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Building Knowledge Societies:

The renewal of democratic practices in knowledge societies

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Synopsis

The core issue for this chapter concerns the political consequences of knowledge societies, in particular its capacities for strengthening democracy and good governance. To consider these issues, *Part I* summarizes debates about the impact of knowledge societies on the public sphere. The main influence of this development, it is theorized, will be determined by the 'supply' and 'demand' for electronic political information and communications, and demand is heavily dependent, in turn, upon the social characteristics of Internet users and their prior political orientations. Given this understanding, the study predicts that the primary impact of knowledge societies will be upon facilitating cause-oriented and civic forms of activism, thereby strengthening social movements, more than upon conventional channels of participation exemplified by voting and campaigning. *Part II* summarizes the sources of survey data and the key measures of political activism used in this study, drawing upon the 19-nation European Social Survey, 2002. *Part III* examines the evidence for the relationship between use of the Internet and indicators of civic engagement. *Part IV* focuses in particular upon UK case studies assessing the effect of remote electronic voting in elections. The conclusion in *Part V* summarizes the results and considers the policy implications for promoting democracy and good governance.

Contents

The rise of knowledge societies represents one of the most profound transformations that have occurred in recent decades. As other parts of this report discuss, the diffusion of information and communication technologies (ICTs) promises to have major consequences by expanding access to education and training, broadening channels of expression and social networks, as well as revolutionizing the nature of work and the economy. The primary impact has been in affluent societies but the Internet has also been widely regarded as an important instrument of development in poorer nations around the globe[1]. The core issue for this chapter concerns the political consequences of knowledge societies, in particular its capacities for strengthening democracy and good governance.

To consider these issues, Part I summarizes debates about the impact of knowledge societies on the public sphere. The main influence of this development, it is theorized, will be determined by the 'supply' and 'demand' for electronic political information and communications, and demand is heavily dependent, in turn, upon the social characteristics of Internet users and their prior political orientations. Given this understanding, the study predicts that the primary impact of knowledge societies will be upon facilitating cause-oriented and civic forms of activism, thereby strengthening social movements, more than upon conventional channels of participation exemplified by voting and campaigning. Part II summarizes the sources of survey data and the key measures of political activism used in this study, drawing upon the 19-nation European Social Survey, 2002. Part III examines the evidence for the relationship between use of the Internet and indicators of civic engagement. Part IV focuses in particular upon UK case studies assessing the effect of remote electronic voting in elections. The conclusion in Part V summarizes the results and considers the policy implications for promoting democracy and good governance.

Part I: Theories of the impact of knowledge societies on democracy

There are multiple theories about how the growth of knowledge societies could potentially influence civic engagement and there are four main perspectives in the literature.

The Internet as a virtual Agora

The most positive view is held by cyber-optimists who emphasize the Panglossian possibilities of the Internet for the involvement of ordinary citizens in direct, deliberative, or 'strong' democracy. Digital technologies are thought to hold

promise as a mechanism facilitating alternative channels of civic engagement, exemplified by political chat-rooms, remote electronic voting in elections, referenda, and plebiscites, and the mobilization of virtual communities, thereby revitalizing levels of mass participation in public affairs[2]. This view was certainly popular as the Internet rapidly expanded in the United States during the mid-1990s and the radical potential of digital technologies for democracy continues to be expressed by enthusiasts today[3].

Yet the general claim that the knowledge society will stimulate widespread citizen deliberation in affairs of state, so that the Internet functions like a virtual Agora, while attractive as a normative ideal, became less plausible once it was widely recognized by many observers that there are substantial disparities in who becomes involved in digital politics. Studies of politically-oriented discussion groups, bulletin boards and online chat rooms have found that these largely fail as deliberative fora, instead serving as places to reinforce like-minded voices due to their 'easy entrance, easy exit' characteristics[4]. The survey evidence from many countries indicates that those who take advantage of the opportunities for electronic civic engagement are often activists who were already most predisposed to participate via the traditional channels of political participation[5]. The Internet is a medium of choice par excellence, so it seems improbable that political websites, chat-rooms and online news will reach many citizens who are otherwise disengaged, apathetic and uninterested, if they choose to spend their time and energies on multiple alternative sites devoted to everything from the stock market to games and music[6]. In this regard, the Internet seems analogous to the segmented magazine market, where some subscribe to *The Atlantic Monthly*, *The Economist* and *Foreign Affairs*, but others pick *Golfing Weekly* or *Playboy*. Therefore so far hopes that the knowledge society could revitalize mass participation in direct or strong democracies finds little support from the available empirical studies.

The knowledge elite and social inequalities

As the Internet evolved during the last decade, a darker vision developed among cyber-pessimists who regard the knowledge society as a Pandora's box reinforcing existing inequalities of power and wealth, generating deeper divisions between the information rich and poor. In this perspective, the well-established global and social divides in Internet access mean that, far from encouraging mass participation, the knowledge society will disproportionately benefit the most affluent sectors in the developed world[7]. For example, the first phase of the UN World Summit on the Information Society (WSIS) held in Geneva in December 2003

concluded that the Internet holds great prospect for development for billions of people around the globe, endorsing ambitious principles and action plans, and yet no agreement was reached about the transfer of financial and technological resources necessary to facilitate wider electronic access in poorer nations[8]. Despite the great potential for technological innovations leading towards political change, observers suggest that in established democracies, traditional interest groups and governments have the capacity to reassert their control in the virtual political sphere; just as traditional multinational corporations have the ability to reestablish their predominance in the world of e-commerce[9]. In authoritarian regimes, as well, studies have found that access to publishing and disseminating information on the Internet, and also access, can be strictly restricted by governments, such as limitations imposed in Cuba, Saudi Arabia and China[10].

Politics as usual

The third perspective, which has become more commonly heard in recent years, is articulated by cyber-skeptics who argue that both these visions are exaggerated. In this view, so far the potential of the knowledge society has failed to have a dramatic impact on the practical reality of 'politics as usual', for good or ill, even in countries such as the United States at the forefront of digital technologies[11]. This perspective stresses the embedded status quo and the difficulties of achieving radical change to political systems through technological mechanisms.

For example, commentators suggest that during the 2000 American election campaign the presidential candidates for the major parties, George W. Bush and Al Gore, used their web pages essentially as glossy shop-windows, as fundraising tools, and as campaign ads, rather than as interactive 'bottom up' formats facilitating public comment and discussion[12]. During the 2003 pre-primary season in the United States greater innovation is evident in the campaign of the Vermont Democratic Governor, Howard Dean, who has used the Internet as an important tool in fund-raising, publicity, and in building a grassroots support network. This process has widened his name-recognition, enabling him to move ahead of rival Democratic candidates in the early opinion polls in New Hampshire, and being anointed as the front-runner by the press and by party leaders such as Al Gore well before a single vote was cast in a primary or caucus. His campaign has challenged some conventional practices in American electoral finance by successfully raising funds through multiple small individual contributions rather than through the traditional sources of large corporate donations. If successful, it seems likely that other candidates and campaign managers in American elections will emulate the Dean techniques. Nevertheless

studies suggest that the impact of the Internet in facilitating financial donations is exceptional, rather than representing part of a broader phenomenon expanding all forms of campaign activism[13]. The Dean campaign has been using new technologies primarily for old functions rather than facilitating radically different forms of interactive two-way communications linking supporters with candidates.

Elsewhere, content analysis of political party websites in countries as diverse as the UK, France, Mexico and the Republic of Korea have found that their primary purpose has been the provision of standard information about party organizations and policies that was also widely available offline, providing more of the same, rather than anything new, still less interactive facilities: "*Party presence on the internet seems to represent largely an additional element to a party's repertoire of action along with more traditional communication forms rather than a transformation of the fundamental relationship between political parties and the public, as some earlier advocates of cyber democracy hoped.*"[14]. Studies of the content of government department websites in many countries at the forefront of the move towards e-governance, such as the United States, Canada and India, and surveys of users of these websites, have also found that these are often primarily used for the dissemination of information and the provision of routine administrative services[15]. The Internet thereby serves as an aid to good governance by increasing government transparency, efficiency, and customer-oriented service delivery, but it does not function as a radical medium facilitating citizen consultation, policy discussion, or other democratic inputs into the policymaking process. Technology, in the skeptical view, is a plastic medium that flows into and adapts to pre-existing social molds and political functions.

The political market model

The last theoretical perspective – and the one developed in this study – can be characterized as the political market model. In this account, the impact of the knowledge society depends upon the interaction between the 'top-down' '*supply*' of political information and communications made available via the internet, e-mail and world wide web from political institutions, notably government departments, parliaments, political parties, the news media, interest groups and social movements, and upon '*demand*' in the use of information and communications about politics among the online public. This model suggests that, in turn, demand depends heavily upon the social characteristics of the online population, especially the preponderance of younger, well-educated citizens who are commonly among the heaviest users of the Internet, and their prior political interests and propensities. The net effect on

democracy at systemic level, the theory suggests, is that use of the Internet in the public sphere is most likely to strengthen and reinforce cause-oriented and civic-oriented dimensions of political activism, thereby primarily benefiting new social movements, transnational advocacy networks and loose coalitions of protest organizations, which are more popular among the well-educated younger generation, while having far less impact upon traditional channels of voting and election campaign participation. The knowledge society will thereby probably reinforce and strengthen the evolution of political participation from the forms of party and electoral participation, common in established democracies during the postwar era, to more contemporary forms of activism[16].

Therefore rather than accepting that either everything will change as radical forms of direct democracy come to replace the traditional channels of representative governance (as optimists hope), that the digital divide will reinforce socio-economic disparities in politics (as pessimists predict), or alternatively that nothing will change as the digital world merely replicates 'politics as usual' (as the skeptics suggest), the market model suggests that it is more sensible to identify what particular types of democratic practices will probably be strengthened by the rise of the knowledge society, understanding that these developments remain a work in process.

Part II: Conceptual framework, evidence and data

What evidence would allow us to examine these propositions, particularly the demand for political information and the impact of the knowledge society upon political activism? To understand these issues we need to recognize that involvement in public affairs can take many different forms, each associated with differing costs and benefits. This report compares the impact of frequency of use of the Internet on four main dimensions of activism: voting, campaign-oriented, cause-oriented, and civic-oriented. These are summarized into a 21-point 'Political Activism' Index combining all dimensions[17]. The basic items used to develop this Index are listed in Table 1 and reported fully in Appendix A.

[Table 1 about here]

Voting in regular elections is one of the most ubiquitous forms of citizen-oriented participation, requiring some initiative and awareness for an informed choice but making fairly minimal demands of time, knowledge and effort. Through the ballot box, voting exerts diffuse pressure over parties and elected officials, and the outcomes of elections affect all citizens. Participating at the ballot box is central to citizenship in representative democracy but due to its relatively low costs the act is a-

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typical of other more demanding forms of participation. The Internet can be expected to encourage voting participation mainly by lowering some of the information hurdles to making an informed choice, although the provision of remote electronic voting through a variety of new technologies can be expected to have a more radical impact upon turnout, as discussed in Part IV[18].

Campaign-oriented forms of participation concern acts focused primarily upon how people can influence parliament and government in representative democracy, primarily through political parties in British politics. Verba, Nie and Kim (1978: 46) focus on this aspect when they defined political participation as "…*those legal activities by private citizens that are more or less directly aimed at influencing the selection of governmental personnel and/or the actions they take*." [19] Work for parties or candidates, including party membership and volunteer work, election leafleting, financial donations to parties or candidates, attending local party meetings, and get-out-the-vote drives, all typify this category. Parties serve multiple functions: simplifying and structuring electoral choices; organizing and mobilizing campaigns; articulating and aggregating disparate interests; channeling communication, consultation and debate; training, recruiting and selecting candidates; structuring parliamentary divisions; acting as policy think tanks; and organizing government. Not only are parties one of the main conduits of political participation, they also serve to boost and strengthen electoral turnout. If mass party membership is under threat, as many indicators suggest, this could have serious implications for representative democracy[20]. Campaigning and party work typically generates collective rather than individual benefits, but requires greater initiative, time, and effort (and sometimes expenditure) than merely casting a ballot.   The Internet can be expected to provide new opportunities for activism in parties and election campaigns, for example through downloading information, joining parties or donating funds, or participation in discussion groups hosted on party or candidate websites[21]. Experience of campaign-oriented activism is gauged in this study by a five-battery item including whether people are members of a party and whether they have donated money to a party, worked for a party, contacted a politician, or worn a campaign badge during the previous 12-months.

Cause-oriented activities are focused primarily upon influencing specific issues and policies. These acts are exemplified by consumer politics (buying or boycotting certain products for political or ethical reasons), taking part in demonstrations and protests, and organizing or signing petitions. The distinction is not water-tight, for example political parties can organize mass demonstrations, and

social movements often adopt mixed action strategies which combine traditional repertoires, such as lobbying representatives, with a variety of alternative modes such as online networking, street protests, and consumer boycotts. Nevertheless compared with campaign-oriented actions, the distinctive aspect of cause-oriented repertoires is that these are most commonly used to pursue specific issues and policy concerns among diverse targets, both within and also well beyond the electoral arena. These acts seek to influence representative democracies within the nation-state through the conventional channels of contacting elected officials, ministers, civil servants, and government departments, but their target is often broader and more diffuse, possibly in the non-profit or private sectors, whether directed at shaping public opinion and 'life-styles', publicizing certain issues through the news media, mobilizing a networked coalition with other groups or non-profit agencies, influencing the practices of international bodies such as the World Trade Organization or the United Nations, or impacting public policy in other countries. Experience of cause-oriented activism is measured in this report by a five-battery item including whether people have signed a petition, bought or boycotted products for a political reason, demonstrated legally or protested illegally during the previous 12-months.

Lastly **civic-oriented** activities, by contrast, involve membership and working together in voluntary associations, as well as collaborating with community groups to solve a local problem. The core claim of 'Toquevillian' theories of social capital is that typical face-to-face deliberative activities and horizontal collaboration within voluntary organizations far removed from the political sphere – exemplified by trade unions, social clubs, and philanthropic groups - promote interpersonal trust, social tolerance and cooperative behavior. In turn, these norms are regarded as cementing the bonds of social life, creating the foundation for building local communities, civil society, and democratic governance. In a 'win-win' situation, participation in associational life is thought to generate individual rewards, such as career opportunities and personal support networks, as well as facilitating community goods, by fostering the capacity of people to work together on local problems. Civic organizations such as unions, churches and community groups, Putnam suggests, play a vital role in the production of social capital where they succeed in bridging divisive social cleavages, integrating people from diverse backgrounds and values, promoting 'habits of the heart' such as tolerance, cooperation and reciprocity, thereby contributing towards a dense, rich and vibrant social infrastructure[22]. This dimension involves direct action within local communities, such as raising funds for a local hospital or school, where the precise dividing line between the 'social' and 'political' breaks down[23]. Trade unions and

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churches, in particular, have long been regarded as central pillars of civic society in Europe which have traditionally served the function of drawing citizens into public life. For a variety of reasons - including the way that voluntary associations can strengthen social networks, foster leadership skills, heighten political awareness, create party linkages, and facilitate campaign work - people affiliated with church-based or union organizations can be expected to participate more fully in public life.[24] Access to the knowledge society can be expected to expand social networks and information, facilitating membership in civic associations and social groups, although the evidence whether the Internet strengthens or weakens social capital remains under debate[25]. Experience of civic activism is measured here by a ten-point scale summarizing membership in a series of different types of voluntary organization and associations, including both traditional sectors such as trade unions, church groups and social clubs as well as 'new' social movements exemplified by groups concerned about the environment and about humanitarian issues.

The summary 21-point Political Activism Index, providing an overview, is composed very simply by adding together experience of each of these different types of acts (each coded 0/1). It should be noted that in this conceptual framework, this report focuses upon political *activity*; we are concerned with *doing* politics rather than being attentive to public affairs or having psychological attitudes, such as trust in parliament or political efficacy, thought conducive to civic engagement. The report therefore does not regard exposure or attention to mass communications, including following campaign events in newspapers or watching party political broadcasts during the election, as indicators of political activism per se. These factors may indeed plausibly contribute towards participation, and thereby help explain this phenomenon, as prior pre-conditions, but they are not, in themselves, channels which citizens can use for expressing political concerns or mobilizing group interests.

Survey evidence and data sources

To establish the extent and significance of the role of the Internet on political activism, the primary source of evidence for this report is drawn from the 19-nation European Social Survey 2002 (ESS-19). This is a new academically-driven study designed to chart and explain the interaction between Europe's changing institutions and the attitudes, beliefs and behavior patterns of its diverse populations[26]. The survey includes a wide range of items designed to monitor citizen involvement, including a battery of a dozen items that can be used to create a summary political activism scale, as well as multiple indicators of political interest, efficacy, trust, party allegiances, subjective well-being, family and friendship bonds, and a rich array of

detailed socio-demographic data including household composition, ethnicity, type of area, and occupational details. This survey provides recent evidence, and it also facilitates comparison among similar advanced industrialized European societies and democratic states. The size of the total pooled sample (with over 36,000 cases) also allows us to monitor differences among smaller European populations, such as ethnic minorities.

The survey currently includes four nations in Scandinavia (Norway, Sweden, Finland, Denmark), six nations in Northern Europe (Britain, Germany, Luxembourg, Ireland, the Netherlands, and Switzerland), four from Mediterranean Europe (Greece, Spain, Italy, Portugal, and Israel), and four post-Communist societies in Central Europe (the Czech Republic, Hungary, Poland, and Slovenia). All these countries were classified by Freedom House in 2001-2 as fully 'free' in their political rights and civil liberties, using the Gastil Index. Most can also be categorized as affluent post-industrial economies (with an average per capita GDP in 2002 ranging from $16,000 (in Greece) to $30,000 (in Norway), although all of the post-Communist states except Slovenia fall below this level.

Internet use

In some of these societies, the knowledge society has been widely diffused, with two-thirds of more of the public using the Internet, at least occasionally. By contrast in others few of the public access the Internet. The survey monitored Internet use by the following question:

*"Now, using __this__ card, how often do you use the internet, the World Wide Web or e-mail – whether at home or at work – for your **personal**[27] use?"*

No access at home or work	*00 (41%)*	}
Never use	*01 (17%)*	}
Less than once a month	*02 (3%)*	} Regular use
Once a month	*03 (2%)*	}
Several times a month	*04 (4%)*	}
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Once a week	*05 (5%)*	}
Several times a week	*06 (11%)*	}
Every day	*07 (16%)*	}
(Don't know/No answer)		

This is a limited measure which does not gauge what people do online or where they commonly seek information, nor does it distinguish among access to the Internet,

email, or World Wide Web. These are only some forms of access to the knowledge society as other electronic technologies may be equally important, such as text messaging, use of mobile or cell telephones, or access to cable, satellite and interactive television. In addition, people may also use the Internet at work as well as for personal use and the measure does not attempt to monitor the length of experience of using the Internet. Nevertheless this item provides a standard measure of exposure to the Internet, widely used in other studies, which gives a suitable benchmark for cross-national comparison.

The main cross-national contrasts which emerged on this item are illustrated in Figure 1, comparing the third of Europeans in the sample who report that they *regularly* use the Internet (defined here as personal use of the Internet at least weekly) in the ESS-19. The remaining two-thirds say they never used the Internet or used it far less regularly than weekly. As many other Eurobarometer surveys have regularly reported, sharp differences are evident in Internet access within Europe[28]. In Scandinavia, notably Denmark, Sweden, and Norway, regular Internet use is widespread among the majority of the population. Many of the countries fall into the middle of the distribution, where between one-fifth and less than one half use the internet at least weekly. By contrast in some countries in Mediterranean and post-Communist Europe, less than a fifth of the public made regular use of this technology, notably in Greece, Hungary, Poland and Spain, all at the bottom of the distribution.

[Figure 1 about here]

Part III: Analysis and Results

How do those Europeans who are and are not regular users of the internet compare across the different types of political activism? We can first compare the overall patterns using the pooled ESS-19 sample without using any prior social or attitudinal controls, and then go on to consider the results of the multivariate analysis and differences among European nations. One important qualification to note is that in the analysis we cannot establish the direction of causality in these models; with a single cross-sectional survey it is impossible satisfactorily to disentangle whether use of the Internet facilitates and encourages political activism, or whether prior habits of political engagement lead towards continuing activism via electronic channels.   To establish causality in any media effects we really need either to analyze repeated panel surveys among the same respondents over successive years, or experimental research designs, neither of which are available on a cross-national basis[29]. In the

model, based on standard theories of political socialization, we assume that the cultural values and norms of behavior are acquired from formative experiences with family, school and community in early youth. We theorize that these processes are likely to shape long-term and enduring political orientations and habitual norms of behavior, such as patterns of partisan identification, ideological values, and forms of activism. We assume that use of the Internet is a relatively recent, and therefore short-term, influence which will facilitate and reinforce the cognitive and attitudinal factors associated with habitual political activism, for example expanding people's awareness of election issues or party policies, but which will not necessarily alter or transform broader patterns of civic engagement.

Given these assumptions, Table 1 shows a clear and consistent pattern: regular Internet users are significantly more politically active across all 21 indicators. The overall score on the mean Political Activism Index, summarizing this pattern, was 4.43 for regular Internet users compared with 2.56 for others, a substantial and significant difference. Nevertheless the size of the activism gap does vary among different types of engagement; it is relatively modest in reported voting turnout as well as across most of the campaign-oriented forms of activism such as party membership, party volunteer work, and party donations. By contrast the gap is substantial (in double digits) among many forms of cause-oriented activism, such as buying or boycotting products for political reasons and signing petitions, as well as in membership of certain types of civic organizations, notably belonging to sports clubs, trade unions, consumer groups, and hobby groups.

[Table 1 about here]

To see whether this activism gap was an artifact of the way that regular Internet use was measured, Figure 2 illustrates the mean distribution of the political activism index across all categories of Internet use ranging from no access at home or work to personal use of the Internet every day. The figure confirms that the overall scale of political activism rises sharply and steadily with each category of Internet use, more than doubling across the whole scale.

[Figures 2 and 3 about here]

Moreover if the patterns are analyzed by country, again similar results are evident in every society. As Figure 3 shows, political activism rises steadily with increasing Internet use in nearly all nations, and the only exceptions to this concern Portugal and Poland, where levels of technological diffusion remain very limited.

[Figure 4 about here]

Despite this clear and important pattern, the theoretical framework in this study suggests that, given the characteristics of the online population, we should find systematic variations in engagement by the different types of political activism, and indeed this is confirmed by the data. Figure 4 illustrates the strong and significant linear relationship between use of the Internet and civic activism in a wide range of voluntary organizations and local associations (R=318***). The cause-oriented activism scale is also significantly associated with the frequency of using the Internet (R =.318***). Nevertheless voting activism is relatively flat across levels of Internet use, and the correlation proves to be significant but negative in direction (R= -0.024**) and the campaign-oriented activism scale shows only a modest positive correlation (R=.136). The results suggest that any association between access to the Internet and political activism is heavily contingent upon the particular forms of participation that are under analysis.

[Table 2 about here]

Nevertheless many factors may be influencing this process, including the prior social characteristics and cultural attitudes of Internet users. To examine these issues we need multivariate regression models. the main explanations of political activism can be categorized into the four groups, namely: (i) structural explanations emphasizing the resources that facilitate civic engagement, notably time, education and income, which are closely associated with demographic groups and social status; (ii) cultural accounts focusing upon the motivational attitudes that draw people into public affairs, such as a sense of political efficacy, institutional confidence, and citizenship duty; (iii) agency explanations prioritizing the role of mobilizing organizations such as churches and unions, as well as the role of the news media and informal social networks, which bring people into public affairs. The use of the Internet can best be conceptualized in this model as a mobilizing agency. Lastly (iv) there could be a regional effect generated by historical traditions in each area, notably the length of time that representative democracy has operated in Scandinavia, Western Europe, the 'third-wave' democracies in the Mediterranean region and Post-Communist societies that only experienced free and fair elections from the early 1990s onwards. Given this framework, Table 2 first includes the standard demographic and socioeconomic variables that many studies have commonly found influence participation, including belonging to an ethnic minority, educational qualifications, household income, social class, work status, total hours normally worked per week, marital and family status, and religiosity. These were entered into the model in this order before adding the cultural attitudes of frequency

of political discussion, the importance of politics, social and political trust, internal and external political efficacy, a sense of civic duty and interest in politics. The mobilizing agency variables were then entered, including social networks, and attention to politics on television, radio and newspapers. The use of the Internet was entered at the end of this category, to see whether there was any residual impact associated with this technology net of all other factors. Lastly the major European regions were added, coded as dummy variables, where the Nordic region was the default category for comparison.

The results in the pooled model confirm the significance of many of these standard factors upon the political activism scale. The only exceptions proved to be belonging to an ethnic minority, the amount of hours in the paid workforce, and the salience of politics, which all proved to be non-significantly related to participation, contrary to expectations. But after adding the complete battery of controls, use of the Internet continued to be significantly related to political activism, suggesting that this relationship is not simply explained away as a result of the prior social or attitudinal characteristics of those who are most prone to go online. The most important factors predicting activism (measured by the strength of the standardized regression coefficients) concern internal political efficacy (a feeling that the person could influence the political process), age, education, region and civic duty. After these factors, use of the Internet proved the next strongest predictor of activism, more important than other indicators such as social and political trust or use of any of the news media. The overall model explained more than one third of the variance in activism (R^2=.37).

Similar regression models were then run with identical controls to predict the four types of political activism under comparison, using the pooled sample. Without showing all the coefficients, the summary of the results in Table 3 shows that use of the Internet was significantly associated with voting, cause-oriented and civic-oriented forms of activism, but not with campaign-oriented forms of activism. This confirms that, rather than claims about the effect of the knowledge society on activism, we do need to distinguish among the types of participation, which generate different effects. The reason for these differences most probably lies in the residual effect of the typical social background and the political values of Internet users, notably the propensity of well-educated younger generations to predominate online, as noted in many studies of the well-known 'digital divide'[30].

[Table 3 about here]

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Part IV: Remote electronic voting

Despite these general patterns, the issue of how remote electronic voting (e-voting) will influence participation in future remains a distinct question about which there is considerable speculation but little systematic knowledge. As access to the new communication and information technologies have diffused throughout post-industrial societies, the idea of using electronic tools to modernize electoral administration has been widely debated, with potential benefits of greater efficiency, speed, and accuracy. Perhaps the most important and influential argument concerns the claim that remote electronic voting will make the process more convenient and thereby strengthen electoral turnout and civic engagement, especially for the wired younger generation[31]. If citizens will not come to the polls, it is argued, why not bring the polls closer to citizens?

Remote electronic voting (or remote e-voting for short), is understood here as the transmission of a secure and secret official ballot to electoral officials via various electronic information and communication technologies at a site located away from the polling station, whether from home, the workplace, or a public access point. Remote e-voting is sometimes thought to refer only to Internet voting, but in this study we can compare many electronic devices which are capable of transmitting an electronic ballot, including computers, touch-tone terrestrial telephones, cell (mobile) phones, text messaging devices, and digital televisions.

By contrast, *on-site electronic voting* technologies are used to vote within the traditional physical location of a polling station, exemplified by touch-activated screens, dedicated computer terminals, or electronic counting devices, as debated after the Florida debacle.

Proponents suggest many advantages that may come from implementing remote e-voting.

- The most important is the added convenience for citizens. By using a telephone, computer, palmtop device, or digital television to cast a ballot from home or the workplace, citizens could reduce the time and effort traditionally required to

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participate in person at the polling station. This may help overcome problems of social exclusion, especially for those with limited mobility such as the elderly, caregivers confined to the home by dependent relatives, or employees and shift-workers with little flexibility in their work hours, as well as for those who are traveling away from home and for overseas residents. The implementation of remote e-voting can be regarded in many respects as an extension of the use of other familiar and well-tested voting facilities already widely available in many countries, including the use of postal, absentee, oversees, or advance ballots[32]. In the June 2001 UK general election, for example, 1.3 million postal votes were cast, representing 5.2% of all ballots[33].

- Moreover both remote and on-site electronic voting could potentially reduce the information costs of participation, and allow citizens to match their preferences more accurately to their electoral decisions, by providing relevant information at the time that people are casting their ballot, for example by incorporating an optional web page display of photos and standardized biographies linked to each candidate, or by providing a briefing synopsis explaining each side of a referenda issue.

- For officials, well-designed and effective electronic technologies, either remote or on-site, could potentially improve and streamline the process of electoral administration, by increasing the efficiency, speed, and accuracy of recording and counting votes.[34]

For all these reasons, the idea of e-voting has been hailed by advocates, particularly those in the industry, as an automatic 'magic ballot' that could entice more people to vote, make citizens more informed, and improve vote-counting.

Against these arguments, skeptics counter that many contemporary limitations - technological, socioeconomic and practical - combine to create

substantial barriers to the effective implementation of e-voting. Democratic electoral systems must meet certain stringent standards of security, data-protection, secrecy, reliability, accuracy, efficiency, integrity, and equality. Public confidence in the integrity of the electoral system must be maintained to ensure the legitimacy of the outcome. This makes the administrative challenges of e-voting more difficult than the implementation of many common forms of electronic government or commerce, even banking. If poorly implemented, citizens could be discouraged from voting via new technologies, for example the design could prove difficult for the disabled, those with low literacy skills, or the elderly. Even if these important technical and security matters could be resolved, another fundamental issue concerns the potential problems that could arise if remote e-voting serves to exacerbate existing structural inequalities in electoral participation. If these issues could also be overcome, the question which arises is what practical effects e-voting might have on turnout?

Evidence to evaluate this debate is drawn here from the results of a series of innovative experiments conducted by the UK Electoral Commission using 59 pilot voting schemes available to 6.4 million citizens (14% of the English electorate) in the 1st May 2003 English local elections. These contests are characteristically low-salience campaigns, determining control of local town halls up and down the land, but commonly stirring minimal interest among the media and the public. Turnout is usually fairly low; for example only one third of the electorate voted in the previous year's contests. The most recent range of pilot schemes used by the UK Election Commission provide an exceptionally good test of the effects of modernizing electoral administration and voting facilities. Implications can be drawn well beyond the particular context, as the electorate in each district cast legal votes with the outcome determining the election of local representatives and the partisan control of councils. These studies built upon the experience of the more limited pilot schemes tried in 2000 and 2002. In the May 2003 elections, 59 different English local districts tested alternative ways of facilitating electronic voting, including use of the Internet from home and public access sites, interactive digital television, SMS text messaging and touch-tone telephones.

Pilots also used all-postal ballots, getting electronic information to voters, extended voting periods, and electronic counting.

The evidence from the election results, and from the survey conducted after the contest, confirms that use of all-postal voting facilities generated turnout of about 50%, compared with average turnout of about 35% in the same districts. All-postal voting also improved public satisfaction with the electoral process, as intended. Nevertheless there are good reasons to be skeptical about claims that electronic technologies can automatically resuscitate electoral participation. Remote e-voting, in particular, may expand citizen choice, but it proved far less effective in improving turnout than the implementation of all-postal ballots. The age profile of who used different voting mechanisms provides an important clue to their effects.

At present, even if the technical and social equality issues could be overcome, there are few grounds to believe that adopting remote e-voting from home or work on a wide-scale basis would radically improve turnout. The introduction of remote e-voting would probably have a modest impact upon the younger generation, if judged by the available evidence from the British pilot studies. And automatic postal ballots are far more effective in improving participation among the older generation, as well as being cheaper and more efficient to administer. Remote e-voting is therefore unlikely to prove a 'magic ballot'. Technological quick fixes, while superficially attractive, cannot solve long-term and deep-rooted civic ills. Yet this does not mean that we should abandon all hope of strengthening electoral turnout through administrative mechanisms; in the UK elections, the impact of all-postal voting proved positive and highly significant. At relatively modest cost, all-postal voting proved very effective at boosting turnout, and surveys of attitudes showed that this process also generated high levels of trust, satisfaction, and a sense of security among citizens[35].

The UK Electoral Commission has evaluated the results of the trials and this analysis will contribute towards the government's proposed reforms of voting procedures in future UK elections. The July 2003 report issued by the UK Electoral Commission, *The Shape of Elections to Come*, recommended rolling out all-postal votes as standard practice for all local

elections, with further evaluation before this practice is extended to other types of election[36]. With regard to electronic voting, the Commission reached far more cautious conclusions, suggesting these should continue to be tested, with the overall aim of using electronic voting as a way of providing citizens with more choice about how they cast their ballots, rather than of improving turnout.

V: Conclusions

Therefore the theory developed in this study considers more pessimistic claims that the development of the Internet will serve to reinforce the voices of the powerful, the more skeptical arguments that it will merely reflect 'politics as usual', and the more optimistic view that the knowledge society will transform governance as we know it and strengthen levels of mass political participation. The evidence remains limited; in particular at present we lack mass cross-national surveys of Internet political use in developing societies and transitional democracies. Nevertheless a growing body of evidence is becoming available in the United States and Europe. Based on this evidence, the study hypothesizes that there is a market where the impact of the internet depends in part upon the 'supply' of political information and communications, primarily from political agencies, and also upon the 'demand' for such information and communication from the mass public. In turn the public's demand comes from the social and cultural profile of the online population reflecting long-standing patterns of civic engagement. As a result, use of the Internet is significantly related to overall patterns of political activism, even with multiple prior controls, but there are several distinct dimensions or channels of activism. The evidence presented in this study suggests that the rise of the knowledge society in Europe has had the greatest positive consequences for civic society by strengthening cause-oriented and civic-oriented activism, rather than mass participation in campaigns and elections.

What are the broader systemic consequences of this pattern? The primary beneficiaries are expected to be new social movements, transnational advocacy networks, alternative social movements, protest organizations, community activists and development workers, who are often concerned with issues such as the environment, international development, anti-war or anti-globalization, and single issue causes from all shades of the political spectrum, ranging from genetically modified food and anti-fuel taxes to animal rights and anti-sweat shops. The knowledge society does not drive these movements -- these causes are triggered by

deeper passions -- but it facilitates their organization, mobilization and expression[37]. Reducing the costs of information and communication minimizes some, although not all, of the significant barriers to effective political participation at individual-level; it becomes easier for ordinary citizens to learn about public affairs, if they are so inclined, and to express their views and to mobilize. This study concludes that knowledge societies will therefore probably have the greatest capacity to fortify democratic participation primarily by strengthening and reinforcing cause-oriented and civic forms of political activism. By contrast, political parties and elections, some of the traditional channels in representative democracy, especially the use of the Internet in voting participation, can be expected to adapt far more slowly to the knowledge society.

Tables and Figures

Figure 1: The proportion of regular Internet users in Europe, ESS-2002
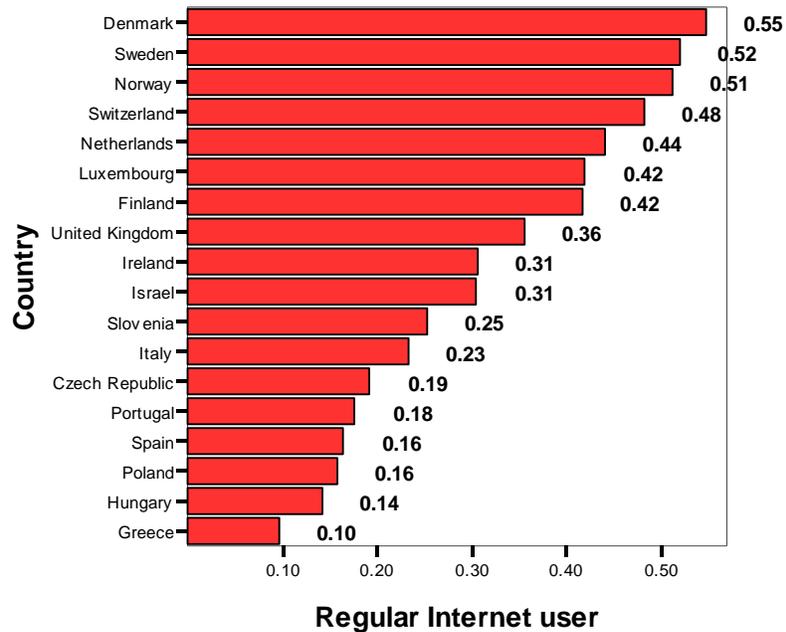
Note: 'Regular Internet users' is defined as those who personally use the Internet, email or World Wide Web at least once a week.

Source: European Social Survey, 2002 Pooled sample

Figure 2: Internet use and the Political Activism Index
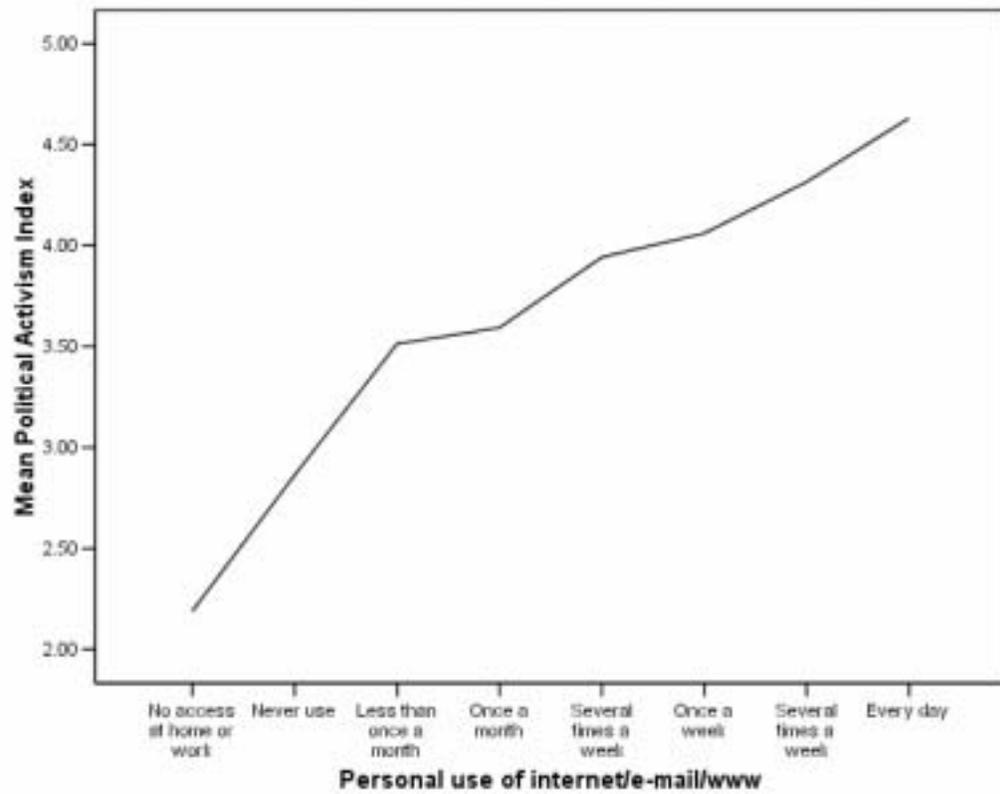
Source: European Social Survey, 2002 Pooled sample

Figure 3: Internet use and the Political Activism Index by nation
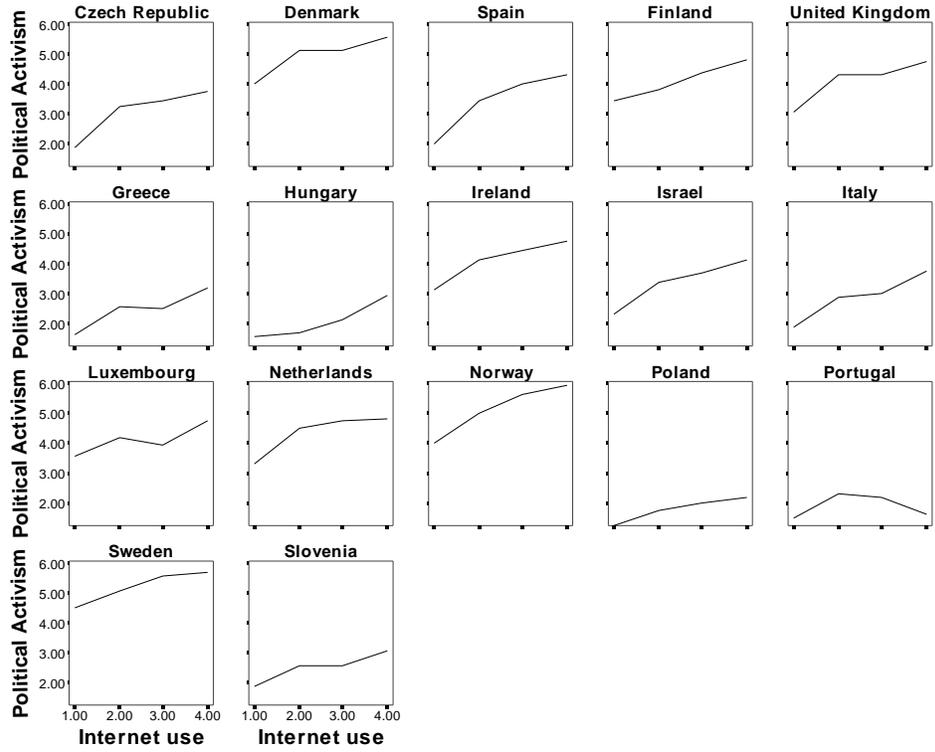
Source: European Social Survey, 2002

Figure 4: Internet use and types of political activism
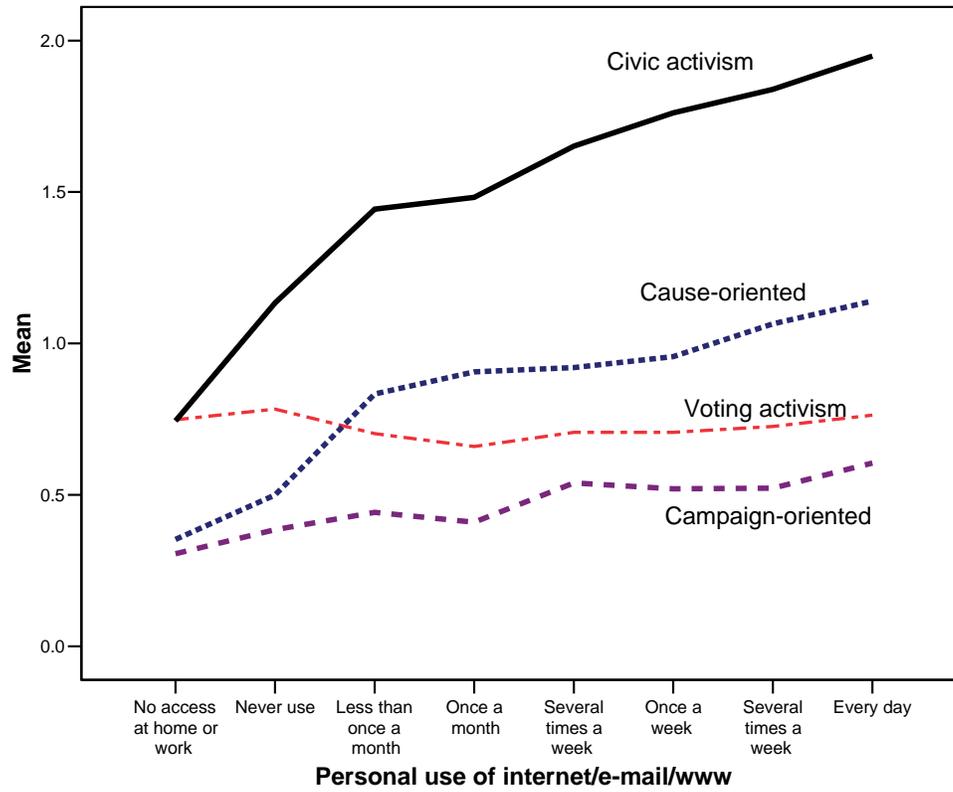
Source: European Social Survey, 2002 Pooled sample

Figure 5: Percentage change in turnout, May 2003 UK local election pilot schemes

District	Value
Gateshead MBC	-2
Stevenage BC	-1
Trafford MBC	-1
St Edmundsbury BC	1
Brighton & Hove City	8
Bolton MBC	10
North Shropshire DC	11
East Staffordshire BC	11
Kings Lynn & West	11
Corby BC	12
Sedgefield BC	14
Rushcliffe BC	15
Redcar & Cleveland	15
Hyndburn BC	16
Salford City C	16
Chesterfield BC	17
Copeland BC	17
Guildford BC	17
Newcastle City C	18
DarlingtonBC	18
Doncaster C	18
Wansbeck DC	18
North Lincolnshire	18
Telford & Wrekin	21
Lincoln City C	21
Derwentside	21
Stockton-on-Tees BC	22
Blackpool BC	22
St Helens MBC	22
Herefordshire CC	23
Rotherham MBC	24
Sunderland City C	24
Blyth Valley BC	25

All-postal

District	Value
Chorley	-12
Stratford-on-Avon	-9
South Tyneside	-9
Ipswich	-7
Stroud	-6
Kerrier	-4
Rushmoor	-4
Epping Forest	-2
Chester	-1
Swindon	-1
Sheffield	0
Norwich	0
Basingstoke & Deane	2
St Albans	5
South Somerset	9
Shrewsbury &	11
Vale Royal	13

Electronic voting pilots

Notes: Turnout is defined here as valid votes cast as a percentage of the eligible electorate. The percentage change in voting turnout is calculated from the previous equivalent election held in each district.

Source: The UK Electoral Commission

Table 1: Political activism in Europe, ESS-2002

Percentage that have…	Regular internet user (%)	Not regular user (%)	Activism Gap (%)	Sig
VOTING				
Reported voting in the last national election	28	26	**+2**	***
CAMPAIGN-ORIENTED				
Contacted politician	22	13	**+9**	***
Worn campaign badge	12	6	**+6**	***
Donated money to party	11	7	**+4**	***
Worked for party	6	4	**+2**	***
Party member	6	5	**+1**	***
CAUSE-ORIENTED				
Bought product for political reason	41	17	**+24**	***
Signed petition	35	16	**+19**	***
Boycotted product	25	11	**+14**	***
Demonstrated legally	10	5	**+5**	***
Protested illegally	2	1	**+1**	***
CIVIC-ORIENTED				
Member sports club	35	14	**+21**	***
Member trade union	33	17	**+16**	***
Member consumer group	25	11	**+14**	***
Member hobby group	20	10	**+10**	***
Member educational group	12	4	**+8**	***
Member professional group	14	6	**+8**	***
Member environmental group	9	4	**+5**	***
Member humanitarian group	9	4	**+5**	***
Member church group	15	11	**+4**	***
Member social club	11	10	**+1**	***
TOTAL 21-POINT ACTIVISM INDEX				
Mean index score	4.43	2.56	**+1.87**	***

Note: For the specific items used in the construction of the Index, see the Technical Appendix. 'Regular internet user' is defined as reported personal use of the Internet, email or World Wide Web at least weekly. The 'activism gap' is measured as the percentage of regular Internet users minus the percentage of regular non-users who engage in this activity. A positive gap indicates that regular Internet users are more active than non-users. The total activism index counts participation in each form of activity as one and sums the 21-point scale. Significance tested by Chi-squares and by ANOVA. *** .001 ** .01 * .05 N/s Not significant.

Source: European Social Survey, 2002 (ESS-19). Pooled sample N. 31741 in 18 ESS nations, excluding Germany (where Internet use was not monitored).

Table 2: The impact of Internet use on political activism, with controls

	B	Std. Error	Beta	Sig.
(Constant)	-1.39	0.28		0.00
SOCIAL STRUCTURE				
Gender	-0.17	0.05	-0.03	0.00
Age (years)	0.02	0.00	0.13	0.00
Belong to ethnic minority	0.03	0.13	0.00	0.81
Educational qualifications	0.22	0.02	0.11	0.00
Income	0.07	0.01	0.06	0.00
Work status	0.38	0.06	0.06	0.00
Total hours per week in main job + O/T	0.00	0.00	0.00	0.88
Married	0.19	0.05	0.03	0.00
Have children at home	0.13	0.05	0.02	0.01
Religiosity (Importance of religion)	0.12	0.05	0.02	0.01
CULTURAL ATTITUDES				
Discuss politics/current affairs, how often	-0.14	0.01	-0.09	0.00
Important in life: politics	0.01	0.01	0.01	0.54
Social trust	0.02	0.00	0.04	0.00
Trust in national political institutions	-0.02	0.01	-0.03	0.01
Trust in international institutions	-0.03	0.01	-0.04	0.00
Internal political efficacy	0.27	0.01	0.18	0.00
External political efficacy	0.12	0.01	0.08	0.00
Civic duty scale	0.04	0.00	0.11	0.00
How interested in politics	-0.34	0.04	-0.09	0.00
MOBILIZING AGENCIES				
How often socially meet with friends, relatives or colleagues	0.17	0.02	0.08	0.00
TV watching, news/ politics/current affairs on average weekday	-0.12	0.02	-0.05	0.00
Radio listening, news/ politics/current affairs on average weekday	0.03	0.01	0.02	0.06
Newspaper reading, politics/current affairs on average weekday	0.09	0.03	0.03	0.00
Personal use of internet/e-mail/www	**0.10**	**0.01**	**0.10**	**0.00**
REGION				
Northern Europe	-0.30	0.06	-0.05	0.00
Mediterranean Europe	-1.35	0.08	-0.16	0.00
Post-Communist Europe	-1.73	0.09	-0.23	0.00
Adjusted R^2	**.373**			

Note: The models represent the result of ordinary least squares regression analysis where the total political activism index is the dependent variable. The index counts participation in each form of activity as one and sums the 21-point scale. The figures represent the unstandardized beta coefficient (B), the standard error (s.e.), the standardized beta coefficient (Beta), and the significance (sig). The default dummy regional variable was the Nordic region. All variables were checked to be free of problems of multi-collinearity by tolerance statistics. See Table1 for the items in each scale.

Source: European Social Survey, 2002. Pooled sample N. 31741 in 18 ESS nations, excluding Germany (where Internet use was not monitored).

Table 3: The impact of Internet use on types of political activism, with controls

Type of activism	B	Std. Error	Beta	Sig.	Adjusted R^2
Voting	.005	.001	.034	.002	.145
Cause-oriented	.036	.004	.095	.000	.213
Campaign-oriented	.006	.004	.018	.102	.161
Civic-oriented	.042	.006	.073	.000	.308

Note: The models represent the result of ordinary least squares regression analysis on each form of activism as the dependent variables. For the full range of prior controls in the models (not reported here) see Table 2. The figures represent the unstandardized beta coefficient (B), the standard error (s.e.), the standardized beta coefficient (Beta), and the significance (sig).

Source: European Social Survey, 2002. Pooled sample N. 31741 in 18 ESS nations, excluding Germany (where Internet use was not monitored).

Endnotes

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