally available to them in their viewing area and ask which ones they watch five days or more per week. When combined with a list of public and private television channels among the 14 countries tested in this study, these questions serve as a useful foundation to divide citizens

[16] See Chaffee and Schleuder (1986) for an extensive discussion of attention vs. exposure as the proper measure of TV news consumption (and as a predictor of political knowledge).

who watch primarily public television from those who watch private stations Using a multistep process, I developed a dichotomous measure indicating those who view some public television and those who report watching none at all. First, I identified each television outlet, roughly a dozen in each of the 14 countries, as commercial or public service. From there, I coded each respondent's television consumption. Any respondent who reported watching a public television station regularly scored "1" and those who report only watching private television stations as a 0. People who reported watching no television were recoded as missing values. Individuals who reported watching public television channels that were not from their home country were coded as "1" only if the public television channel was broadcast in the same language. For example, an Irish viewer of the BBC and an Austrian respondent who watched the German ARD or ZDF would be coded as a "1," while a Swedish viewer of the BBC who did not watch any Swedish-language public television networks would be coded as a "0." Because the vast majority of viewers of foreign public broadcasting also reported watching their domestic public broadcasters, this rule affects the coding on only several dozen of the roughly 25,000 relevant survey respondents across the two surveys. I call this measure, shown in Table 4.1, "public viewership." Note, however that the public viewership variable does not provide a particularly fine-grained measure of exposure: the surveys do not ask detailed questions regarding time spent watching each channel; nor do they track television viewing through diaries or direct measurement like a ratings agency does.

Table 4.1 shows the results of this coding scheme and merits several observations. First, in each Western European country except Greece, a majority of respondents reports watching public television. These results do not represent the "share" of public broadcasting – the percentage of households watching television tuned in to public broadcasting at any given instant. Instead, the measure shows the "reach" – a statistic that denotes how many households actually tune into public broadcasting at least occasionally during a given period of time, usually measured as a week or month. Second, despite the clear majority who views at least some public broadcasting, each country has enough variation to conduct meaningful statistical tests. Finally, at least 90 percent of the respondents in each country report watching at least some television, indicating that meaningful sample sizes remain to test the relationship between public viewership and political knowledge for each country.

Socioeconomic and Demographic Variables

To test the neutralization hypothesis that increased public broadcasting subsidies decrease the influence of socioeconomic variables on political knowledge, I incorporate measures for several individual-level variables known to correlate with political knowledge in past studies: political interest, gender, education and socioeconomic status.

Much political science work claims a strong relationship between interest in politics and political knowledge. Zaller (n.d) suggests the theoretical importance that individual interest plays in political knowledge when he claims that most Americans do not pay much attention to politics and rely on the news media to report only the most important political events. Other than that, they wish to be left alone. Implicitly, then, this logic assumes that a minority of interested citizens will be more interested in politics and thereby have more knowledge of political events. This assumption also works in Lupia's framework regarding cognitive shortcuts: Instead of reading hundreds of pages of commentary to inform themselves on issues, voters base their own decisions from the stances that major organized interest groups take (Lupia, 1994). Presumably, however, more interested citizens will do more research and have more political knowledge. It also seems that a measure of political interest captures at least some of the positive effect that partisan affiliation has on basic levels of political knowledge first found by Converse (e.g. 1964) and since replicated by many others.

I use a single question from the Euro barometer inquiring how often respondents discuss politics with friends to measure levels of political interest. The item contains three response choices: never, occasionally or frequently, which I code 0, 1 and 2 respectively. Therefore the political discussion variable should have a positive relationship with political knowledge. This measure matches one part of the two-item index that Iyengar and his colleagues use in their 2010 study on public broadcasting.

Gender also correlates with political knowledge. Scholars have long known that men on average have higher levels of political knowledge than women, even when controlling for income and education (Nadeau & Niemi, 1995). Mondak and Anderson (2004) argue that a large proportion of this difference is an artifact of women being more likely to say they do not know an answer to a question than men, who often guess – and thus have a chance of correctly answering the question. Since most of the work on political knowledge has tended to treat "don't know" answers as the equivalent of incorrect answers, women may be unfairly penalized on their political knowledge scores. Mondak (2001) has argued that the remedy for this situation is to encourage all respondents to take their best guess to cut down on the number of respondents answering "don't know." However, the Eurobarometer freely accepts "don't know" as an answer option. Since I count "don't know" as an incorrect answer, controlling for gender helps neutralize respondents' differing propensities to guess. In this analysis, gender is a dichotomous variable with males assigned a score of “1” and females scored as a “0.” Due to this coding, gender should have a strong positive relationship with political knowledge.

Education is also important as a control variable. Highly educated individuals tend to have a larger storehouse of facts on which to draw and superior training in making connections between those facts, which is the foundation of political knowledge (Luskin, 1987). In each of the two Eurobarometer surveys, respondents note the age at which they left school, which corresponds to the educational attainment of most individuals, regardless of the differing degree programs and systems offered in across different European countries. The result is an nine-point ascending scale of education with people who had left school prior to age 14 scoring a 1 and those who finished their schooling at age 22 or above scoring an 8. I code individuals between the ages of 15 and 22 reporting that they are still a student as having left school at that age, to reflect their rough current state of education. This education measure should correlate positively with political knowledge.

Socioeconomic status correlates with political knowledge (Nadeau & Niemi, 1995). Measuring socioeconomic status among the residents of European countries contains potential pratfalls due to differing purchasing powers within various countries. The 1999 and 2006 studies use two separate ways to get at the concept. In 1999, the Eurobarometer asked respondents to identify their monthly household incomes on a 12-point scale adjusted to the local currency and economic standards, with higher points on the scale associated with higher income brackets. The 2006 survey takes a different approach and asks individuals if they own a list of eight common consumer items like televisions, DVD players, cars and Internet service. I construct a six-point additive SES status index from these measures with higher score indicating greater levels of goods ownership.[17] I dropped two questions that asked if respondents owned a television or a home that had been paid off. Since more than 98 percent of respondents answered that they owned a TV, the item adds little useful variation to the overall measure.[18] The paid-off home ownership item is merely a subset of another item that asks if respondents owned their own home that they had paid off or on which they had a mortgage. Both the 2006 goods measure of wealth and the 1999 income measure should positively correlate with political knowledge. I call the 1999 variable "income" and the 2006 variable "wealth," in tables because of their distinctive measures. In general discussion however, I will use the terms "income," "wealth," "income/wealth" or "socioeconomic status" interchangeably to analyze the effects of these variables.

Finally, I control for country-level sources of variation in my data. First, the European Union has a two-tier organization. Most EU countries take part in the common currency of the Euro, while others have chosen to retain control over their monetary policy. Countries in the Eurozone may have citizens who pay closer attention to the affairs of the EU, due to the stronger role the EU plays in setting economic policy in Euro-area. Therefore, I created a measure scoring countries who were members of the monetary union as "1" and those who were not as "0." In 1999, four countries of the 14 in this study – Greece, the United Kingdom, Sweden and Denmark had not joined the Eurozone. By 2006, Greece had joined. All else being

[17] Cronbach's alpha for the 6-item index is .8064, which is reliable by standard levels.
[18] This observation is doubly true as the individuals who don't own a television presumably are much more likely not to watch any television, meaning that they won't show up in this analysis, which after all, focuses on individuals who watch at least some television.

equal, there should be a positive relationship between a country's membership in the EU monetary union and a citizen's knowledge of EU affairs.

Because they all deal with identifying political leaders, the knowledge questions for the 1999 study also introduce another source of possible variation. The longer an individual has held an office, the more likely the population would be able to identify her. To control for this potential variation, I deploy several measures of a person's tenure in office. For the questions asking respondents to identify their country's foreign minister and finance minister, I simply create a country-level variable measuring the number of years that the minister in question had been in office at the time, which range from one to seven years. These two measures should vary positively with political knowledge.

I use a slightly different approach to control for the time an EU commissioner has served. Due to their fixed terms in office, it seemed most appropriate to assign the residents of each country a score based on the number of terms that their commissioner had served. Because respondents only had to identify one commissioner, countries with two commissioners in 1999 (the United Kingdom, Germany, France, Italy and Spain) received a score representing the longest-serving commissioner. Scores ranged from 1 to 4 across this variable, and should vary positively with citizen levels of political knowledge. A summary of the distributional statistics for relevant variables appears in table 4.2.

Conditional Effects

My analysis keys on several key relationships. First, subsidies should positively correlate with knowledge. Second, the subsidy hypothesis additionally predicts that subsidizing public broadcasters strengthens the relationship between watching public broadcasting and political knowledge. To measure this relationship, I use an interactive term that multiplies the subsidy and “Public Viewership” variables together. I predict that this term will have a positive sign, which would indicate that subsidies for public broadcasters increase public affairs knowledge among those who watch public television.

Finally, the neutralization hypothesis predicts that subsidizing public broadcasters will decrease the effects of individual-level variables on political knowledge. These variables include political interest, as previously tested (Iyengar, et al., 2010), but also a broader array of socioeconomic variables, namely education, income and gender. I include an interactive term for the product of subsidy and each of these variables in each regression equation. The sign on each of these four interactive terms should be negative, which would mean that that subsidizing public broadcasters would decrease the political knowledge gap between rich and poor, educated and uneducated, interested and uninterested, and men and women.

To test my hypotheses, I regress the political knowledge index on the independent variables. I estimate three regressions for both the 1999 and 2006 data, the results of which appear in Table 3.3. The first column for each year in the table (1999a and 2006a) represent the simplest test of the subsidy hypothesis without any interactive terms. The second column for each year (1999a and 2006b) shows the results of the interactive test between subsidies and public broadcaster viewership. The final column (1999a and 2006b) represents the results of the tests for the neutralization hypothesis, showing interactions between subsidies on one hand and income, education, gender and political interest on the other. Because the dependent variable of knowledge has a limited number of ordered categories, I employ ordinal probit analysis. Because each individual in my analysis is nested within a country, I use cluster-adjusted standard errors to account for within-country error correlations.

Results

Table 4.3 shows the results of the analysis, while figures 4.1 and 4.2 graphically show the estimated effects of each independent variable on political knowledge in countries with unsubsidized and subsidized public broadcasting systems. Overall, Table 4.3 shows reasonably broad support both the subsidy and the neutralization hypothesis, in the 1999 table. Column A shows mixed support for the subsidy hypothesis. The public funding variable is essentially zero in the 2006 study. The magnitude has a positive coefficient of reasonably large magnitude for the 1999 study, though it is not significant at standard levels. One reason for this lack of significances is that subsidy is a country-level variable that has very few degrees of freedom when combined in a regression with four other country-level variables in a study with only 14 countries. Although using 14 countries is an improvement over previous comparisons of public broadcasting and political knowledge, which generally only use two to four countries, leverage remains limited. The individual-level variables of political interest, education, income and gender all have coefficients that are statistically significant at the .05 levels, which match existing research showing that more interested, better-educated, wealthier and male respondents possess higher levels of political knowledge, all else being equal.

The “b” columns in Table 4.3 show stronger support for the subsidy hypothesis. The interaction of public broadcasting subsidies and public viewership produces a positive coefficient in 1999. The interaction term is statistically distinct from zero at the .05 level in 1999. For the 2006 study, as I predict, the interactive term between subsidy and viewership does not reach significance – remember that the 2006 data should show weak effects because the specification of the 2006 measures of public broadcasting measures reported viewership of all programming, not merely public affairs programming.[19] This difference in the magnitude and significance levels of the interactive terms provides evidence for the proposition that attention public affairs programming in subsidized public broadcasting systems– not merely watching a public broadcaster – drives knowledge.

Finally, the "c" columns of Table 4.3 show the interactive terms between individual education, gender, income and political interest, and the subsidy variable. Across the two years, seven of the eight interaction terms have negative signs, which support the neutralization hypothesis. The one positive interaction – between gender and subsidies in the 1999 test, contains magnitudes that are so small that they are inconsequential. The interaction term between subsidies and income/wealth is statistically significant in both the 1999 regression (at the .05 level) and in the 2006 results (at the .10 level). The negatively signed interaction term between political interest and subsidies is significant in the 2006 data, but not in the 1999 data. Despite mixed results regarding statistical significance, however, the overall pattern of negative effects across all eight measures supports the neutralization hypothesis.

Both coefficient directions and statistical tests generally support my hypotheses, but reading the coefficients alone does not indicate whether or not the effect sizes are substantively large. Additionally the conditional nature of interaction terms and probit regression mean that effect sizes are not static at different values of each variable. I illuminate

[19] Also notice how the 2006 regression predicts roughly half the variation of the data in comparison to the 1999 regress. (Pseudo R2 of .043 to .088 respectively).

this issue by displaying effects sizes in figures 4.1 and 4.2. To calculate these effects, I followed a two-step process. Using statistical analysis software, I first calculated the estimated probability that a person will answer a given number of political questions correctly at each level of a given independent variable, the subsidy variable and the affected interaction terms while holding all other variables at their medians. For example, I calculated the estimated probabilities of a respondent answering 0, 1, 2, 3, or 4 of the questions correctly of the knowledge index (for 1999's knowledge index) that makes up my dependent variable for all possible value combinations the public television consumption and subsidy. In this case, I would have the estimated probabilities of the same hypothetical person if he watched public television in a country with subsidies, if he watched public television in a country without subsidies, if he only watched commercial television in a system with public subsidies or if he only watched commercial television without subsidies for public-service broadcasters. I repeated these calculations for all the other relevant interactions regarding gender, income, education and political interest.

These estimates were more intuitive than regression coefficients. However, because each situation produced five data points each the predicted probability of answering a given number of questions correctly, the data remained limited in their easy interpretability. To further collapse the output into a simple figure, I took the second step and used the estimated probabilities to determine the expected average number of questions answered correctly on the knowledge index. For instance, if a hypothetical respondent of interest had respective probabilities of correctly answering zero, one, two, three or four questions on the knowledge index of .2, .2, .2, .2 or .2, then simple multiplication yields an expected number of right answers of 2.[20]

These calculations yield the bar graph in Figure 4.1. Each paired set of bars represents the effect size of a given independent variable. The darker bar on the left of each pair represents the effect of the variable in countries that do not subsidize their public broadcaster, while lighter bars on the right represent the variable's effect in countries with subsidized public broadcasting. In the 1999 data the effect of watching public broadcasting on knowledge more than triples when moving from an unsubsidized to a subsidized system, increasing from .140 to .497. The effect size of .497 is roughly 12 percent of the total range on the dependent variable, meaning that respondents increased the number of correct answers by one half a question (on a 0-4 scale) in subsidized systems – a large effect that strongly supports the subsidy hypothesis.[21] For 2006, the effect size is much smaller, with respondents who watch public television in countries with subsidies only recording an additional .119 correct answers compared to their counterparts in unsubsidized countries. This difference represents slightly more than a 4 percent improvement on 2006's three-question knowledge index. Again, however, this muted improvement supports my theory's implication that superior news and public affairs programs on subsidized public broadcasters drive knowledge gains, not merely watching public broadcasting.

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[20] Mathematically:
.2(0)+.2(1)+.2(2)+.2(3)+ .2(4)
= 0+.2+.4+.6+.8
= 2

[21] Although the comparison isn't strictly relevant, an analogy would be having the average score on a test increasing from 75 percent to 87 percent --- or a C to a B+ at most institutions.

In contrast, the effect sizes decrease for the other predictors of knowledge between unsubsidized and subsidized political broadcasting systems in both 1999 and 2006. In 1999, some changes are quite small, with the effects of gender and interest hardly changing at all. However, moving to a subsidized political broadcasting system depresses the effect of education on political knowledge by a more noticeable 19.9 percent. Finally, the effect of income drastically falls by a whopping 73.0 percent. In 2006, the decreases on the magnitude are 15.7 percent for education, 24.7 percent for gender, 36.3 percent for political interest and 48.2 percent for income, adding additional support for the neutralization hypothesis.

Another way to contrast the impact of subsidies is to compare the relative sizes of the effects of public broadcasting viewership with the other independent variables across systems. For the 1999 analysis, in countries with unsubsidized broadcasting systems watching public broadcasting has by far the smallest effect on knowledge of the five variables, increasing the average number of correct answers on the knowledge scale by a mere .139 questions, while the next smallest coefficient, gender, leads to a .389-question increase in the predicted number of correct answers. In subsidized systems, however, watching public broadcasting is the variable with the third-largest effect, recording a larger effect size (.497) than income (.351) or gender (.372), while nearly matching the size of education (.626).[22]

To summarize, the results shown in figures 4.1 and 4.2 strongly support the subsidy hypothesis, which states that subsidizing public broadcasters has a positive effect on political knowledge among people who watch public broadcasting. The neutralization hypothesis also

[22] When I compare "effect sizes" I am not referring to the effect size per unit, but rather the total effect generated by moving across the entire range of the variable from lowest to highest value.

has high levels of support, as the data analysis shows that subsidizing public broadcasting dampens the effects of class and interest. These results are statistically significant or at least suggestive, and substantively meaningful.

One objection to these conclusions is that Spain and Portugal share a long cultural history and that these results might simply be an artifact of some unspecified “Iberian” effect. To address this concern I re-analyze a smaller sample of countries for which I have more detailed financial data from 1999, subdividing them into three levels of subsidy. Spain and Portugal provide no direct subsidies, and are classified as the “low” group. Among countries that subsidize their public broadcasters, Italy and Ireland rely relatively extensively on advertising funding, and provide between 40 and 50 percent of the budgets of their public broadcasters through subsidies. I classify these two as the “moderate” subsidy group. Finally, Britain, Sweden and Denmark provide nearly the entire budget of their broadcasters through subsidies. None of the three sell any advertising on their public networks, with the exception of Sweden’s STV allowing limited sponsorship of sporting events. I classify these three countries as the “high” subsidy group.

I estimated separate regressions using probit analysis for each of the three groups from the 1999 Eurobarometer data, maintaining the individual-level controls from the first set of regression equations. Table 4.4 shows the coefficients for each group, while figure 4.3 shows the effect sizes of the each of the variables compared across all three regressions. For the “Iberian effect” hypothesis to hold, the moderate subsidy group and the high subsidy group should show similar effect sizes for the effect of watching public broadcasting on knowledge. That result might indicate that subsidies were not driving the knowledge increase, and would add credence to the idea that something unusual about Spain and Portugal are driving the effect.

This is clearly not the case. The low subsidy group's coefficient on the public broadcasting variable is .099 (and statistically insignificant at the .05 level), while the middle group's effect is .369 and the high subsidy group's is .788. This nearly linear increase is exactly what the subsidy hypothesis predicts and suggests that something more going on that any innate differences that Spain and Portugal have from the rest of Europe. The picture is similar for the neutralization hypothesis: Both the political discussion and income variables show the largest effects in the low-subsidy countries and the smallest effect sizes in the high-subsidy countries, with the effect sizes for the middle-subsidy countries being in between. The picture is less clear for the education and gender variables, but even they at least do not show a pattern supporting the idea that the Iberian countries are different than the rest of Europe.

Figure 4.3 shows the estimated effects of each variable on political knowledge under the revised tripartite schema. To make similar comparisons across each set of countries, I estimated the marginal effect of each variable while holding all other variables constant. To ensure comparability across all groups, I used variable values that corresponded with the median of the median of the three groups. For example, the respective median education levels in the low, medium- and high-subsidy groups were "1", "4" and "6". I calculated the effects sizes shown in Figure 4.3 with the value of each group's education level set at "4."

The magnitudes of estimated effects on each variable strongly support the subsidy hypothesis and offer mixed support for the neutralization hypothesis. Watching public broadcasting in a low-subsidy country has small effects; a respondent who reported getting news from a public broadcaster answered an estimated .04 more political knowledge questions correctly. This effect size jumps to .14 questions for the medium-subsidy group and .30 for the high-subsidy group. In contrast, the estimates show decreasing effects for income and political discussion respectively. Effect sizes for income drop from .25 in the high-subsidy group to .14 in the medium-subsidy group and .05 in the high-subsidy group – almost the precise mirror image of the effect sizes shown for the public broadcasting variable. For political discussion, an increase from the lowest levels to interest to the highest leads to a .4-question boost in the number of right answers to the political knowledge questions for respondents in the low-subsidy group, which drops to an estimated increase of .35 for the medium-subsidy group and .30 for the high subsidy group. The pictures for education and gender are more muddled, but the mixed results matches the general pattern I found when I used the dichotomous definition of public broadcasting earlier in this chapter.

Finally, the magnitudes of the effects seem to match the earlier analysis. The effect of public broadcasting moves from the smallest of all the variables in the low-subsidy group, to a modest effect that roughly matches income in the medium group, to an effect that outstrips gender and income and is roughly on par with political interest and education among the high-subsidy countries. All of this analysis adds up to more robust support for the subsidy and neutralization hypotheses, while eliminating the hypothesis that something different about Spain and Portugal is causing the observed data patterns.

Summary and Conclusion

The evidence of this chapter supports two major hypothesis of this project. Using measuring the attributes of the residents of 14 European countries from two surveys nearly a decade apart, I explored the ideas that government aid to public broadcasters increases public knowledge and that the information-rich environment evens out the differences in knowledge produced by gender, education, income, wealth and political interest. The subsidized knowledge hypothesis holds up well; individuals who watch news programming on public television in countries that subsidize their public broadcasters has significantly higher levels of political knowledge than both citizens who watch commercial television and those who watch unsubsidized public broadcasters. Differences in question wording for questions measuring public broadcasting consumption between 1999 and 2006 survey data suggest that better public affairs programming on public broadcasting outlets in countries with public broadcasting subsidies drives the knowledge gains.

The neutralization hypothesis faces mixed, though generally predicted results. Subsidizing public broadcasters appears to reduce – to varying extents – the effects that social, economic and demographic variables have on political knowledge. Since knowledge, as I have extensively argued throughout this work, is one key to the ability of voters to hold their leaders democratically accountable, having the government subsidize public broadcasters helps level the political playing field ever so slightly between historically disadvantaged groups (the poor, the uneducated and women) and traditionally dominant groups (the wealthy, highly educated and men). However, several notes of caution are warranted here. The effects of subsidies on reducing gender disparities are so small to be virtually nothing and any effects they have on education and interest levels do not reach statistical significance at standard levels – though it is suggestive that all coefficients point in the predicted direction. Only for wealth and income and possibly political interest does it appear that has a substantial leveling effect. Finally, further analysis eliminates the possibility that these results are merely the result of an Iberian effect.

Finally, though these results are highly suggestive, I remind readers that they leave out one important piece of the puzzle: viewership. Unwatched public broadcasters, regardless of subsidy, impart no political knowledge, as the sad state of American political knowledge attests. It is to this issue of how public broadcasters can maintain viewership in a 500-channel universe while still providing information that I turn in my final chapters. For now, however, I move to another more immediate question. Subsidizing public broadcasting seems to make citizens smarter about political affairs, but does it make them more likely to participate?

Table 4.1: Distribution of Television Consumption in Western Europe					
Country	Year	Public	Private	Missing	Total N.
Austria	1999	89.2	3.1	7.7	1,018
	2006	93.0	5.0	2.0	1,017
Belgium	1999	67.0	25.2	7.8	1,044
	2006	81.3	15.6	3.1	1,020
Denmark	1999	96.9	.6	2.5	1,001
	2006	88.1	9.1	2.8	1,008
Finland	1999	59.5	27.9	12.6	1,015
	2006	78.3	16.6	5.1	1,006
France	1999	58.5	32.5	9.0	1,003
	2006	66.5	28.0	5.5	1,020
Germany (west)	1999	79.8	10.4	9.8	1,018
	2006	74.4	20.6	5.0	1,016
Greece	1999	24.3	74.2	1.5	1,010
	2006	49.9	46.9	3.2	1,000
Ireland	1999	91.3	1.2	7.5	1,001
	2006	90.1	7.8	2.1	1,003
Italy	1999	83.2	15.6	1.2	1,010
	2006	77.5	17.5	5.0	1,000
Netherlands	1999	84.5	12.3	2.8	1,010
	2006	84.0	10.4	5.6	1,009
Portugal	1999	56.1	37.9	6.0	1,001
	2006	47.1	50.5	2.4	1,002
Spain	1999	58.9	30.6	10.5	1,000
	2006	64.2	30.8	5.0	1,005
Sweden	1999	74.1	21.9	4.0	1,000
	2006	86.2	10.2	3.0	1,017
Great Britain	1999	63.6	29.3	7.09	1,002
	2006	88.2	7.7	4.1	1,002

Table 4.2: Summary Statistics for Ordinal- and Ratio-Level Variables						
Year	variable	Range	Mean	median	Std. deviation	N
1999	Political Knowledge	0-4	2.02	2	1.46	14,093
	Education	1-9	4.68	5	2.88	14,129
	Income	1-12	6.60	6	3.39	9,689
	Political Interest	0-2	.77	1	.62	14,053
	Commissioner Term	1-4	1.86	2	.99	14,133
	Foreign Minister experience	1-7	3.35	3	1.68	14,133
	Finance minister experience	1-7	3.49	3	1.72	14,133
2006	Knowledge	0-3	1.43	1	.95	14,124
	Education	0-9	4.95	5	.98	13,392
	Goods	0-6	3.62	4	1.91	14,124
	Political Interest	0-2	.86	1	.65	14,084

Table 4.3: Relationship between Knowledge and Public Broadcasting Subsidies							
Model		1999a	1999b	1999c	2006a	2006b	2006c
Broadcasting Variables	Viewership	**.342**** (.098)	.109 (.103)	**.360**** (.091)	.062 (.075)	-.047 (.058)	.064 (073)
	Subsidies	.156 (.256)	-.041 (.325)	**.617**** (.189)	-.057 (.152)	-.144 (.211)	.202 (.243)
	Viewership X Subsidies		**.284*** (.144)			.139 (.111)	
SES and political interest	Income/Wealth	**.034**** (.011)	**.034**** (.012)	**.097**** (.026)	**.041**** (.011)	**.041**** (.012)	**.066**** (.014)
	Education	**.068**** (.011)	**.068**** (.012)	**.079**** (.010)	**.068**** (.008)	**.068**** (.008)	**.078**** (.017)
	Gender	**.330**** (.022)	**.331**** (.022)	**.319**** (.040)	**.331**** (.043)	.331** (.043)	**.426**** (.069)
	Political Interest	**.473**** (.034)	**.471**** (.033)	**.477**** (.064)	**.224**** (.023	**.223**** (.022)	**.311**** (.022)
	Income/Wealth X Subsidies			**-.072**** (.028)			**-.032^** (.018)
	Education X Subsidies			-.015 (.017)			-.012 (.020)
	Gender X Subsidies			.012 (.047)			-.109 (.086)
	Political Interest X Subsidies			-.009 (.073)			**-.103**** (.034)
Control variables	Eurozone membership	.010 (.200)	.005 (.200)	.022 (.193)	.156 (.121)	.159 (.121)	.149 (.124)
	Commissioner Experience	-.131 (.132)	-.135 (.131)	-.158 (.133)			
	Foreign Min. Experience	.045 (.045)	.041 (.046)	.041 (.043)			
	Finance Min. Experience	.031 (.03)	.031 (.029)	.032 (.031)			
Regression statistics	Cutpoint 1	.530 (.4234)	.346 (.468)	.878 (.316)	.179 (.207)	-.044 (.216)	.213 (.238)
	Cutpoint 2	1.008 (.441)	.824 (.483)	1.359 (.334)	1.045 (.200)	.984 (.207)	1.242 (.237)
	Cutpoint 3	1.693 (.430)	1.509 (.474)	2.047 (.324)	2.128 (.194)	.2067 .204)	2.325 (.232)
	Cutpoint 4	2.374 (.433)	2.191 (.479)	2.729 (.332)			
	Pseudo R2	.0852	.0857	.0872	.0422	.0424	.0430
	Total N	9,040	9,040	9,040	13,361	13,361	13,361
Significance levels: ^=.1 *=.05, **=.01							

Table 4.4: Effects of Public Broadcasting Subsidies on Political Knowledge (Robustness Check)			
Variable	Low-subsidy group (Portugal and Spain)	Medium Subsidy Group (Italy and Ireland)	High Subsidy Group (Britain, Sweden, Denmark)
Watching public broadcasting	.099 (.068)	**.369**** (.124)	**.788**** (.067)
Education	**.085**** (.013)	**.077**** (.0139)	**.100**** (.008)
Income	**.057**** (.010)	**.030*** (.013)	.011 (.007)
Gender	**.342**** (.066)	**.446**** (.073)	**.334**** (.048)
Political Discussion	**.527**** (.056)	**.460**** (.059)	**.390**** (.040)
Cutpoint 1	.652 (.085)	.578 (.155)	.804 (.086)
Cutpoint 2	1.052 (.087)	1.179 (.157)	1.195 (.0869)
Cutpoint 3	1.726 (.094)	1.726 (.160)	1.775 (.090)
Cutpoint 4	2.507 (.104)	2.300 (.164)	2.452 (.094)
Pseudo R2	.0895	.0687	.0862
N	1143	919	2160
Significance levels: ^=.1 *=.05, **=.01			

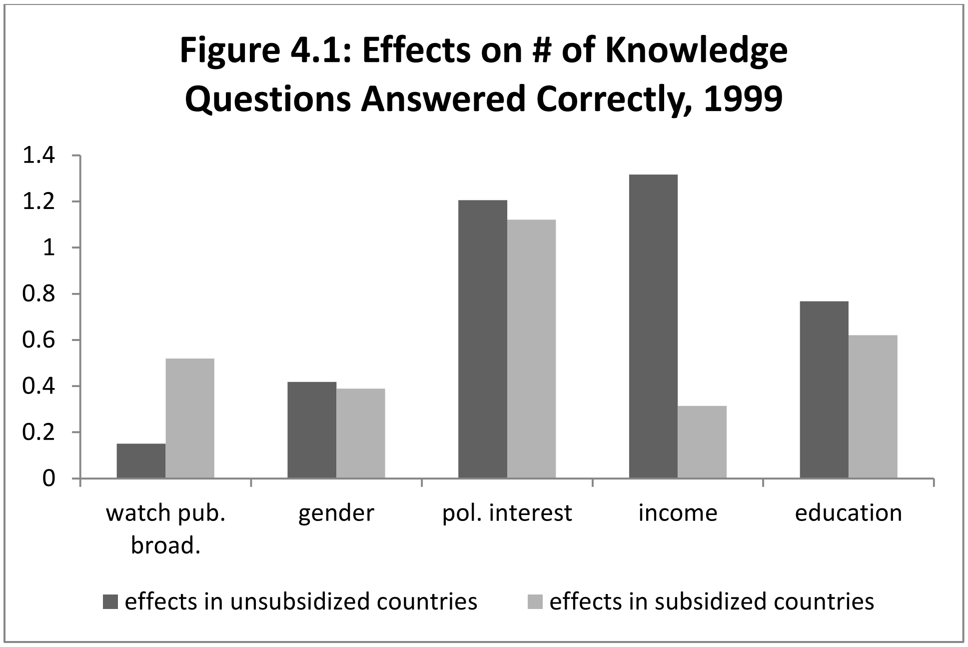
Figure 4.1: Effects on # of Knowledge Questions Answered Correctly, 1999
1.4
1.2
1
0.8
0.6
0.4
0.2
0
watch pub. broad.
gender
pol. interest
income
education
effects in unsubsidized countries
effects in subsidized countries

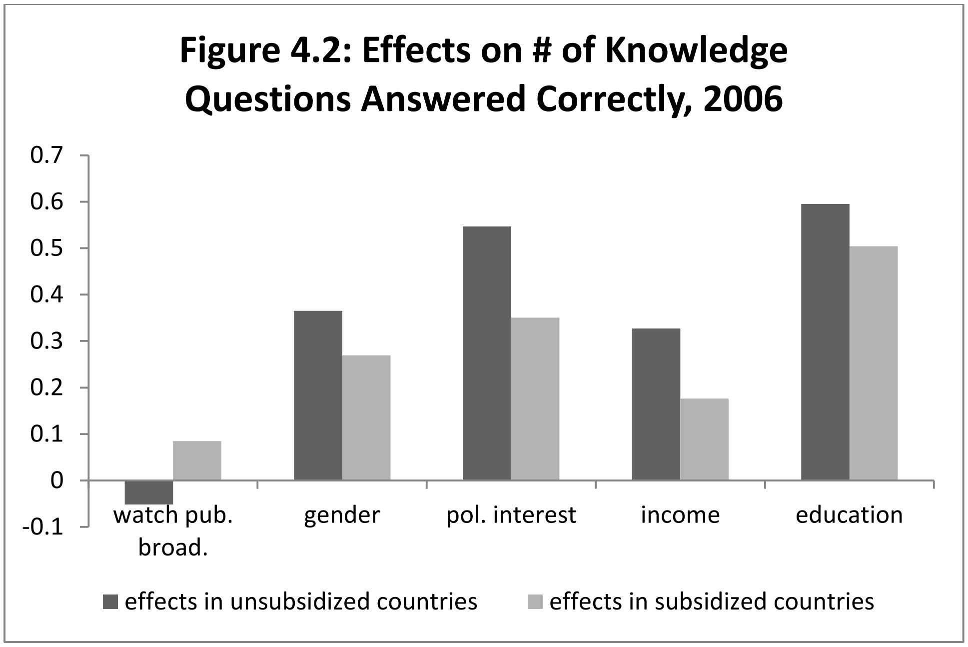
Figure 4.2: Effects on # of Knowledge Questions Answered Correctly, 2006
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
watch pub. broad.
gender
pol. interest
income
education
effects in unsubsidized countries
effects in subsidized countries

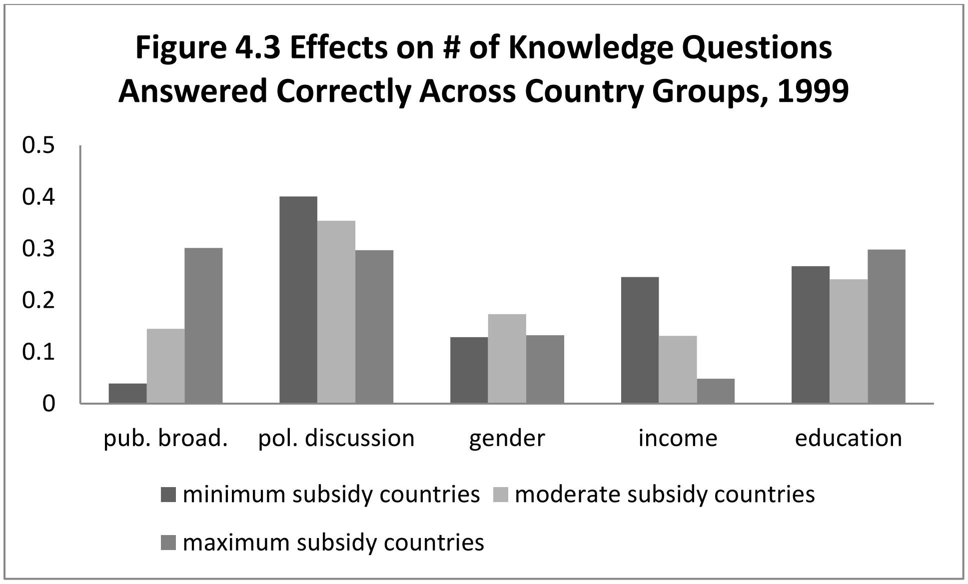
Figure 4.3 Effects on # of Knowledge Questions Answered Correctly Across Country Groups, 1999
0.5
0.4
0.3
0.2
0.1
0
pub. broad.
pol. discussion
gender
income
education
minimum subsidy countries
moderate subsidy countries
maximum subsidy countries

Chapter V

Evaluating the Role the Public Broadcasting Plays in Voter Turnout

Introduction

The analysis of the last chapter provides considerable evidence for a positive link between public broadcasting and political knowledge. Public broadcasting's effects also reduces the knowledge discrepancies between privileged citizens and those of more modest socioeconomic backgrounds. That knowledge allows citizens to hold leaders accountable provides an important justification for continuing government subsidies for public broadcasters. Knowledge, however, is only one part of the accountability equation. Knowledge may be power, but if newly enlightened citizens merely sit on the sidelines on Election Day, that power remains unrealized. In this chapter, I examine the impacts of different institutional structures of media systems on political participation, specifically voter turnout. First, I directly extend the logic of the last chapter and theorize that subsidized public broadcasters increase turnout among their viewers indirectly because they boost public knowledge, especially among heavy users, and greater knowledge in turn leads to greater participation. Second, I predict that broadcasting systems with greater levels of partisan bias also lead to higher levels of participation. To develop these predictions, I first discuss the links between political knowledge and political participation. Next I develop my second hypothesis by reviewing the connection between broadcasting partisan bias and turnout, and how partisanship embeds itself in some political broadcasters. Finally I test my two hypotheses again using data from the 1999 Eurobarometer.

Knowledge and Participation

It is not self-evident that knowledge increases political participation. Using survey data and experimental evidence Mutz (2006) finds that political conversations with non-liked minded acquaintances increase political knowledge, particularly the ability to understand the rationale behind the positions of political opponents. However, these knowledgeable citizens are less likely to vote than those who only communicate with like-minded associates. Mutz's analysis suggests that "hearing the other side" dampens participation primarily by creating social anxiety – to avoid creating conflict with their acquaintances, individuals shrink from political participation. In contrast, individuals who only communicate with like-minded acquaintances are less likely to have knowledge about the positions of political opponents. Instead the validation reinforces their political beliefs, encouraging them to vote.

Her findings are compelling, but Mutz's subjects function in the narrow context of interpersonal deliberation. My study in contrast focuses on the impact of information gathered through media consumption. With the exception of the few of us who routinely lunch with news anchors, mass media provide information in an impersonal fashion, which might eliminate the major factor –social anxiety—that dampens political participation among Mutz's better-informed subjects.

Many scholars find a positive correlation between political knowledge and political participation e.g. (Larcinese, 2007) (Luskin, 2003) (Delli Carpini & Keeter, 1996) (Smith, 1989) (Neuman W. R., 1986). However, the causal mechanisms underlying the relationship are sometimes murky – some scholars theorize that political interest triggers interest and information seeking, while others argue that Based on Larcinese's (2007) recent work that uses an instrumental variables approach to strongly suggest that knowledge precedes participation, here I use the idea that political knowledge is a resource that citizens use to make decisions. As with any activity, political participation comes with a variety of costs. Individuals must invest time to attend an event or show up to the polls, but it also requires time and energy to learn about issues and office holders in order to make the right choice once you get there. Having a store of existing political knowledge lowers the cost of participation (Larcinese, 2007) (Neuman W. R., 1986) (Downs, 1957). Obviously, knowing the identity of candidates and their policy positions leaves citizens with lower information costs. Furthermore, an existing base of information also aids individuals in assimilating new information about politics useful for making decisions (Luskin, 1987).

Because it helps cut the costs of participation, knowledge theoretically fits nicely within widely accepted theories in which resources and skills boost participation (Wolfinger & Rosenstone, 1980). Knowledge also is consistent with The Civic Voluntarism model extensions of the resource model (Verba, Schlozman, & Brady, 1995), because knowledge gives individuals the ability to both make basic decisions and become easily engaged with politics. All else equal, more knowledgeable citizens are also more rational voters because they can detect differences between parties and candidates on the issues. Bartels (1996) re-estimates the vote choices of individuals in five presidential elections if they had the highest levels of knowledge in their demographic groups, and finds that the results of two would have shifted. Althaus (1998) finds some sharp shifts in public opinion on specific policy issues when performing similar analysis.

Importantly, Althaus also observes that more knowledgeable groups tend to express coherent collective opinions, indicating that increased knowledge clarifies opinions, which leads to easier vote choices.

Finally, political knowledge also can interact with emotions to produce greater turnout. Neuman (1986) suggests that political knowledge moderates emotional appeals made in advertising and other direct mobilization efforts by political parties and interest organizations. He suggests political knowledge functions as a "catalyst" that allows individuals to perceive and process information at a higher level. Individuals with higher levels of political sophistication are less likely to respond to political stimuli in a "non-political" manner (e.g. cynically tuning out).

Under Neuman's mechanism, negative political information stirs up negative emotions in part by providing information that scares or angers voters about political organizations or their policy ideas (Geer, 2006). It is difficult to get angry over party plans to cut the minimum wage if citizens know about neither the party nor its plans. The converse is also true about becoming enthusiastic about a party's plan to raise the minimum wage. Experimental and survey work shows that voter resources interact with certain emotions to increase political participation. (Valentino, Brader, Groenendyk, Gregorowitz, & Hutchings, 2011).

Given this connection between the knowledge and participation, I can extend the logic of the last chapter to derive two clear hypotheses linking public broadcasting and increased political participation.

H1: Countries that provide government subsidies to their public broadcaster should see higher levels of political participation among their populations.

H2: People who watch public broadcasting should have higher levels of participation, but only if they live in countries that subsidize public broadcasting.

The Role of Media in Political Partisanship and Participation

Of course, knowledge isn't the only way to overcome barriers to participation. In their discussion on knowledge and participation Delli Carpini and Keeter (1996), recognize that the political environment plays a large role in determining political participation, noting that civic engagement in the electorate increases motivation to pay the costs of participation. Mobilization efforts by parties and interest groups (Rosenstone & Hansen, 2003) also play large roles in increasing participation. In particular, parties play a large role in lowering participation barriers by providing information to voters through cues as well as mobilization efforts (Aldrich, 1995) (Campbell, Converse, Miller, & Stokes, 1960). Hearing messages from parties that reinforce pre-existing beliefs is another way partisans are encouraged by their parties. As Mutz (2006, p. 3) notes in her discussion of the influence of conversation between citizens with similar political predispositions: "Like-minded people can spur each other on to collective action and promote the kind of passion and enthusiasm that are central to motivating political participation."

I predict varying levels of partisan bias across media systems also influence political participation. Hallin and Mancini (2004) describe two variables connected to the levels of partisanship in media systems – political parallelism and professionalism. Professionalism reflects the journalists' sense of who they work for and parallelism encapsulates how closely connected to the political system a media system is. For consistency and ease of interpretation, I refer to Hallin and Mancini's concept of political parallelism as partisan bias.

In systems where journalists have high levels of professionalism, they tend to view themselves as actors independent from political parties. A professional journalist sees an obligation (at least in theory) to try to respectfully represent the arguments of multiple points of view on a story they are reporting. Any analysis they conduct is supposed to be objective, and their personal opinion does not intrude upon their reporting. Opinion tends to be segregated (again in theory) to editorial pages, which are kept strictly separate from news. In contrast, in some countries, primarily in Southern Europe, journalism is traditionally not a highly professional field. Instead of being independent from political viewpoints, journalists are instruments of political actors and tend to work directly for political parties. As a result, they view themselves as operatives working for a political organization, instead of objective observers of a political conflict.

The second variable Hallin and Mancini discuss is political parallelism (partisan bias). Instead of thinking about where individual journalists stand vis-à-vis the political system, partisan bias focuses more broadly on journalism outlets. Societies with low bias tend to have independent broadcasters heavily insulated from the state. Objective journalists compile, analyze and report on various political factions in a society. In contrast, countries with high political bias in the media feature political factions having direct control over portions of the broadcasting outlets, which they then deploy to directly present their own views. Both systems allow for representation of a spectrum of viewpoints, but systems high in biased outlets allow readers and viewers unblemished access to their partisan point of view on the air waves and encourage news media to directly mobilize political participation from co-partisans. In contrast, countries with low levels of political parallelism would present a contrapuntal world of conflicting viewpoints and should only present information– not direct attempts to rile up and mobilize like-minded partisans.

These two variables load into Hallin and Mancini's generalized classifications of media systems into "liberal" systems that have high professionalism and low parallelism (bias), "partisan polarized systems" that have low levels of professionalism and high levels of partisan bias and "democratic corporatist" systems that which are somewhere between the two and to have high levels of professionalism and medium levels of bias –particularly in broadcasting. Combining Hallin and Mancini's work on partisanship within media systems with decades of literature on partisan influence on political participation leads to a straightforward hypothesis on the role that media partisanship will play on expected political participation.

H3: Media systems embedded with greater levels of partisan bias will lead to higher levels of political participation.

Data and Variables

Political Participation

Here, the dependent variable is political participation, and the 1999 Eurobarometer provides two useful measures regarding their participation in EU politics. The first item asks individuals if they had voted in the 1999 election for the EU parliament. The other question inquires about their voting intention in the 2004 EU Parliament elections. Voting is only one form of political participation – people could also attend rallies, campaign for candidates and give money to parties or campaigns among other forms of participation. However, voting is arguably the single most central act of democratic citizenship and is routinely used as a measure of participation across numerous surveys and scholarly studies. That the

Eurobarometer has two measures of voting helps provide for greater reliability for the resulting compound variable as well.

I code each of the voting participation items as a binary variable, in which a “1” indicates that the respondent either reported voting or reported intending to vote, and a “0” indicates that a respondent reported not voting or not intending to vote. I excluded respondents who reported being ineligible to vote from my analysis. The two measures regarding EU elections have a Chronbach’s Alpha measure of .68.[23]

Independent Variables

In order to test H1 and H2, I deploy the indicators used in Chapter 3 – whether or not a respondent watches public broadcasting or private broadcasting and whether the country subsidizes its public broadcaster as I did in the previous chapter. If the arguments that political knowledge leads to political participation hold, then I would expect both an independent effect from the subsidy variable on participation (H1) in a simple non-interactive equation. Additionally, I would expect to see an interactive relationship between the public broadcasting variables and voter turnout in a regression estimate that interacts viewership and subsidy (H2). That is, reporting watching public broadcasting should lead to elevated turnout, but only in countries that subsidize their public broadcaster.

To test H3, I use Hallin and Mancini’s systems coding as a proxy for the level of partisan bias in the media system. “Liberal” (low partisan) countries in Hallin and Mancini’s classification

[23] I eliminated a measure asking respondents what party they wanted to vote for in their country’s next election because it did not correlate tightly enough with the EU election participation measures to meet any reasonable reliability threshold.

are coded “0” because of their low partisan influence and general “objective” approach to the news that represents all partisan viewpoints. Democratic Corporatist countries with their moderate partisan involvement in managing public broadcasters and programming yet professionals that regard themselves as highly professional are coded as “1.” Countries that have high levels of political parallelism and instrumentalism according to Hallin and Mancini are highly partisan and coded as “2.” In accordance with H2, I expect increasing levels of political parallelism in national public broadcasters to lead to increased turnout, so this variable should have a positive relationship with political participation. I show these classifications in Table 5.1.

Control variables

I use the same control variables of education, income, gender and political interest as I did in the last chapter and predict similar positive relationships to those that I previously have found. Additionally, I control for the variable of mandatory voting laws, which can have an impact on an individual’s decision of whether or not to vote (Powell, 1986). Although the European Union elections do not currently have any compulsory voting laws in place, both Greece and Belgium had such laws in place for national elections in 1999 (Malkopoulou, 2009). I account for these two countries with a variable called “mandatory voting law.”

Methods

The dependent variable is a tripartite ordinal index measuring respondents’ participation in EU elections. To test my hypothesis, I use ordinal probit, which extends the logic of the traditional probit model and is appropriate with dependent variables with few ordinal outcomes. Because some of my variables are country-level variables and others are individual-level measures, the potential exists for the individual error terms to be correlated across countries. To correct for this phenomenon, I use cluster-robust standard errors, clustering by country.

Results

Table 5.2 shows results. The column 1999a demonstrates the test for H1 and column 1999b shows results for H2. The support for my hypotheses is mixed. In line with H3, partisan bias in the media does seem to increase voter turnout, as the coefficient on the media partisanship variable is positive and significant at the .10 level in the basic model and at the .01 level in the interactive model. There is little support for H1, as the coefficient on the national subsidies variable is effectively zero. H2 is supported, as the interactive variable between subsidies and public broadcasting is positive and significant at the .05 level, which indicates those who watch subsidized public broadcasters are more likely to vote.

I show the estimated effects of the interaction between public broadcasting viewership and public broadcasting subsidies in Figure 5.1; while I show the effects of media partisan bias in Figure 5.2. Because all the variables are conditional due to the nature of estimating ordered probit equations, to calculate the marginal effect of the variables of interest I hold all other variables at their medians. The y-axis on both figures represents the predicted probability that a respondent would report voting in the last EU parliamentary election in 1999 and state that they would vote in the next EU election in 2004.

Figure 5.1 shows that the interactive effect of watching public broadcasting and having a government-subsidized broadcaster on predicted voter turnout is noticeable. In countries that do not subsidize their public broadcaster, the predicted gap in participating in both elections between those who report getting their news from commercial TV is about 8 percentage points. In countries that subsidize their public broadcasters, the turnout gap doubles to 16 percentage points.

The relationship between turnout and partisan bias shown in Figure 5.2 is profound. Holding all other variables at their medians produces a predicted probability of turning out in both EU elections of 41.4 percent. At moderate levels of political parallelism, the turnout probability increases to 53.8 percent and high levels of political parallelism produces a turnout probability of 65.7 percent. The total change in predicted probability across all values of the political parallelism variable is a whopping 24.3 percentage points, which is both statistically distinct from zero at the .10 level[24] and substantively quite large. This finding supports H3.

Taken in combination these findings show a mixed picture. The institutional structure of media systems do seem to influence voting turnout, but only in a limited way. The interactive evidence presented in model 1999b is consistent with the idea that subsidized public broadcasters provide more information, which turns into higher levels of knowledge, which in turn moderately increases participation. However, the lack of a significant coefficient for subsidy in the non-interactive model shown in column 1999a casts doubt on the mechanism. In any case, the largest effect on turnout tested here comes through media systems that incorporate higher levels political parallelism. These effects are both statistically distinct and substantively meaningful.

Although increased knowledge may reduce the cost of voting under some circumstances, it lacks partisanship's overall stimulus. Knowledge does have the power to

[24] The 95 percent confidence interval around the turnout figures for the low-partisan bias countries ranges from 28 percent to 55 percent, while the interval for the high-partisan bias countries ranges from 53 percent to 78 percent.

clarify positions, but it does not incorporate the emotional appeals that a partisan presentation can provide. If a voter making minimum wage knows that the Labour party wants to raise the minimum wage, that voter may be more likely actually to support Labour and be motivated to go vote for Labour. However, news media often lack the targeted focus on issues that a given set of voters might find important. Partisans (and partisan-based media) specifically seek out those voters and provide them with highly targeted information (e.g. “Vote Labour – they want to raise your wages.”) Second, it’s true that information and knowledge can have an emotional impact (“We haven’t raised the minimum wage in 20 years? That’s an outrage!”) However, partisans attempt to incite targeted emotions with their presentation of facts and deployment of emotional cues and rhetoric – and research shows links between emotional processes and rational thought that connect with political action (Valentino, Brader, Groenendyk, Gregorowitz, & Hutchings, 2011). In a system with high political bias in the media, a commentator might get visibly angry that the minimum wage hasn’t been raised in 20 years and exhort her audience to vote Labour to fix the stain on the country’s honor. Contrast that scene with a professional anchor reporting that the minimum wage hasn’t been raised in 20 years.

Finally, remember that the though the effects of subsidized public broadcasting on turnout appear modest, research suggests its effects on knowledge discussed in the previous chapter still play a role in participation. Because knowledgeable voters behave differently than ignorant ones, people who watch subsidized public broadcasting in a country with a partisan media system are more likely not only to vote, but to vote in a way that better reflects their true interests.

Summary and Conclusion

I theorize that political knowledge imparted through watching subsidized public broadcasting positively influences turnout through decreasing the costs of voting, while a partisan media environment will have a more direct mobilizing effect on the electorate. Results show that subsidized public broadcasters have a small positive effect on their viewers' turnout. However, high levels of political partisanship in media systems (both commercial and public) drive much higher levels of turnout.

Although these results derive from analysis of Western Europe, patterns in the United States also support both these hypotheses. Although American public broadcasting receives subsidies through the Corporation for Public Broadcasting, commercial broadcasters have dominated the media broadcasting system since the late 1920s. Additionally, the American media system subscribes to high levels of professionalism and low levels of partisan bias, with the exception of several recent examples in the cable news universe, which still constitute a small minority of viewership. Both of these facts would predict lower voter turnout according to my theorizing, and American voter turnout generally lags behind its European peer nations.

As always, these results are incomplete. One notable lacuna is that I use a limited form of participation by incorporating only measures of voting. Future research should examine how variation in media institutions influences broader forms of participation. These forms might include simple expressive matters like signing a petition or displaying party materials, or more committed forms of participation like actively campaigning for a candidate, donating money or running for office. However, this project does lay out a new step in a new way of analyzing the influence of media on turn out by examining the institutional characteristics of media systems on individual-level participation decisions. Given the limits of this analysis in both measurement and the small number of cases, the results are still suggestive and certainly worthy of further investigation.

Table 5.1: Classification of Countries by Partisan Bias in Their TV Broadcasting Media Sector	
Liberal	Britain, Ireland
Democratic Corporatist	Austria, Belgium, Denmark, Finland, Germany, Netherlands, Sweden
Polarized pluralist	Greece, Italy, Portugal, Spain, France

Table 5.2 Relationship between Voter Turnout and Public Broadcasting Subsidies			
Model		1999a	1999b
Broadcasting	Viewership	**.369**** (.006)	.208** (.009)
	Subsidies	-.076 .171	-.201 (.175)
	Viewership X Subsidies		**.199**** (.063)
Politicization	Parallelism of Media System	**.310^** (.161)	**.312*** (.159)
SES variables	Income	**.033**** (.007)	**.033**** (.007)
	Education	**.041**** (.013)	**.041**** (.013)
	Gender	**.074**** (.028)	**.075**** (.028)
Country level	Existence of Compulsory Voting Laws	**.858**** (.119)	**.872**** (.116)
Regression Statistics	Cutpoint 1	.267 (.322)	.171 (.317)
	Cutpoint 2	.920 (.328)	.825 (.323)
	Pseudo R2	.0503	.0506
	N	8772	8772
Significance levels: ^=.1 *=.05, **=.01			

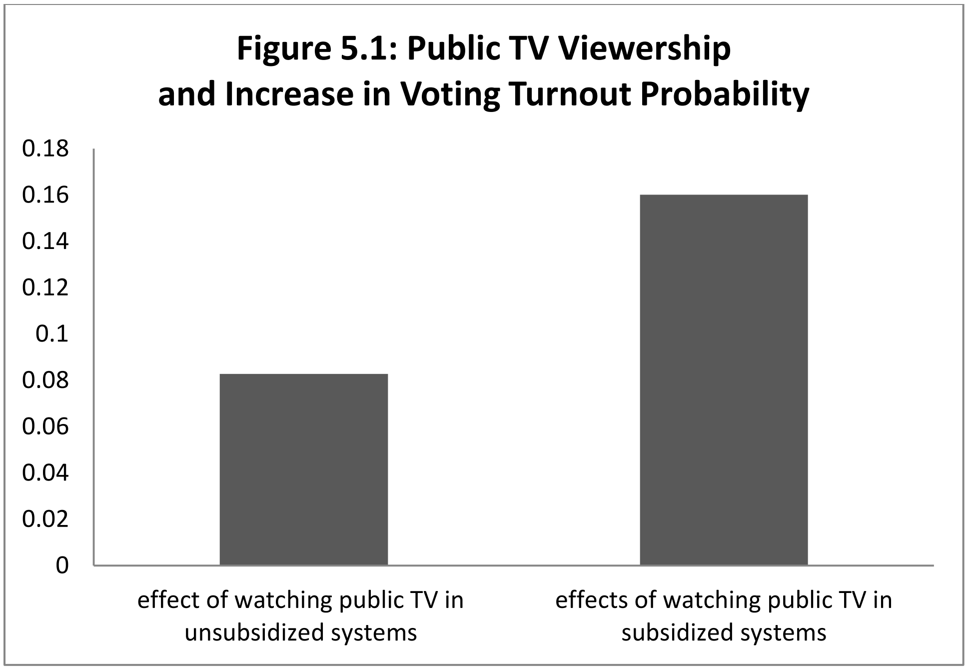
Figure 5.1: Public TV Viewership
and Increase in Voting Turnout Probability
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
effect of watching public TV in unsubsidized systems
effects of watching public TV in subsidized systems

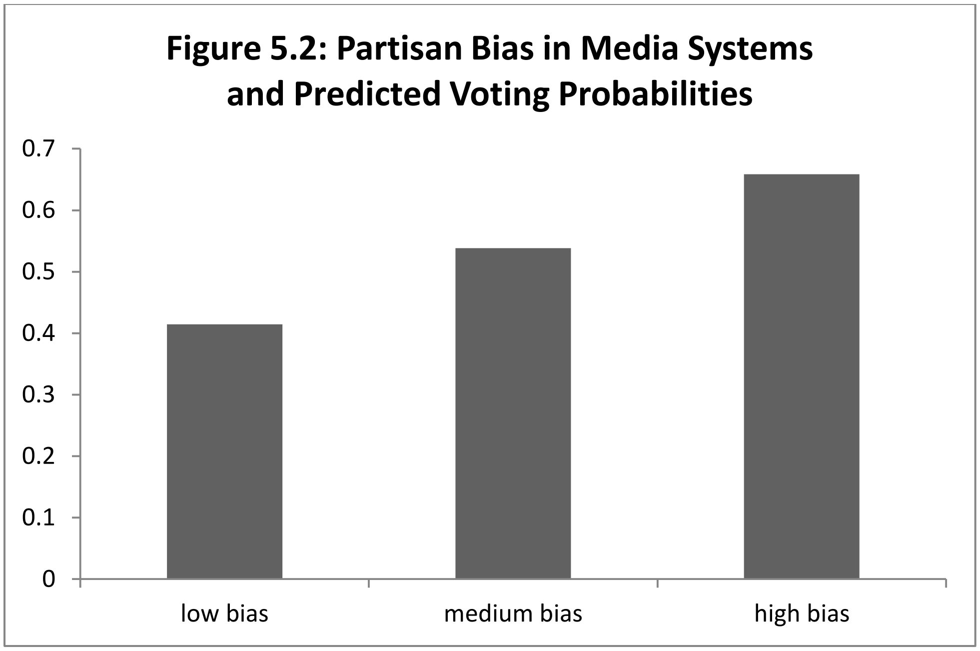
Figure 5.2: Partisan Bias in Media Systems
and Predicted Voting Probabilities
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
low bias
medium bias
high bias

Chapter VI

The Way Forward: Reimagining the Role of the Public Broadcasting in the Modern Age

Introduction

In the *Social Origins of Dictatorship and Democracy*, Barrington Moore (1993 [1966]) outlined a path for societies to move from landed aristocracies into industrialized democracies. However, he noted that the path was reliant on unique historical conditions. As the Industrial Revolution advanced, the unique alignment of social forces needed to develop democracy shifted and the door to democratization closed, though some established democracies were able to become self-sustaining. I argue the establishment of a powerful public broadcaster is as historically contingent as the creation of democracies in Moore's historical analysis. Reformers wanting to create dominant, widely watched public broadcasters in countries which those broadcasters do not already exist do have one clear path to success: invent a time machine, travel back to the early 1920s, rewrite legislation governing broadcasting and stack broadcasting regulatory boards. Without time travel, options are extremely limited. The historical path to creating a widely viewed public broadcaster has become overgrown with the brush of a thriving 500-channel media market. The way is shut – unless something new and unforeseen comes along, again.

More depressingly from the reformers' perspective, the era of influence of the public broadcaster is drawing slowly but inevitably to a close even in countries where public broadcasters have traditionally been dominant and retain significant market share. Public broadcasters have provided long and generally distinguished services to the populations of industrialized democracies, in some cases for nearly a century. But their influence is waning. The last three decades has seen the steady erosion of market share of public broadcasters as the number of media outlets has exploded. As late as the 1970s or even 1980s, many households in Western Europe could only access five or six television channels. Today those same households can access 100 times as many. Even in places where public broadcasters have strong institutional support and nimble management, viewing shares continue to decline and eventually, we will be looking at a world in which public broadcasting's role may be similar its situation in the United States: a niche provider of information and educational television to a small subset of the population. From the perspective of political accountability, the implications from this world are not pleasant because widespread consumption of public broadcasting brings large benefits to a democratic society.

Virtuous effects? Reviewing the Individual-Level Effects of Public Broadcasting

Before examining the implications of this future world, it makes sense to review the benefits that subsidized public service broadcasters provide for democracies. At the most basic level, this dissertation addresses the questions of what specifically makes public broadcasters different from their commercial counterparts, explores the ramifications of those differences on individual-level political variables, then evaluates the potential influence that public broadcasters have in differing broadcasting environments. It answers Mitt Romney's question about the worth of spending public money to subsidize non-profit broadcasters affirmatively: subsidized public broadcasters do provide benefits to the population by increasing political knowledge, though we need better data to evaluate their effects on political participation.

The logic underpinning the idea that public broadcasters are different is simple and relies on a very straightforward examination of the incentives structures created by subsidies. Commercial broadcasters exist to make money for their shareholders, while public broadcasters have broad mandates to provide information to their audiences as well as entertain them. But the funding base of broadcasters is what allows them to achieve these goals. Commercial broadcasters usually rely solely on advertising or subscription fees for revenue. The total revenue from these types of fees is reflected either directly or indirectly from audience share. Because viewers prefer entertainment to education, commercial broadcasters provide entertainment at the expense of information to maximize audience share and the return for investors. Public Broadcasters may have different goals than their commercial counterparts, but face similar financial constraints if they rely on the same advertising-based revenue model that private outlets do. If public broadcasters need to rely solely on maximizing audience share to succeed, then they will have to offer a similar diet of entertainment and softer news that commercial stations do.

However, government subsidies through parliamentary appropriations or a dedicated license fee give many public broadcasters the ability to fulfill their goals without having to worry about advertising revenues. As a result, outlets like the BBC can focus on the part of their mandate to inform their audiences instead of being forced to merely entertain them. The outcome of these incentive structures shows up in the individual political knowledge levels of countries across space and time. In the industrialized countries of Western Europe, residents who report watching the news on public television channels have considerably higher levels of knowledge of public office holders and political institutions than their counterparts who watch commercial outlets. This relationship holds when controlling for standard socioeconomic and demographic variables. Most notably, the positive association between watching public TV and political knowledge holds even when controlling for political interest, suggesting that watching public television helps people know more about politics, and not merely that more politically interested people (with more knowledge) watch public television. Most importantly, these knowledge gains provided by public broadcasting help equalize the gaps in knowledge caused by differing socioeconomic status, gender and interest. This feature of public broadcasting consumption serves to ease the problems of asymmetric information.

Finally, the positive effects of watching public television *only hold in countries that subsidize their public broadcasters*. The evidence also suggests that a higher subsidy-to-advertising ratio increases the positive effects of watching public broadcasting as well. For example, the knowledge gains of watching public broadcasting in countries that fund their public broadcaster entirely through public funds, like Great Britain or Sweden, are considerably higher than they are in Ireland or Italy, two countries whose public broadcasters are funded roughly half by advertising and half by a license fee.

Public broadcasting might increase political participation, though higher quality and more comprehensive data is necessary more research is necessary to sort out any relationship between the two. Despite increases in knowledge that it produces, the interaction between watching public broadcasting and the government subsidizing public broadcasting is statistically indistinct. However, the results do point to a substantive increase in the difference of voting turnout. Future studies working with more comprehensive measures of turnout, other forms of political participation, and more statistical power, may bring the effect of public broadcasting on participation into clearer focus. However, the partisan bias of the broadcasters – which represents the level of partisanship exhibited by the various programs broadcast – has a clear positive effect on mobilizing citizens. These results support Mutz's logic (2006) in her studies of social networks and political participation in America.

Generally, conclusions contain both academic-oriented notes to improve and extend future research as well as practical suggestions to develop and implement beneficial changes on public policy implied by research findings. I turn to these issues in the next two sections. First, I review several shortcomings of the data this project uses and suggest improvements that will allow for clearer tests of these ideas in the future. Second, I suggest additional adjustments to improve measurement and sharpen the theoretical tests. Finally, I then turn to the policy-making area to discuss potential reforms. These reforms both discuss both changes to help slow the decline of public broadcasters, and novel ways to transplant the benefits of public broadcasting into increasingly fragmented, commercialized broadcasting systems.

Reconsidering and Extending the Work

This work has cleared new theoretical ground and advanced empirical tests from previous work. However, there is still a long way to go. First, the number of cases I test here is relatively low – 14 western European countries. That itself is an extension over the case studies or simple two or three-country comparison that have been conducted in the past. However, a sample of 14 countries is quite low to effectively conduct quantitative analysis for country-level variables. Extending the data sets across space to other advanced democracies would allow for considerably more leverage to isolate the results of public broadcasting subsidies. Additionally, increasing the number of observation years for each country by incorporating either time-series cross sectional studies or panel students would both increase observations and help track the changes in subsidy effects over years or even decades. A data set of 30 OECD countries with five years of observational data apiece would allow for 150 data points and drastically increase leverage for country-level variables.

Measurement issues have also dampened my analysis. One large issue is my measure of exposure to public affairs broadcasting. As I show, there is a difference between asking individuals whether or not they *watch* a public television station on one hand, and whether or not they get their *news* from a public television station on the other. The latter question actually isolates the effect that I am seeking, while the former does not. However, the dichotomous measure is still quite crude. There would be an advantage to using measures tracking the amount of daily time spent watching public affairs and news programming or the number of days per week that an individual watches the news on public broadcasters. Ideally these measures would be tracked through a ratings service directly recording television usage instead of one-time self-reports on surveys, but this would be both time intensive and quite expensive.

Second, I want more fine-grained measures of subsidies. The thrust of my analysis rests on a dichotomous measure comparing two countries without public broadcasting subsidies to 12 countries with subsidies. A confirmatory analysis tracks seven countries: two with no subsidies, two with moderate levels of subsidies, and three with high levels of subsidies. Ideally

I would measure subsidy would be a continuous variable, tracking the precise share of each public broadcaster's budget dedicated to subsidies. Combined with more cases, a more nuanced subsidy variable might yield a clearer picture of the cross-national effects of subsidies, as well as the time lag between changes in subsidy levels changing programming and coverage levels.

My dependent variables, knowledge and participation could also use expansion and refinement. The baseline knowledge measures I use are standard measures of political knowledge and reasonably effective. However, it would be helpful to be able to use the same measures of political knowledge across multiple surveys so as to directly compare knowledge differences over time. Future research should also take into account more policy-specific knowledge, as these more finely grained measures of advanced knowledge more accurately predict attitudes toward politicians and beliefs about policy than simple "civics" knowledge of knowing about political parties, office holders and institutions (Gilens, 2001) (Jerit & Barabas, 2006). Finally, the participation measures I use are particularly crude – self reports of voting intent in two elections. I would want to broaden these measures to a full range of political activity from joining a party, to campaigning, contributing money (where allowed) and even running for office – in both national and European Union elections.

Finally, it would be useful to broaden this analysis outside of democratic countries to gauge differing effects of subsidies in democratic and non-democratic countries. A project along those lines would more thoroughly consider the line between state broadcasters and public broadcasters. Research using a set of non-democratic cases would also shed light on interesting new developments in broadcasting, as when Qatar disbanded its information ministry and set up the relatively independent Al-Jazeera network with a large one-time government grant.

Understanding the Implications of Public Broadcasting's Decline

These individual effects provide the foundation for better political accountability. Publically funding public broadcasters can make a large positive difference in the individual-level political knowledge levels of people who watch public broadcasting. The question that remains however is how often such positive impacts can increase the knowledge base of society at large. Public broadcasting doesn't mean much if the only people watching are handfuls of tote-bag wielding NPR devotees and their Sesame Street-watching toddlers. This conclusion returns us to the question I raised at the beginning of this chapter: With declining viewer shares of public broadcasters in an increasingly competitive age, what are the implications of a media mall in which public broadcasting only occupies a small, specialized boutique shop – as PBS and NPR do in the United States?

The answer appears to be summed up in an old cliché: you can lead a horse to water, but you can't make it drink. Prior's work (2005) in the United States illustrates the point that citizens with more options can opt out of watching public affairs programming. Using U.S. data gathered by Pew, he demonstrates notes as access to cable and internet providers increases, people who prefer watching entertainment demonstrate less political knowledge and are less likely to turn out to vote. The implication of the study is that by flooding the field with entertainment options, gaps in knowledge and participation widen, which erases the leveling impact that subsidized public broadcasting has. Worse, if only highly educated, wealthy, politically interested people watch public broadcasting and gain its benefits, then public broadcasting might actually *exacerbate* knowledge and participation gaps among the broader population instead of leveling them. The steadily declining shares of public broadcasting in other countries in the face of the onslaught of cable and commercial operators hints that Prior's findings are not merely limited to the American public.

The passage of time will only enhance the potential of this problem. Viewing habits form at young ages and tend to persist over time. This fact means that the audiences of people who watch the news in general, and public broadcasting specifically tend to be made up of older individuals, while younger generations more eagerly embrace the diversity of the thousand-channel universe (Wattenberg, 2007). Age also correlates with public broadcasting viewership in each of the samples I use in this work.

Against these depressing possibilities, what are public broadcasting proponents and lovers of democratic accountability to do? Short of my facetious suggestion to build a time machine, there are several possibilities. First, a necessary (though far from sufficient) measure is to preserve and increase access of the population to public broadcasters. If no one can receive a public broadcaster, then the additional information it provides can't do any good for political accountability. Most countries' public broadcasters are in reasonably good condition on this front. Almost all of them have near-universal coverage in their countries. Even in the United States, the steady stream of government funding since the early 1960s has helped NPR and PBS get access to the technical equipment and know-how necessary to reach most of the American population, including improving signal quality, program sharing in the 1960s, developing a satellite connection program in the 1970s and later transitioning to digital broadcasting and reception (Corporation for Public Broadcasting, 1986). Keeping up with newer delivery methods on the Internet is also critical to maintain access to people who are turning online to get their news in greater numbers.

Finally, there are legal parts to access. Free-to-air broadcasting is has been used by fewer and fewer consumers since the massive spread of cable and satellite systems in the 1970s and 1980s. As a result, must-carry laws should make cable and satellite providers include public television as part of their basic packages for it to be a readily available option so citizens could at least theoretically consume public broadcasting if they wish.

Second, reformers must defend government subsidies from political assault. My analysis shows that subsidies are the critical feature of public broadcasting. Governmental support from either a license fee or direct parliamentary appropriations removes the direct strain of maximizing audience share to attract advertisers. Removing the profit motive allows public-service broadcasters to focus on public affairs information that might improve the democratic competence of the general population. In chapter 4, I noted that Portugal's government voted to remove its license fee in the mid-1980s. As a result, Portugal's public broadcaster has reduced the quality of public affairs coverage and viewership has no positive effect on political knowledge. In contrast, Spain's Socialist government enacted legislation in 2009 that abandoned the use of advertising to fund the country's public broadcaster RTVE. Instead, the legislation taxes the revenues of free-to-air television (0.3 percent), cable providers (1.5 percent) and "electronic communications providers" (0.9 percent) (Ofcomm). My analysis also suggests that subsidies have a continuous effect, not a threshold one. France's recent attempts to cut advertising on its public broadcasters during peak-viewing hours and phase out ads on several of its public-service channels should help increase the already existing positive effects of its public affairs broadcasting on political knowledge. France is paying for this increase by a 3 percent tax on for-profit television's advertising revenues and a transactions tax levied on telecommunications firms. However, both France and Spain's attempts to tax the telecoms have run into challenges from the European Union's governing authorities (Ofcomm), which likely will blunt the effects of the overall initiatives. General budget austerity and poor economic performance across E.U. member states – driven by the tight monetary policy of the European Central Bank – has also placed stress on public broadcasting budgets along with the rest of the public sector operations.

Going on the Offensive: Regulating Commercial Networks and Colonizing Advertising

Providing the population with easy access to public broadcasting and providing government funds creates the potential for public broadcasting to have widespread positive effects. However, government regulations also need to find a way to prevent people from changing the channel from the news to entertainment. In a single-channel system, this task is easy, but in a 500-channel universe the task is exponentially more difficult. Enacting regulations requiring all channels to broadcast news during a set segment of prime-time viewing hours, as some European countries do for their free-to-air channels, raises the bar for entertainment seekers and may lead to more consumption of public affairs programming, either by accidental exposure or by increasing habits. Since subsidies help public broadcasters provide better content, offering to subsidize news broadcasts of commercial broadcasters in return for increasing the programming dedicated to public affairs may help improve the quality of those broadcasts and indirectly widen the effects of public broadcasting-style news.

These subsidies would raise questions of potential government interference in the news. As Zaller (n.d.), Page (1996a), Cook (2005), Cox (1988), Ladd (2012) and many others discuss extensively, even policymakers in democratic countries go to great lengths to use the news media to generate favorable coverage of their activities and squelch dissent, at the expense of good public policy, civil rights, civil liberties or government accountability. In non-democracies subsidies for state-run broadcasting merely reinforce control of the government of the day. However, in many democracies public broadcasting governing bodies already have much experience insulating themselves from the government of the day in their management and day-to-day operations. Using governing boards with long-lasting staggered terms, proportional representation and independent funding streams can help insulate the news from the government interference. Also, the potential problem of government interference needs to be balanced by remembering that other avenues for undue pressure on commercial broadcasters exist from advertisers and parent corporations of large media conglomerates. Arguably government funds can even provide a useful counterbalance to these corporate pressures, though the influence of big business on government does complicate the question.

If the idea of subsidized news broadcast is too much, perhaps seeding prime-time advertising slots on terrestrial TV and basic cable stations with public-service announcement-length news clips might be useful. This idea, I'll call it "ad-news", stems from some scholars' arguments that political advertising has propped up political knowledge in the United States (Freedman, Franz, & Goldstein, 2004). The idea would get around commercial broadcasters' objections to regulation – particularly strident in the commercially dominated United States. Instead of regulation, this idea has some non-profit news organization simply buy advertising space at fair-market value. Spots could be 30 seconds or 60 seconds, and purchased during shows with large audiences that demographically are unlikely to watch the news. The spots would contain a brief synopsis of an important ongoing news story, perhaps presented in traditional TV-reporting style or a more graphical style popular with top newspaper blogs like the *New York Times'* Economix or the *Washington Post's* WonkBlog. With increasing numbers of people using the Internet as their primary mass media source, these Ad News spots could also show up as pop-up ads on popular social media sites.

On one hand, the limited time of advertising spots makes it difficult to do in-depth reporting directly for Ad News, but the short length of a 30-second spot actually is longer than the 150 characters permitted by Twitter, and not out of line with 100- and 200-word blog posts. Besides, the reform train attempting to regenerate long-form journalism on most television news shows long ago left the station. For example, the average length of a sound bite has been shrinking since the late 1960s and is now under five seconds (Hallin, 1992).

The nature of advertising also makes it difficult to cover breaking news events in a timely fashion. However, this seeming weakness might be a blessing in disguise. Instead of focusing on who is “winning” the news cycle, Ad News could focus on the context of stories like health-care reform, with each 60-second spot focusing on one major aspect of a reform proposal. Shorter 30-second or 15-second spots could simply report the results of recent Congressional votes with the voting patterns of each party. These simple ads run repeatedly could help citizens better place parties and U.S. institutions in context, provide enough information on party preferences to help inform and energize voters.

There are several precedents behind this idea of colonizing advertising. On one hand, it deliciously inverts the idea of an infomercial. Imagine, instead of a network selling a show's space for a 30-minute paid advertisement hawking garishly colored juicers and idiot-proof omelet makers, a serious news organization buys 30 seconds of advertising time to present an important public affairs story. This concept is also the reverse of an early public-private venture in Finnish television. During the 1960s, Finnish public broadcaster YLS sold blocks of its broadcast time to the new commercial broadcaster MTV (Osterlund-Karinkanta, 2004). Finally the idea of public affairs information colonizing advertising space has roots in decades of non-profit groups airing public service announcements to educate the public covering every topic from the dangers of smoking to information on how to stop foreclosure proceedings.

The body running "Ad-news" could be set up along the lines of a non-profit trust that is a private-public partnership. The partnership would have a non-partisan board of governors appointed partially by the government, partially by its employees (primarily journalists and researchers) and perhaps by several non-profit charitable trusts. Management and employees would be compensated in line with government pay scales. In the United States for example, funding for the venture could come from university-style endowment raised over multiple years from private donors, non-profits charitable trusts, universities and public monies amounting to about $20 billion – the size of a prestigious private university's endowment. The public portion of the endowment could come from several sources; states could make a one-time contribution of $1 billion divided among the states by their share of the national GDP. The federal government could contribute a fixed rate based on a small sales tax (perhaps .5 percent) on all new computers, TVs and personal electronic devices sold in the country for a period of five years, which could easily amount to several billion dollars. Operating funding would come from the interest on the endowment, making the organization financially independent of the government or any private donor. For example, if the trust had a $20 billion endowment, using 3 percent of investment earnings annually would generate $600 million in operating funding. $100 million could provide for facilities, equipment and a staff of several hundred dedicated journalists and researchers. $500 million – an advertising budget on par with a presidential candidate's general election campaign –could buy advertising slots to run news all across the country.

Conclusion

For nearly a century in industrialized democracies, public broadcasters have been a transmission belt for critical information that voters use to evaluate their political leaders. However, that belt has been fraying with age as the media universe has drastically expanded over the last 40 years. The challenge for the supporters of non-profits is twofold. First, they have to aggressively protect both the existence of public broadcasters as well as the features, most notably public funding, that give them the ability to provide their unique benefits. But this defensive struggle will only slow the steady decline of public broadcasting's positive influence in a continuously fragmenting media universe. To ensure its long-term health and the underlying health of democracies, reformers must attempt to creatively inject the values of public service, non-profit broadcasting in an increasingly competitive, privately oriented for-profit media world.

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