**Internet use and engaged citizenship in comparative perspective.**

**Abstract.**

Previous research has found that Internet use may influence political attitudes. However, this relationship is far from universal and its strength varies across countries. Contextual characteristics are likely to condition the extent to which digital media use can influence attitudes and values. This paper analyses the effects of economic development and the interaction between democracy and the use of Internet on citizenship conception using data from the International Social Survey Programme (ISSP). A test of the model is provided using multilevel data from a diverse set of 22 countries.

## 1. Introduction. New technologies, citizenship norms and compared research.

Citizenship is a concept under permanent construction. It entails the set of rights and duties that stem from membership in a community (Marshall 1950), but whether the rights or the obligations matter the most depends on scholars' theoretical perspectives (Heater 2004). Although this reveals the highly normative nature of citizenship, objective conditions also play a role in the evolution of citizenship and its implications. For instance, we know that young people feel less committed to a community (Putnam 2000 and 2002; Goerres 2007), and the same applies for women, since only recently they have been considered "citizens" (Bolzendahl and Coffe 2008). The combination of economic prosperity and generational replacement can also cause changes on what is thought to be desirable in a citizen (Inglehart 1990). Therefore, it is reasonable to expect that major technological evolutions may play a role in this construction process; especially if these evolutions not only bring new skills, but also new systems of logic and ethics whose contents are concomitant to what we call "citizenship norms."

Through most of the previous research asserts that the Internet fosters a set of political attitudes related to political engagement, there is not agreement with regard to the direction and intensity of this relationship. A plausible reason for this heterogeneity may lie in the differences among analysed contexts. Certainly, there is a noticeable lack of comparative research in this field, since most of the studies consist of case analyses, predominantly from developed countries with technologically skilled citizens. Nevertheless, it makes sense to think of

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contextual factors that may affect both the logic and patterns of use of new media and the effects of these media on citizenship across countries.

This paper analyses the relationship between the Internet and political orientation belonging to the engaged citizenship dimension, as characterized by Dalton (2008). As a result of the main characteristics of Internet (community-oriented, interactive and it fosters autonomy, horizontality, egalitarianism and anonymity), it is expected that as the use of Internet increases, the belief that citizens should keep an eye on their governments would also do so. Nevertheless, this relationship would not be homogeneous across countries. On the contrary, institutional conditions would mediate it, providing opportunities and utilities that would affect the implications and meaning of this new media.

The leading question of this research is the following: under what conditions may the use of Internet foster a strong sense of active (or engaged) citizenship? The main hypothesis of these pages can be summarized as follows. The fewer democratic guarantees are found in a country, the more Internet will be associated with engaged citizenship. Under non-full democratic regimes, Internet acquires a democratic aura, and its potential as an alternative, almost uncontrollable media and communication tool is emphasized. In another words, a non-full democratic context will foster the role of the Internet as a mean to bypass government control of information and to empower citizenship to exert control over rulers. It may play a role as a shelter for political dissidence; even those who are not particularly critical, when surfing the Net, may bump into critical opinions and groups, which can result in critical and active attitudes towards rulers. Economic conditions would be taken into account as well. We can expect that Internet use will be more frequent in developed countries, but engaged citizenship levels across countries would also be a consequence of economic conditions. Citizens of rich countries, where rulers invest in development, will feel that it is less necessary to control their governments.

## 2. Theoretical framework. Contextual moderators of Internet influence over engaged citizenship.

The expansion of digital media all over the globe runs parallel to the increasing literature on the effects of Internet on political culture and behavior. Since its appearance, this technology was believed to facilitate, develop and produce new resources and skills useful for political action (Hoff 2004). Seminal works on this field focused in the relation between TIC'S and political participation (Bimber 1999, 2003; Pasek, More and Romer 2009; Bimber, Stohl and Flanagin 2009; Tolbert and McNeal 2008; Mossberg et al. 2008, Tolbert and Hamilton 2009; Xenos and Moy 2007), though the lack of strong evidence and

contradictory findings moved some scholars to focus on indirect effects, mediated by political attitudes.

A certain consensus has been reached regarding the effect of the Internet on attitudes related to political engagement, according to which digital media use can foster this set of orientations even when political interest (that also drives digital media use) is controlled (Boulianne 2009). Political efficacy (Scheufele and Nisbet 2002, Kenski and Stroud 2006, Lee 2006, Tedesco 2007) and trust (Kraut et al. 2002; Katz and Rice 2002, Pasek, More and Romer 2009) are two of the core political attitudes that Internet has been proven to foster.

According to these previous findings, there are reasons to expect that the use of the Internet will promote a particular sense of citizenship. But, which one? Following republican citizenship logic, virtuous citizens must consider the needs of the whole, rather than self interest, and play an active role in the public sphere. As it has just been stated, technology use can facilitate political mobilization and civic participation, improving community engagement; so it may be linked to civic republicanism (Mossberger et al. 2008). But the relation of the Internet with citizenship may become clearer in the light of Dalton's distinction between duty and engaged citizenship (Dalton 2007 & 2008). The first concept involves social norms and law obedience, which in some societies include voting and electoral participation. In contrast, Engaged Citizenship spans solidarity, the willingness to be active in politics, political autonomy, and a sense of criticism that may lead people to exert effective control over their officers, that is, to guarantee accountability.

The impact of virtual activity on political norms is currently uncertain. Nevertheless, there are powerful reasons to expect that the use of Internet may foster attitudes related to engaged citizenship. Firstly, virtual interactions allow for multiple, flexible memberships that are not bound by geographical limitations, based in shared interests, what would instill the sense of community among users (Kittilson and Dalton 2008). In other words, online activity would entail online interactions and a sort of "social capital" that may generate the sense of belonging to a community. As a matter of fact, many languages have a word to identify the community of Internet Users (*Internautas* or *interautes* in Spanish, Portuguese, French and Catalan), even if they have little in common, apart of their familiarization with this new media.

Besides its ability to build community –and community-oriented attitudes, there is also the issue of interactivity.  Understood as "the extent to which users can participate in modifying the form and content of a mediated environment in real time" (Steuer 1992:84), interactivity is the Net feature suffering more changes

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lately. The so-called Web 2.0 protocols and applications allow users to produce and share their own data, cooperating with other users to construct an alternative information system through blogging, wikis, social bookmarking and, of course, networking applications (Breindl and Francq 2008). Therefore, the Internet is increasingly empowering people in the domains of political information, communication and organization. This empowerment is probably more likely among people who were already politically motivated, but if the motivation factor is controlled for, then the regular use of Internet – especially for political purposes - might induce the perception that keeping an active and watchful attitude towards the government is possible and coherent with the logic of this new media.

Interactivity leads us to horizontality and autonomy, two features closely related to engaged citizenship norms. Horizontality, understood both as a synonym for "non-hierarchical" and the quest for legitimacy through peers' acknowledgement, rather than through authority and obedience, is a main component of engaged citizenship as well as an element of Internet-specific ethics (Aibar 2008). This strengthens the idea that the use of the Internet, even for leisure purposes, but especially for political purposes, gives birth to a sense of community belonging, in some senses alternative to the one constituted by fellow countrymen. Feeling responsible for the problems of this community, a value related to engaged citizenship, norms would be a logical consequence of horizontality. In addition, the more an individual becomes used to horizontal relations and this new logic of legitimacy, the less he would be impressed by or obedient to hierarchical authority. In other words, the more he will feel able to criticize and control the rulers.

Bringing this relationship to bear in the political arena, new technologies are a powerful influence on citizens' access to information about political representatives and institutions. They make contacting political figures and institutions easier, and allow people to communicate with public officials by means of blogging or e-mailing, and thus hold them accountable more easily. The Internet allows the inversion of the classic relationship between the rulers and the ruled, and may enhance the feeling that controlling public officials is desirable and feasible. We name this characteristic, related to the empowerment and the reversion of power fluxes, "autonomy."

The potential of Internet to instill autonomy among citizens would be boosted by another quality of this new media: its potential to reduce costs for political action, networking, political information and communication. This is a very well known mechanism working in the nexus within Internet and political engagement that is also valid in the case of engaged citizenship norms. Active citizenship is costly and demanding; it requires a ready and willing attitude and

lots of attention to the public arena (Dalton 2008). Surfing newspapers, news lists, forums or online blogs would take less time than comparing information published in the offline press or consulting opinion climates among friends, relatives and acquaintances. It would also be more efficient, since it allows users to select strictly the most interesting items regarding public issues. From this point of view, the Internet acts as a tool to guarantee the equality of opportunities to feel politically engaged among those people who are similarly motivated. It is not a sort of magical cure for inequalities related to objective and subjective political engagement, but the Internet is much more egalitarian than traditional media and makes engaged citizenship less demanding.

Nevertheless, we must take into account that the use of Internet is not equally distributed around the globe. The "digital divide" persists across both individuals and societies. From an individual perspective, the role of Internet as a tool to reduce the costs of political involvement may be more important for people with low Socio-Economic-Status (SES) and a high level of political motivation. From an aggregated perspective, the digital divide across countries may be one of the reasons why some comparative research conclusions on the effects of Internet on political behavior and culture is ambiguous or contradictory. The expansion of this new technology is undeniable, and this entails increasing chances for citizens of many types of political regimes to become engaged in networks that would foster feelings of community belonging, horizontality, autonomy…and which would mobilize them and provide them with political information. However, let's think of a society where the Internet is still a luxury. Who will first use its potentialities?

It is quite intuitive that Information and Communication Technologies (ICT's) adoption happens first among people with resources and strong motivations. Thus, it is possible that in less developed countries the frequency of Internet use would be more attached to engaged citizenship than in rich societies, where its use is more widespread. As a result, it is necessary to control for economic development variables to avoid that an "engaged avant-garde" in less developed countries would inflate the effect of the Internet on engaged citizenship norms. From a methodological point of view, it can be asserted that in less developed countries there is still room for seeing the effects of first contacts with this technology, whereas in rich countries the adoption of this new media will be completed and normalized in everyday life, causing a "ceiling" effect. Internet adoption would have reached a point in which it has no further effect on attitudes such as those belonging to engaged citizenship.

This is not the only trait of Internet that may affect engaged citizenship depending on contextual factors. Anonymity, for instance, is a feature that helps

shy people make advances to other people online, or to express polemical opinions (Cornfield 2003). But this trait may be even more important in societies where democratic rights are not completely guaranteed. It is then not a question of shyness, but of security and freedom. The Internet's fuzzy nature somewhere between the public and the private realms and the possibility of remaining anonymous make the Internet a paradise beyond the state, where it is possible to hold critical opinions and establish prohibited social relations on its basis (Sun 2002, Graham and Khrosravia 2002, Kok Wah and Teik 2002, Eickelman and Anderson 1999, Rinnawi 2009)

Following this train of thought, the role of Internet as a platform for social and political interactivity would be crucial where there are limitations to political rights. Its horizontal logic and autonomy potential would stand out, especially where the government shows authoritarian traits. But, above all, its role as a provider of critical information and opinions, and as a way to avoid media gatekeepers, would be more intense in those societies where there is not complete press freedom. What we are suggesting is that aspects of the Internet that might foster engaged citizenship norms would work with more intensity in regimes with limited or no democracy. This would explain why some voices have risen in non-liberal political contexts to stress the importance of ICTs in the development of a new notion of citizenship (see Yang 2003 for a Chinese example).

Of course, economic factors appear again as an important issue: there are more non-full democratic regimes among less developed countries than among rich countries (Robinson 2006). As a consequence, political rights as a moderator of Internet effects should be controlled by economic development. But the main reason to include development indicators in any analysis concerning engaged citizenship is that they tell us if rulers deserve suspicion from their citizenship. Fewer public expenditures indicate less responsive government, possible corruption and, thus, greater distrust among citizens (Uslaner 2004). Therefore, citizens would be more prone to think that it is important to keep an eye on government in less wealthy countries, especially if public expenditure is not noteworthy.

To sum up, there are at least two contextual factors that should be taken into account when studying the phenomenon of engaged citizenship norms: the degree of economic development and political rights. Both are as well related to Internet use. Citizens of developed countries would tend to think that it is less important to control political elites, and their use of Internet – even for political purposes – would be more extended and frequent. In countries suffering a lack of rights or freedoms, the Internet may lead aware people to critical thinking and engaged citizenship, and could provide them with suitable tools with which

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control governors. The main hypotheses that are going to be tested in the following pages are:

H1) The more a citizen uses the Internet, the more she will be prone to think that it is her duty to keep watch on government's actions.

H2) Differences across countries regarding their levels of engaged citizenship attitudes would rely on economic factors. A country's wealth denotes elites' efforts to develop a society, so that citizens would think that it is less necessary to control them.

H3) The distinct impact of the Internet on citizenship norms depends on democratic guarantees. Where political rights are not fulfilled, the Internet gains importance as a political tool and its positive effects on engaged citizenship are stronger.

**3.    Research design. Data, variables, methods and relations between factors.**

There are several possible ways in which to operationalize engaged citizenship. For the sake of simplicity, I have limited the analysis to a single indicator related to the engaged citizenship dimension, belonging to the subset of the "autonomy" attitudes (Dalton 2007). This is the belief that keeping watch on the government's actions is important to being considered a good citizen. It requires an active, responsible and attentive role on the part of the citizen; it focuses on people's rights and it i is reasonable to consider that it will belong to the group of citizenship norms all over the world

The theoretical framework has stressed the importance of Internet use to understanding why some citizens believe that keeping a vigilant attitude towards government is very important. This is an individual-level factor that can also be affected by circumstances such as age, SES or personal motivation. Therefore, any multivariate analysis facing the challenge of quantifying its impact over the importance of keeping an eye on government should include these variables as controls. Age and years of education – as an SES proxy – will be included in the subsequent analyses for this purpose.

Regarding motivation, two clarifications are needed. Due to data limitations, the selected indicator of Internet use frequency includes political motivation, since its exact wording is "On average, how often do you use the Internet to obtain political news or information?" This can be seen as a flaw or as

an opportunity to control for motivation, since all respondents with high frequency of use are keen to seek for political information. To be sure that it is the media and not the exposure to political information that fosters engaged citizenship, the information about Internet effects is controlled for the frequency of exposure to political news or information through TV. Both media indicators are measured from 0 to 4, where 0 means "never," 1 means "fewer than 1-2 days a week," 2 is 1-2 days a week, 3 is 3-4 days a week and 4 means every day.

This information is extracted from International Social Survey Program (ISSP) study on citizenship, conducted in 2004, which covers topics on citizenship and State-citizen relationships. Over 1.500 people were sampled in each of the 42 countries in which it was held; however, not every country asked all the questions on the questionnaire. Only 22 of them included the frequency of exposure to political information online. That determines the universe of this study, consisting of 22 countries, each quite different in their levels of Internet penetration, civic norms and economic development

This allows us to present some evidence on the issues discussed in this paper. First, that there exists quite a wide variation regarding engaged citizenship attitudes and Internet use for gathering political information. Figure 1 displays the mean levels, across countries, of respondents' perception of the importance of keeping an eye on the government to being considered a good citizen. There are more than two points on a 7-point scale of variation among them, with some East European countries ranking very low and Canada, Australia or Sweden ranked at the top of the table.

**Figure 1: Importance of keeping an eye on government to be considered a good citizen. Means by country (2004).**



Source: ISSP 2004.

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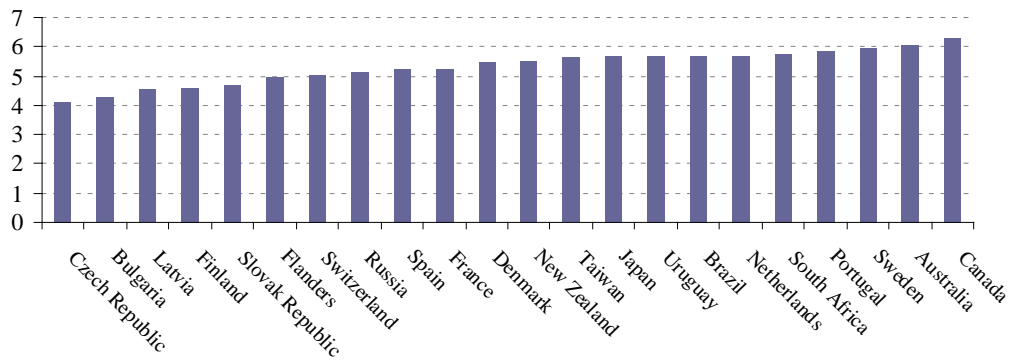
Figure 2 depicts the percentage of Internet users in each country, after Internet World Stats data. While South Africa, Brazil and Russia stand out for their low percentage of users, Sweden and the Netherlands have almost reached the total penetration of this new media.

**Figure 2: % Internet users among the population (2004).**
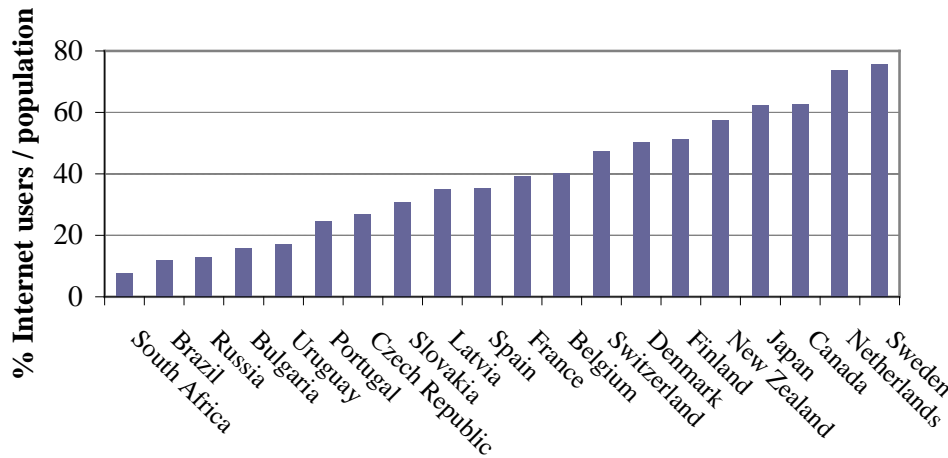


Source: Internet World Stats. www.internetworldststs.com/stats.htm. No data were provided for Australia and Taiwan in 2004.

Finally, there is one more piece of evidence obtained through the ISSP 2004 data that is helpful both to understanding why previous research has reached confounding conclusions and why a multilevel approach is needed. Figure 3 displays the results of an Ordinal Least Square regression used to predict the importance of "keeping an eye on government" only by means of the frequency of Internet Use. Each dot and line represents unstandardized B coefficients and their levels of confidence. Even in the absence of controls, it becomes obvious that this independent variable has very different effects on Engaged Citizenship. First, there are countries showing positive but non-significant effects: Australia, Canada, Japan, Switzerland, Slovakia, Uruguay, Bulgaria, Russia and Taiwan. Then, we can also find four countries - Sweden, Russia, Denmark, South Africa – where the effects of Internet are negative and non-significant. Positive, significant effects are found in New Zealand, Spain, Latvia, France, Portugal, Belgium, Brazil, Finland, Netherlands and Czech Republic. Finally, South Africa stands out for negative and significant effects of Internet use on the analysed citizenship norm. These data suggest that characteristics of the countries may be

interacting with individuals' Internet use, causing such diverse effects. Then it is necessary to model such effects.

**Figure 3: B coefficients and confidence interval for "Keep an eye on government" importance regressed on Internet use frequency[1].**
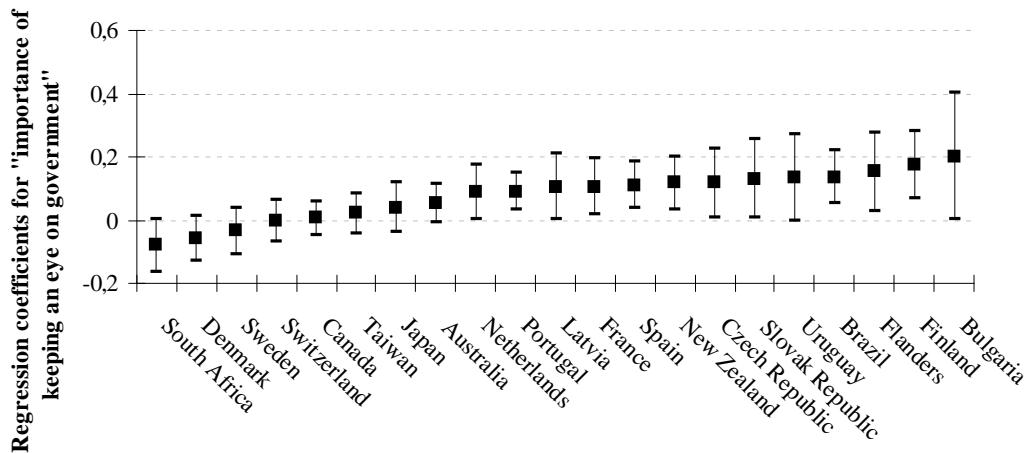


Source: ISSP 2004.

With regards to the operationalization of the variables capturing elite commitment to economic development and democratisation, two indicators were selected, taking into account three criteria. The first criterion demanded that the figures should reflect the notions of economic wealth, public investment and democracy; second, that there ought to be available data for the 22 countries in 2004, and third, that the indicators should show enough variability. Two macro-level variables were selected: Government spending as a percentage of the GDP and having banned political parties.

Regarding economic development, it is well known that government spending is the sum of public expenditures in goods and services, except transfer payments such as social security or unemployment benefits. This variable captures economic development without relying too much on exports and imports and, thus, not penalizing ancient colonies. In addition, it tells us how much of the nation's wealth is due to public investment. As a consequence, it can be seen as an indicator or rulers' attitude towards the development of their nation. As stated in

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[1] The coefficients are the result of the following regression:

Importance of keeping an eye on government= $\beta_0 + \beta_1$*Internet Use+$\varepsilon$.

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the theoretical framework, it is expected that in countries where public investment is lower, citizens would think that controlling governments is more important than in countries with high government spending. In the former, suspicions of corruption would arise and citizens would be more likely to think that keeping an eye on their elites is a necessity.

Operationalizing whether or not a country is a full democracy is much trickier and not very useful for our purposes, since all the countries selected for this research can claim that they held competitive elections and thus are democracies. Many indexes have been suggested to measure the level of this claimed democracy, such as Poliarchy, Polity, Freedom House indices, but they are usually complex and gather lots of information referring to different institutions measured through varying criteria[2]. This, together with data availability limitations, drove me to select a single – though very illustrative – item to approximate whether or not political rights were fully guaranteed: the existence of banned parties.

This does not divide our sample into democratic and non-democratic countries, but, to a certain extent, points to rulers who profit from quelling opposition. This, according to Przeworsky's work (1991), would be a signal of a flaw in democracy. We can infer that the expression and socialization organizations of these banned parties are illegal too, limiting the rights of their supporters. This could also indicate the existence of a section of civil society working underground, trying to bypass law, politicians and traditional media. From another point of view, banned parties can be the villains, rather than the victims. We can easily find banned parties in former dictatorships, where the arrival of democracy has consigned ancient non-democratic elites to oblivion. In any case, this variable suggests that suspicions of democratic loyalty among the banners and the banned are reasonable. Though some democracies with high rates in the aforementioned democracy indexes may show a positive value in this dichotomous variable, it will identify almost all dictatorships or non-fully democracies. These data were collected by the Institutions and Elections Project (IAEP)[3].

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[2] Even if they offer the attractive characteristic of their variability, this advantage is not very evident in our case. For instance, all the 22 countries reached a value higher than 9 in Freedom House index except Brazil (8) and Russia (5).

[3] The IAEP site for more information on this variable is :

http://www2.binghamton.edu/political-science/institutions-and-elections-project.html.

All aggregate data mentioned and used in this paper were gathered by Gothenburg's Quality Of Government Institute  (Teorell *et al*. 2010).

The data structure and the mixing of variables at the individual and at the aggregate level require a multilevel approach to test the stated hypotheses. First, when handling pooled cross sectional surveys, the structure of the errors will probably reproduce similarities within countries, underestimating the standard errors of the macro-level variables, which may affect the coefficients themselves. This can only be fixed by clustering errors by countries or applying multilevel analysis.

Regarding the use of variables measured at different levels, figure 4 sums up the hypothesis and the relations between the suggested indicators. The individuals' belief that controlling governors is important to being considered a good citizen depends on four variables at the individual level (age, years of schooling, frequency of Internet use for searching political information and frequency of TV use for the same purpose) and one aggregate variable, Government spending as a percentage of the GDP, which indicates both nation wealth and politicians' commitment to the economic and human development of their nation. An interaction between the aggregate and individual level is set, since it is expected that the positive effect of the Internet on the engaged citizenship norm would be stronger where democratic rights are not fully guaranteed, in that case, in those countries with banned parties.

**Figure 4: Research design. Relations between the main variables implied in this research.**



Second level: national characteristics          First level: individual characteristics
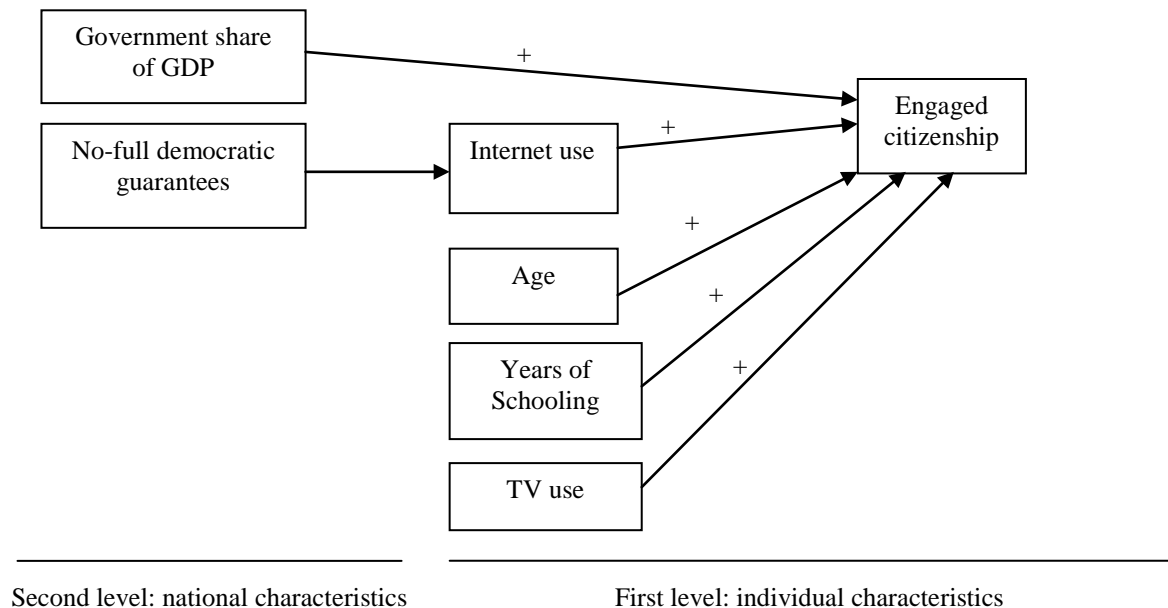
In multilevel terminology, it can be asserted that the initial level (intercept, the parameter $\gamma_{00}$ in equation 1) of engaged citizenship will depend on government expenditure (its effect is captured by parameter $\gamma_{01}$), and the strength of the effect of the Internet (its slope, with parameter $\gamma_{30}$) will be stronger in contexts where political rights are not completely guaranteed. The full equation of the model can be expressed as follows:

(1)  Civ. should keep an eye $= \gamma_{00} + \gamma_{01} * \text{GOV.EXP} + \gamma_{10} * \text{AGE} +$
$+ \gamma_{20} * \text{YEARSCHOOL} + \gamma_{30} * \text{INTERNET} + \gamma_{31} * \text{BANNED PARTIES} +$
$+ \gamma_{40} * \text{TVUSE} + U_0 + U_3 * \text{INTERNET} + r.$

Thus, Hierarchical Linear Modelling is recommended to solve this equation, which was done using HLM for windows (version 6) developed by Raudenbush and Bryk (2002). A relevant requirement of this technique is the absence of missing data. To avoid them, cases lacking of information regarding sex and age were deleted. Then, missing values of the dependent variable, TV use, Internet use and years of schooling were imputed, since they probably were not missed at random[4].

Four models were estimated using Maximum Likelihood estimation, starting with a null or baseline model that only takes into account the grouping of the observations in second-level units, and that tries to answer how much variance of the dependent variable depends on this second level. The next model introduces predictors at the individual level, and the third lets the effect of Internet use vary across countries. The last model includes second-level predictors. The results are presented and discussed in the next section.

## 4.      Results. A multilevel model for an engaged citizenship norm.

Table 1 displays these four models. Model 1 has a variance component of 0,31 that is statistically significant. This suggests that there is considerable unexplained variance in the belief that governments should be watched across nations. The amount of the variance of the citizenship norm due to macro factors is almost 12%. The second model reveals that these unexplained variances of the dependent variable keeps varying systematically and significantly across nations

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[4] 1332 observations were imputed regarding "keeping an eye" using 13 variables. 1106 observations of the "Internet use" variable were predicted by means of 11 variables. 1264 observations were imputed for years of schooling, relying on 14 variables and 449 observations were imputed regarding TV use frequency using 11 variables.

even after accounting for the micro-level predictors. All these individual predictors are significant except the years of schooling; nevertheless, the theory suggests that it should be kept in the model as a control for Internet use. It is also noteworthy that Internet use has the predicted effect, confirming the first hypothesis. The more an individual uses Internet to get political information, the more she will agree that keeping an eye on government is important.

The third model introduces a new random effect, allowing the slope of Internet's effect to vary between countries. This random effect ($U_3$) is significant as well, so that we can try to explain the differences of this effect between countries. The last model includes the two macro level variables that try to explain initial levels of the engaged citizenship norm in every country ($\gamma_{00}$) and the extent of the effects of Internet on it ($\gamma_{30}$). As a result, two new parameters are estimated in the model ($\gamma_{01}$ and $\gamma_{31}$), accounting for interactions between individual-level and macro-level variables.

The parameter referring to the role of Government Expenditure has a negative and significant effect. It goes in the same direction as hypothesis number 2, so we can assume that in countries where the government share of the GDP is higher, people are less likely to think that politicians should be controlled. Regarding the role of banned parties, its influence on the relation between Internet use and engaged citizenship norm is confirmed by a positive, significant coefficient. This means that if a country has banned parties, then the positive effect of Internet use on critical, engaged citizenship norms is larger.

Random effects for this last model indicate that the variance of the analysed phenomenon at the second-level has decreased substantially after including these macro-level variables. It must be stated that the model doesn't show significant improvement with regard to the former, taking into account the reduction in the deviance and the degrees of freedom, which models 2 and 3 did. Nevertheless, the aim of this model is more focused on testing hypotheses regarding Internet use, banned parties and government share of the GDP than on perfectly predicting the importance of keeping an eye on government.

**Table 1: Multilevel linear estimations of the importance of "keeping a watch on the actions of government".**

| Variable | Parameter | 1) Null Model Coef. | St.Error | 2) Inconditional Model. Random Intercept Coef. | St.Error | 3) Random Slope Coef. | St.Error | 4) level 2 predictors: Democracy and economic development. Coef. | St.Error |
|---|---|---|---|---|---|---|---|---|---|
| **Fixed effects** | | | | | | | | | |
| Constant | $\gamma_{00}$ | 5,291*** | 0,118 | 4,297*** | 0,193 | 4,29*** | 0,189 | 5,17*** | 0,456 |
| Gov.spend.(GDP) * $\gamma_{00}$ | $\gamma_{01}$ | | | | | | | -0,052** | 0,024 |
| Age | $\gamma_{10}$ | - | | 0,01*** | 0,001 | 0,01*** | 0,001 | 0,01*** | 0,001 |
| Years of School | $\gamma_{20}$ | - | | 0,000 | 0,000 | 0,005 | 0,000 | 0,000 | 0,000 |
| Internet use freq. | $\gamma_{30}$ | - | | 0,056*** | 0,015 | 0,062*** | 0,000 | 0,05** | 0,016 |
| Banned Parties * $\gamma_{30}$ | $\gamma_{31}$ | | | | | | | 0,062** | 0,021 |
| TV use freq. | $\gamma_{40}$ | | | 0,177*** | | 0,179*** | 0,02 | 0,179*** | 0,020 |
| | | | | | | | | | |
| **Random effects** | | | | | | | | | |
| Var (constant) | $U_0$ | 0,309*** | | 0,323*** | | 0,343*** | | 0,273*** | |
| Var (residual) | r | 2,336 | | 2,24 | | 2,236 | | 2,236 | |
| Var (slope internet use) | $U_3$ | | | | | 0,005*** | | 0,004*** | |
| Intraclass Correlation ($U_0$ / $U_0$ + r) | | 11,7% | | 12,6% | | 13,3% | | 10,8% | |
| Deviance | | 122174,6 | | 120798,4 | | 120763,3 | | 120754,6 | |
| Number of parameters | | 3 | | 7 | | 9 | | 11 | |
| Model comparison test | | - | | 1376,2*** | | 35,1*** | | 8,7 | |
| N Level 1. | | 33.112 | | 33.112 | | 33.112 | | 33.112 | |
| N Level 2 | | 22 | | 22 | | 22 | | 22 | |

Maximum likelihood estimation. No missed values. ***p<0,01, **p<0,05, *p<0,1.

The models take as reference the equation (1).

Years of schooling have been centred to group mean.

Figure 5 displays random effects of the second-level variables in the last model. The predicted values of the dependent variable are higher among the countries with low government share of GDP (25th percentile). This means that people are more prone to think that good citizens should control their governments where they do not invest much in development. On the contrary, the intercept of predicted values is lower among the countries located at the 75th percentile regarding their public expenditure. The lines represent the effect of Internet use on the belief that keeping an eye on government is important. The four lines indicate a positive effect, but the slope is more pronounced if the country has banned parties. In short, there is some support for the hypothesis that economic variables affect how important citizens think it is to control their governments, independent of a variety of individual-level characteristics. There are also findings supporting the hypothesis that limitations on political rights may increase the impact of Internet use on this attitude of engagement.

**Figure 5. Contextual effects on the predicted values of the engaged citizenship norm (*keepeye*).**



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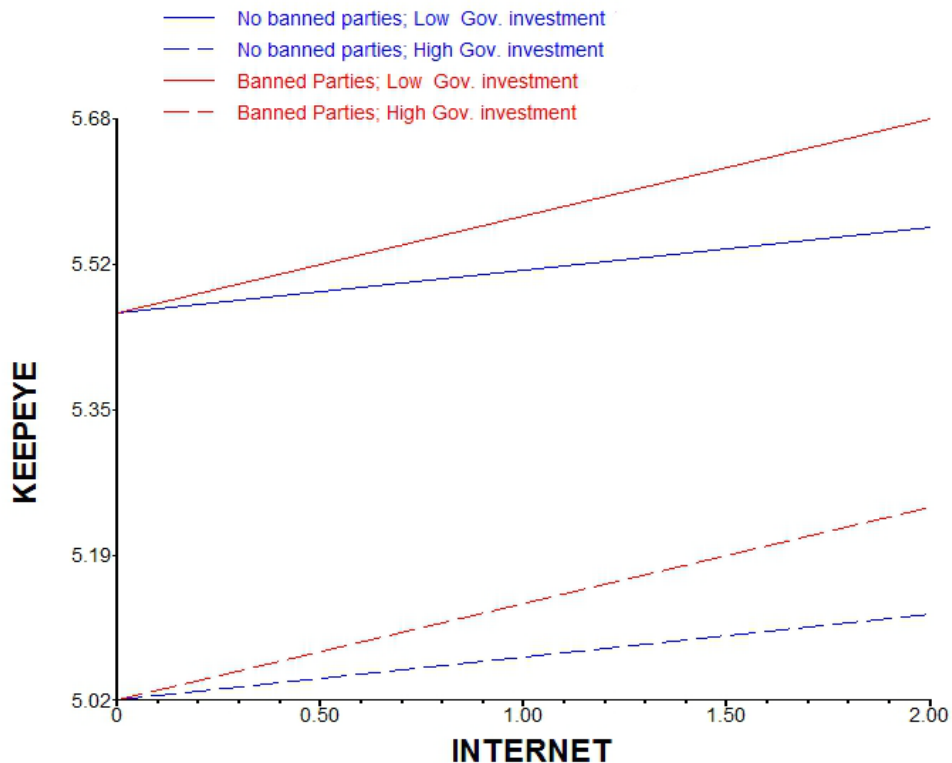
## 5.      Discussion and conclusions.

Focusing on an attitude belonging to the engaged citizenship dimension, this paper has attempted to contribute to the literature concerning the effects of the Internet on political attitudes in several ways. First, it has faced the problem of different and contradictory findings over countries, suggesting that contextual variables may be mediating these effects. Second, it has argued that in nations with limited political rights, the Internet gains importance as an alternative information and communication medium, and the Internet's positive effects on active citizenship attitudes are thus enhanced.

To control these institutional effects by macro variables related both to Internet adoption rates and to the level of engaged citizenship, economic development has been introduced in the estimation of the perceived importance of keeping a watch on government actions. It has been hypothesized that economic wealth and elite commitment to development (both measured through government share of GDP) may refrain citizens from thinking that their governments should be controlled. Governments that invest in public development are less suspicious to their citizenry, and that accounts for significant variance across countries with regards to this citizenship norm.

The analysis conducted following multilevel methodology confirms the main hypotheses stated. The role of Internet use – in this case, for gathering political information – as an enhancer of engaged citizenship has been confirmed, even after controlling for the use of offline media (TV) for the same purposes, age and years of schooling. The government's use of GDP accounts for a substantial part of the variance of this phenomenon across countries. The existence of banned parties fosters the positive effect of Internet use on the belief that governments should be controlled.

Nevertheless, we are aware of the limited scope of these findings. The exploratory nature of this paper has restricted the number of variables in the models. Further research would increase the number of dependent variables, including attitudes regarding civic duty and engaged citizenship, in order to compare Internet's role in their development. It is also possible and desirable to increase the number of contextual explanatory factors. The government share of GDP might be combined, for instance, with corruption indicators in order to better explain the amount of variance across countries. The model could also include second-order variables such as freedom of press that capture the existence of an unsatisfied, dissident civil society when trying to explain the Internet's role. However, the way is paved for continuing to understand the diversity of Internet effects on citizenship.

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