Universidad de San Andrés

Departamento de Economía

Maestría en Economía

Television, electoral debates and democracy

Autor: Iván Torre

DNI: 31695541

Mentor de Tesis: Sebastián Galiani

Victoria, Buenos Aires, 26 de Julio de 2019

Universidad de San Andrés

Departamento de Economía

Maestría en Economía

Television, electoral debates and democracy

Iván TORRE

DNI 31.695.541

Mentor: Sebastian GALIANI

Buenos Aires

26 de Julio de 2019

Tesis de Maestría en Economía de

Iván TORRE

"La televisión, los debates electorales y la democracia"

Resumen

Los debates públicos entre candidatos durante la campaña electoral son una práctica común en la mayoría de las democracias modernas. Al día de hoy los determinantes de esta práctica no están claros al comparar entre países: si bien académicos han estudiado la decisión individual que lleva a un candidato a participar o no en un debate, poco se sabe sobre qué es lo que hace más probable que estos debates se celebren en un país o en otro. En este trabajo me focalizo en el rol de la tecnología de los medios de comunicación y estudio la relación entre los debates electorales y la penetración de la televisión. Para llevar adelante este estudio construí una base inédita que registra cuándo se realizaron debates electorales para la posición ejecutiva más alta en 32 países democráticos en el período 1945-2008. Encuentro que la penetración de la televisión está positivamente asociada con una mayor probabilidad de celebrar debates electorales, aunque esta relación es no-lineal: existe un umbral –alrededor de 27 televisores cada 100 habitantes- que aumenta enormemente la probabilidad de que dicha práctica se lleve a cabo. Chequeo la solidez de las estimaciones verificando si las características institucionales del país tienen un efecto y encuentro que la relación entre la penetración de la televisión y los debates electorales es particularmente importante para aquellos países cuyas instituciones tienen origen en el derecho anglosajón.

Palabras clave: Televisión, debates electorales, medios de comunicación, campañas electorales

"Television, electoral debates and democracy"

Abstract

Public debates between candidates during electoral campaigns are a common feature of most modern democracies. The drivers of this practice are not well understood in a cross-country setting: whilst researchers have studied the individual decision that drives a candidate to engage or not in such debate, little is known about what makes some countries more prone to hold this type of political events than others. In this paper I focus on the role of media technology by studying the relationship between electoral debates and the penetration of television. To do so, I built a unique database that registers the timing of electoral debates for the highest executive position in 32 democratic countries for the period 1945-2008. I find that, indeed, increased TV penetration is positively associated with a higher probability of holding electoral debates, although this relationship is non-linear: there is a threshold –around 27 TV sets per 100 inhabitants- which increases dramatically the probability of such event happening. I check the robustness of the estimates by looking at whether institutional characteristics have an effect and find that the relationship between TV penetration and electoral debates is particularly important for countries whose institutions trace to Common Law.

Keywords: television, electoral debates, media, electoral campaigns

Códigos JEL: D70, D72, L82

Universidad de San Andrés

1.1 Introduction

In modern democracies, media have become one of the most important political actors in the social scene – sometimes referred as the "fourth power" after the executive, legislative and judiciary ones. This pre-eminence has been magnified by the advent of television, which has practically dethroned the written press as the most important source of information all over the world - although now rivalled by online media and social networks. Contemporaneously to this transformation in media, democracy has expanded throughout continents and is now becoming the most common political regime anywhere in the globe. This reality has driven many social scientists to investigate the possible relationships between both phenomena: Has television been behind the triumph of democracy? Or is the expansion of television a by-product of welfare improvements brought by democracy? These questions also refer to a particularly relevant research agenda – the relationship between technology and institutions.

On this paper I will try to shed light on one aspect of this relationship – namely, the role that TV penetration has played in the emergence on what has become a common practice in most democratic regimes: pre-electoral debates in which the most important candidates discuss their proposals and exchange their points of view. To do this I test empirically the relationship between TV and debates through the use of a previously inexistent database on electoral debates in 32 countries that I have constructed for this purpose. To our knowledge this is the first paper that deals this issue in this fashion and the first one that shows conclusive evidence on the importance of television as a promoter of a better quality of democracy.

This paper is organized as follows: section 2 presents the literature on electoral debates and derives some theoretical considerations on the relationship between TV penetration and debates. Section 3 presents the database to be used in the analysis. Section 4 presents the main empirical specification and results, including robustness checks. Lastly, Section 5 concludes.

Universidad de San Andrés

2.1 Electoral debates

Debates between politicians are not new. The tradition of a public debate of ideas is rooted in the most antique version of democracy, that is, the Athenian democracy. The art of rhetoric used to be considered one of the most important features of practical democracy, and debates were the set for its development. Modern democracy has, nevertheless, other important features: one of them is the carrying out of a regular electoral cycle which marks the end and beginning of the democratic authorities' term of office. Elections are sometimes considered as the defining moments of modern democracy – those in which the democratic principle of a government elected by the citizens comes to life. In this context pre-electoral debates between candidates have emerged as a common electoral practice in the second half of the 20th century. They differ from regular, parliamentary debates in the sense that politicians address the citizenship directly and their main objective is winning an upcoming election.

McKinney and Carlin (2004) indicate that from a normative point of view, political scientists very much agree that candidate debates help to enhance democracy through different channels: they contribute to the conformation of a more informed and rational electorate and provide politicians an opportunity to seek the consent of the governed. From a more positive point of view, some scholars have pointed out that debates may set the public agenda on certain topics, although there is no consensus on this. Sears and Chafee (1979) underline some "latent effects" of electoral debates that are of particular interest: these practices may contribute to the legitimization of democratic institutions and the political socialization of pre-

adults. In this sense, whether debates are decisive or not in electoral results is not a particularly relevant issue since their carrying out is what cares as they boost the democratic regime's overall robustness.

Electoral debates are considered an essential characteristic of the so-called "Americanization" of campaigning around the world. In that sense it is useful to start our brief historical description with the case of the United States. Trent and Friedenberg (2007) have pointed out that electoral debates have been present in political campaigning in the United States since the 19th century, but with a limited reach since they were concentrated in sub-national elections (like mayoral elections, for instance). The emergence of radio offered a possibility for the carrying out of debates with a broader audience, but changes in legislation assuring equal-time allocation for all the political parties in radio broadcast hindered that possibility. In fact, in a predominantly bipartisan political system such as the US one, conducting a debate between the republican and democrat candidates would have automatically implied the inclusion of a large number of less known candidates that only gathered the support of a small portion of the electorate. It is not surprising, then, that the first debates conducted on radio were done between candidates of a same party in face of primary elections. This was the case of the Republican presidential candidates Thomas Dewey and Harold Stassen in 1948. Four years later the first debate broadcasted by radio between candidates of rival parties was done – J.F.Kennedy, a democrat, against Henry Cabot Lodge, a republican, both of them senatorial candidates for Massachussetts. In 1959 the equal-time provision clause (section 315 of the Communications Act) was modified by the Congress, thus allowing for the carrying out of debates exclusively between the Republican and Democrat presidential candidates. The first one –between J.F. Kennedy and Richard Nixon- was broadcasted on September 26, 1960 and was watched by 60% of the US adult population. In the following weeks, three more debates were conducted for the 1960 campaign, all of them resulting in a slight win for the Democrat candidate. There were no presidential candidate debates for the 1964, 1968 and 1972 elections. Since 1976, when they were resumed, all presidential campaigns included a debate between the Republican and Democrat candidates –except for 1992, when the independent candidate Ross Perot was also included. Starting in 1984 vice-presidential debates have also been carried out in all electoral campaigns. The practice of debates is now well rooted in US political campaigning and the creation of a bipartisan Commission on Presidential Debates in 1987 is a proof of that fact.

Electoral debates outside the US trace their roots to similar or even earlier dates. For instance, the first debate between party leaders in face of an upcoming election in Sweden was carried out in 1948 between Prime Minister Tage Erlander and opposition leader Bertil Ohlin (Uppsala University, 1999). The 1960s saw the carrying out of electoral debates in several western countries: after the US in 1960, the Netherlands followed in 1967, then Canada in 1968 and finally Germany in 1969. An interesting fact is that Venezuela carried out debates for the 1963 and 1968 presidential elections as well. Gradually more countries started having electoral debates, although this practice was mostly limited to Western developed countries – with the noteworthy exceptions of Venezuela and Colombia during the late 1980s. It was only during the 1990s that electoral debates started to be carried out in relatively less developed countries such as most of Latin America, Eastern Europe and some countries in Southern Europe. This can be seen in Chart 1, which plots the decile of world income each country having debates belongs to. Whilst up to the 1980s only countries in the 8th, 9th and 10th deciles of world income had carried out debates between candidates, by the early 2000s countries in the 6th and 7th deciles had also organized electoral debates.

2.2 Television and debates

This section discusses the relationship between TV penetration and electoral debates. First of all, we should ask us the following question: What drives politicians to engage in public debates with rival candidates? If we suppose that candidates in an election seek to maximize the expected number of votes they will receive in an election -a standard assumption in the political economy literature-, the decision of carrying out a public debate with other candidates may be probably related to i) the probability of having a good performance in the debate and ii) the influence of the debate in the electoral result. Here I will focus in the second issue, that is, the impact a good or bad performance in a public debate has on the electoral result.

Ceteris paribus the performance of the candidates, a public debate may have an impact on the electoral result through roughly two different means: on the one hand it is more plausible that a debate will have an impact on the result if it is watched by a large enough audience – that is, if a significant number of voters watch it. On the other hand, the debate may have a significant impact on the result if the electoral race is very competitive, i.e. when rival candidates are very close to each other in voting intention. If the result is clear before the debate – for instance, if a candidate holds a large difference in voting intention to its rivals – then the only possibility that such practice may influence the final electoral results is a very bad or very good performance by one or several of the candidates, something which I have assumed constant in this preliminary analysis. As a side note, in some countries debate are seen as a part of a "democratic tradition" that must be respected, even if results are clear beforehand. In this sense, a candidate holding a large positive difference in voting intention to its rivals may well decide to engage in a public debate in order not to deceive its voters; these strategies may be prevalent in countries were the so-called "valence issues" play a large role in deciding the electoral result, although this is an issue I don't deal with in this paper.

With this framework in mind, it is clear then how the expansion of television penetration in a given country works as an incentive to engage in public debates: as more households have access to television, the proportion of potential viewers-voters in the population rises. Thus, candidates may be more willing to carry out a pre-electoral debate since it can be a resourceful campaigning practice in terms of the potential impact in the election's final results. This is the main theoretical hypothesis to test: whether prevalence of debates is higher when TV penetration increases. Note here that I am leaving aside the strategical dimension of debates – that is, the analysis of gains and losses an individual candidate faces in choosing whether to engage in a debate or not. I do this on purpose since our interest lies not in the candidates' behaviour but in the more institutional characteristics of the electoral process.

There is evidence, however, that TV penetration may be correlated also with voter disinterest: Gentzkow (2006) shows that, during the 1950s, electoral turnout dropped in US counties where TV was introduced. In this sense, then, whilst increased TV penetration may widen the reach of a candidate´s campaign, it may also reduce the effectiveness of such campaign if voters lose interest in politics. On the other hand, Prat and Stromberg (2005) show that the arrival of commercial TV channels (as opposed to public TV channels) in Sweden raised the average information awareness of voters as new stations catered for an audience previously unattended by state monopolies. This suggests that the relationship between TV penetration and prevalence of electoral debates could go either sense.

What do we know about the factual relationship between television and debates? The fact that all of the debates carried out these days are televised –and since the late 2000s, also streamed online- suggests a very close link. Historically, the diffusion of television shows a common

trend with the expansion of debates throught the world, as it can be seen in chart 2. The diffusion of television is not only the result of general economic growth but also thanks to the reduction of its price. This can be seen in chart 3. Nowadays, the prevailing way of organizing a debate consist in one or a series of debates between the main candidates broadcasted simultaneously by all TV channels or by a pool of the most important ones. If there is no agreement between the TV networks, different debates may be conducted separately and in an independent fashion although these cases are a minority. In some countries, TV networks are active promoters of public debates between candidates: for instance, CNN has promoted and organized debates for the presidential elections of Ecuador and Nicaragua in 2006, of Guatemala in 2007, of Paraguay in 2008, and of El Salvador in 2009.

Regulatory aspects may have also an influence on the relationship between television and debates. In fact, regulation of televised debates is enormously heterogeneous throughout the world and affects the way they are carried out. For instance, in some countries where a national electoral commission exists (a public institution that carries out the electoral process) –Bulgaria, Korea or Mexico for instance- debates are organized or overseen by that institution and several rules concerning timing, selection of participants, topics discussed and other issues are enforced. In Korea, for example, the regulation indicates that public service TV stations should broadcast the debate in relay during prime time hours. In other countries regulation of debates fits in more general campaign regulations. Some of these insist in equal time provision for all candidates – which has resulted in debates being conducted with as much as ten participants in Scandinavian countries, for instance- whilst other are more lax in that sense –as in Brazil, where the Electoral Code requires only a minimum of three candidates present. In the United States presidential debates are organized by the Commission on Presidential Debates, a bipartisan NGO, with little intervention of the Federal Electoral Commission. Facing claims that minor candidates were being excluded from the debates, the Supreme Court ruled in 1998 that is in the right of the organizers of a debate to leave out candidates who don't enjoy a large enough public support.

3. The database

3.1 Description

One of the main contributions of our paper is the presentation of a previously inexistent database on electoral debates that I have constructed for this purpose. The database consists on information about electoral campaigns, debates and TV penetration in 32 countries for the period 1945-2008. Our first task consisted in tracking all the campaigns for elections I considered relevant in our analysis. I have concentrated on elections for national executive authorities, that is, elections through which the authorities of the executive power are elected. In the case of countries with parliamentary regimes the selection was simple: I tracked all the elections for parliamentary authorities, usually the only "national" elections that are carried out in those countries. For the case of countries with presidential regimes, I concentrated our attention only in presidential elections, leaving aside mid-term legislative elections. For the case of semi-presidential regimes, in which some of the executive responsabilities are in charge of the president and other in charge of the prime minister, I carried out a case-specific selection. In the case of France, for instance, the relevant election for us was the presidential election, whilst in the case of Portugal I took into account both elections – the presidential ones and the parliamentary ones. The choice made was based on the dynamics of each semi-presidential regime.

Universidad de San Andrés

After the tracking of campaigns was carried out I focused on identifying the elections during which one or more debates between the main candidates were carried out. I thus constructed a dummy variable called *debate* that took a value of one if the election carried out in a given year included at least one debate during the campaign, and took a value of zero otherwise. In some cases debates were carried out but without the main competitors – in these cases I assumed there was no "real" debate and the variable *dummy* took value of zero. For more precisions on these issues refer to the database appendix. All the information was extracted from several sources such as academic papers and newspapers – the complete references are also available in the database appendix. An additional variable included in our database and which we will take as dependent variable is *lastdebate*, a dummy which takes value of one if the last election to date included at least one debate during the campaign and value of zero otherwise– that is, if *lastdebate* takes a value of one in 1990 for a given country, that means that the last election up to 1990 included at least one debate between candidates during the campaign.

Another relevant variable found in our database is the number of TV sets per 100 inhabitants, a measure of TV penetration. The source for this variable was the information available on the International Telecommunications Union (ITU) database on ICT indicator. Other variables included in our database are the GDP per capita in 1990 Gheary-Kamis dollars, extracted from Maddison (2009) and a series of institutional variables such as the legal origins of each country (from LaPorta et al, 2008), the Polity IV index and others.

The total number of countries included in the database is 34 and consist of most of Western Europe, some countries of Eastern Europe, nine Latin American countries, three Asian countries and the so-called Western Offshoots. The selection of countries depended only in the availability of information – I have only included those countries with democratic regimes for which I had reliable information indicating that debates were carried out or not. This means that I have deliberately left out of our database non-democratic countries and democratic countries without reliable information on campaigns. I look forward to receive contributions from readers so as to enlarge our database.

A last remark should be made: since missing values on TV penetration data are widely present for many countries in the years 2000-2008, the estimations I will conduct on following sections are restricted to the period 1965-2000.

3.2 Summary statistics for main variables

In our database 30 out of 32 countries have conducted at least once a debate during an electoral campaign. This practice is fairly constant: of these 30 countries, 14 have not abandoned it since the first time it was done, 13 abandoned (and later retook) it just once and 34 have abandoned it twice (only two of them later retook it). One country held debates in almost all elections covered in the database: Sweden. Two countries, on the contrary, never had debates: Argentina and the United Kingdom.

Across time, TV penetration has risen in all countries: the sample average for 1965 was 10.7 TV sets per 100 inhabitants and 53.3 TV sets per 100 inhabitants in 2003 – the last year for which a reasonable average can be computed. In that year, the lowest value of TV penetration was 19 TV sets per 100 inhabitants in Venezuela and the highest was 111 TV sets per 100 inhabitants in the United Kingdom.

4. Empirical analysis

4.1 Basic Empirical Specification

The basic specification to test the relationship between TV penetration and the carrying out of pre-electoral candidate debates is the following linear probability model of having carried out a debate in the last campaign:

$$lastdebate_{ct} = \alpha_c + \alpha_t + \beta.tvpenetration_{ct} + \gamma.\varpi_{ct} + \varepsilon_{ct} \quad (1)$$

Where α_c is a country fixed effect, α_t is a time period dummy, $tvpenetration_{ct}$ is a measure of TV penetration in country *c* in period *t* and ω_{ct} are other controls. In order to better appreciate time effects I use only observations from years ending in 0 and 5 for our period of analysis 1965 – 2000. This would give a total of 8 observations per country, although I do have some missing values for years 1965 and 1970.

In this basic specification I include TV penetration as a continuous variable – this means that I are assuming that, if the relationship exists, the growth in the number of TV sets in a country will raise the probability of carrying out a debate in a constant manner, both for high and low levels of TV penetration. The variable I use to measure TV penetration is the number of TV sets per 100 inhabitants.

Apart from the fixed effect controls already mentioned, I include in this specification time-varying controls for the log income per capita extracted from Angus Maddison's database and the average years of schooling from the Barro-Lee dataset[1]. These controls are very important since they could eventually invalidate our hypothesis of a more technological determinism of debates. In fact, if these regressors "absorb" the variance of our dependent variable this would indicate that debates are not the result of the appearance and diffusion of television but of an improvement in general welfare conditions and educations – namely, a simple result of economic development.

4.2 Basic Results

The results for equation (1) using the whole database (approximately 8 observations per each of the 32 countries included, a total of 242 observations) are presented in column (1) of table 1. A positive correlation between the number of TV sets per 100 inhabitants and carrying out candidate debates is found whilst income per capita and education appear to have a non significant correlation. The data used has, nevertheless, a flaw since it contains observations for years of non-democratic government in certain countries. To cope with this issue, I carry out two strategies: the first one consists simply of including a dummy variable called *democracy* which indicates whether the government in charge in period *t* was democratically elected (value equal to 1) or not (value equal to 0). To construct this variable I use information coming from the Polity IV database. The second strategy consists simply on restricting the estimations to the observations in democracy, that is, I exclude all the observations for which *democracy* has a value of zero. Results are presented in columns (2) and (3) of table 1. In both specifications I find a positive correlation for the relationship between TV penetration and debates, although it is weaker in specification (3). Interestingly, in this last specification income per capita shows a positive and significant correlation with the carrying out of debates. This would suggest that in democratic regimes it is not only the diffusion of television that is associated with a higher probability of carrying out a candidate

[1] Available in www.barrolee.com

Universidad de San Andrés

debate, but also the process of economic development itself.

4.3 Threshold specification and results

Results of the basic specification suggest the existence of a positive correlation between TV penetration and debates even when controlling for variables related to the economic development of each country. I now try to further understand the nature of this relationship by testing the existence of "threshold effects" that are somewhat present in our theoretical preliminaries. In fact, I indicated in previous sections that politicians may engage in a public debate with rivals if a potential good performance can be viewed by a large enough audience so as to change the electoral result. In light of this it could be argued that the probability of carrying out debates doesn't grow smoothly but may show a discontinuity around a certain threshold – a threshold which represents something like the minimum number of viewer-voters that are needed for a debate to effectively have an impact on the electoral result. Below that threshold public debates may not be held because of their relatively low impact on the campaign, whilst over that threshold they may be always carried out.

An initial way to analyze the existence of threshold effects is to partition the continuous variable *tvpenetration* so as to make it discrete. The first specification I test is the following:

$$lastdebate_{ct} = \alpha_c + \alpha_t + \beta_1.dtv1_{ct} + \beta_2.dtv2_{ct} + \beta_3.dtv3_{ct} + \gamma.\varpi_{ct} + \varepsilon_{ct} \quad (4)$$

Where *dtv1*, *dtv2* and *dtv3* are dummy variables which indicate whether the value of *tvpenetration* falls in the first, second or third quartile of the variable's distribution in our database. This specification allows for the existence of three thresholds – one at a value of 15 TV sets per 100 inhabitants, another at 27 TV sets per 100 inhabitants and the last at 42 TV sets per 100 inhabitants. Controls are the same as in the previous specifications.

The results for countries during democratic regimes are presented in column (4) of table 1. It can be seen that the coefficients associated to variables *dtv1* and *dtv2* are negative and significant. This would imply that democratic countries with relatively low values of TV penetration show a significantly lower probability of holding public debates between candidates; if there are less than 15 TV sets per 100 inhabitants, this probability is reduced by more than 50 percent points. An F-test for the equality of the coefficients associated to *dtv1* and *dtv2* doesn't reject the null hypothesis, implying that the threshold at a value of 15 TV sets per 100 inhabitants is rather weak. The coefficient for *dtv3* is not significant: this implies that over a value of 27 TV sets per 100 inhabitants the probability of holding a debate doesn't change. Income per capita has also a positive and significant correlation with debates, suggesting that diffusion of technology may not be the sole determinant of this electoral practice.

The second threshold specification I test is simpler than the first one. In this one we replace the original variable *tvpenetration* by a new one, *dtvmed*, which indicates whether the value of *tvpenetration* is below (value equal to 1) or below (value equal to 0) the median (27 TV sets per 100 inhabitants in our database). The specification would then be the following:

$$lastdebate_{ct} = \alpha_c + \alpha_t + \beta.dtvmed_{ct} + \gamma.\varpi_{ct} + \varepsilon_{ct} \quad (5)$$

The results for this specification using the observations during democratic regimes are presented in column (5) of table 1. They show that having less than 27 TV sets per 100 inhabitants is significantly correlated with a reduction in the probability of carrying out an electoral debate by almost 25 percent points. If it is assumed that TV sets are uniformly

distributed among those that own them, this would imply that debates are carried out when roughly a 25% or more of a country's population has access to television. Income per capita is positively correlated with debates, whilst the average years of schooling appear to have no discernible role. It must be noted that these results are robust to the estimation of country-clustered standard errors.

4.4 Thresholds in different contexts

Having found out that a significant threshold effect exist around an audience of 25% of the population, I explore now how this may differ between groups of countries. Our first approach is to restrict the sample used to those countries that didn't experience a transition from dictatorship to democracy (or viceversa) during the time frame of our study. These are mostly Western developed countries and include also Colombia and Venezuela. The results for the median threshold specification and this group of countries are presented in column (2) of table 2. It can be seen that the qualitative findings of previous specifications remain whilst the correlation's magnitude is larger for both the variable *dtvmed* (having less than the median value of TV sets per 100 inhabitants is correlated with a reduction of 37 percent points in the probability of having carried out a debate in the last campaign) and the income per capita.

Our second approach consists in restricting the sample to developed Western countries in democracy – that is, I exclude observations from Asian countries (4 countries in our sample), from developing countries (mostly Latin American in our sample) and from developed Western countries in non democratic regimes (basically excluding early observations from Southern European countries). Results for the median threshold specification are presented in column (3) of table 2. They show a remarkably interesting fact: whilst the correlation between debates and having less than the median value of TV sets per 100 inhabitants remains at around the same previous values, the correlation between debates and income per capita disappears. This would indicate that among developed democracies it is not further development but the diffusion of a technology (in this case, television) which determines the carrying out of debates.

4.5 Robustness checks

In table 3 I present different specifications that are tested in order to check the robustness of our previous results. Our main concern is excluding a possible source of endogeneity – namely, institutional differences. In order to do this I test four specifications that include variables which resume institutional characteristics of each country.

In column (2) of table 3 I replicate the median threshold specification with the inclusion of the Polity IV index for each country as a control. As it is a time-varying regressor, I can include it in a direct manner. The results are almost identical to those of the original specification, with the coefficient associated to the Polity IV index statistically insignificant.

In column (3) of table 3, I replace the Polity IV index by another variable related to that index – a measure of constraints to the executive power (named *xconst* in the database). As in the previous case, core results are almost unchanged (the point estimate of the coefficient associated to *dtvmed* reduces its absolute value from -0.247 to -0.232) and the coefficient associated to *xconst* is statistically insignificant.

The next specification, presented in column (4) of table 3, included a variable measuring political competition (called *polcomp*) also extracted from the Polity IV database. Our core results remain practically unchanged, both in statistical significance and in the point estimates. The new variable appears to have no significant correlation with the carrying out of debates.

Universidad de San Andrés

Our following robustness check consisted in the accounting of differences in the "legal origins" of countries as described by La Porta et al. (2008). These authors distinguish between those countries which share a Common Law background (namely those historically related to the UK), those which trace their legal origins back to the Roman code and its French modern adaptation, those which trace them to the German tradition and those that have Scandinavian style legislation. In our database I have countries that can be accounted into the first three groups except for the Scandinavian one, in which only Sweden falls in (I do not include Denmark, Finland and Norway in our database because of limited historical information). I regrouped that country into the German Law group following La Porta et al.'s description.

As the legal origin variables do not vary in time, I include them as an interaction term with *dtvmed*. The results, taking the German tradition group as base category, are presented in column (5) of table 3. As it can be seen, there are relevant changes in the estimations. While the core qualitative findings remain unaltered, the point estimates suggest stronger effects. In fact, the coefficient associated to *dtvmed* for German Law countries is -0.561, indicating 56 percent points less of probability of carrying out debates if TV penetration is under the median level. The interaction term for countries using Common Law, although not significant, suggest that the same effect would be smaller for those societies. Lastly, the interaction term for countries which trace their origins to French Law is significant and positive. The correlation for *dtvmed* for those countries is around -0.163, smaller in absolute value than the original point estimate of around -0.25 found in more general specifications. This would imply that countries with French legal origins see a smaller effect of the growth in TV penetration in the probability of carrying out debates – as the correlation for income per capita remains positive and significant, this suggests that in those countries it is general economic development what drives the appearance of this electoral practice. It must be said that the countries with French legal origins in the database comprise all of the Latin American countries and Southern European countries, so the analysis would be equivalent to control for a "Latin" dummy.

5. Concluding comments

This paper presents evidence that the diffusion of television is correlated with the appearance of what is by now a standard campaign practice around the World – debates between candidates in the eve of an election. This correlation is robust to diverse specifications controlling for education, income per capita and some institutional characteristics. As a general comment, what I find is that *ceteris paribus* the level of economic development, technology can make a difference in the quality of democracy. This statement comes from the fact that there is consensus between political scientists that candidate debates improve the democratic quality of countries.

I find, nevertheless, an interesting conditionality for my general argument: technological incentives to improve democracy may be restricted to those countries with particular institutional backgrounds – namely, those that don't trace their legal origins to French and Roman Law. In the countries that do have that background, it may be solely the process of economic development that improves the quality of democracy through the carrying out of candidate debates, for instance.

Thus, I show that technology may be an important promoter of a better democracy only if the institutional structure on which it develops allows it.

Universidad de San Andrés

6. References

Gentzkow, Matthew (2006) "Television and Voter Turnout", *Quarterly Journal of Economics*, vol. 121(3), pages 931-972

La Porta, Rafael & Florencio Lopez-de-Silanes & Andrei Shleifer (2008) "The Economic Consequences of Legal Origins," *Journal of Economic Literature*, American Economic Association, vol. 46(2), pages 285-332

Maddison, Angus (2009) *The World Economy. Historical Statistics* Website update (www.gddc.net/maddison) from A. Maddison *The World Economy. Historical Statistics*, OECD, 2003

McKinney, Michael & Diana Carlin (2004) "Political Campaign Debates" in Lynda Lee Kaid (ed.), *Handbook of Political Communication Research*. New Jersey: Lawrence Erlbaum

Prat, Andrea & David Strömberg (2005) "Commercial Television and Voter Information", CEPR Discussion Paper 8246

Sears, D.O. & S.H. Chaffee (1979) "Uses and effects of the 1976 debates: An overview of empirical studies" in S. Kraud (ed.) *The Great Debates: Carter vs. Ford, 1976*. Bloomington, Indiana

Trent, Judith & Robert Friedenberg (2007) "Debates in Political Campaigns" in J. Trent & R. Friedenberg (eds.) *Political Campaign Communication*. Westport: Praeger.

Uppsala University (1999) "American influences in Sweden", Research Project available at http://www.engelska.uu.se/research.influence.html

Universidad de SanAndrés

7. Charts and Tables

Chart 1 - World income decile of countries having debates during the last campaign

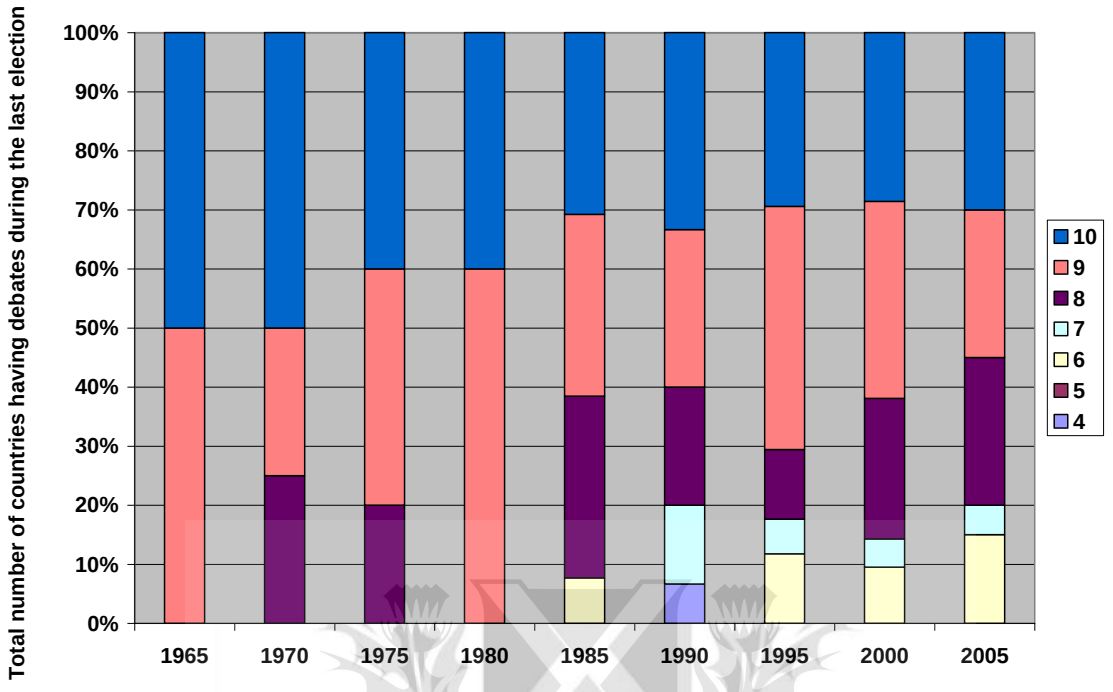
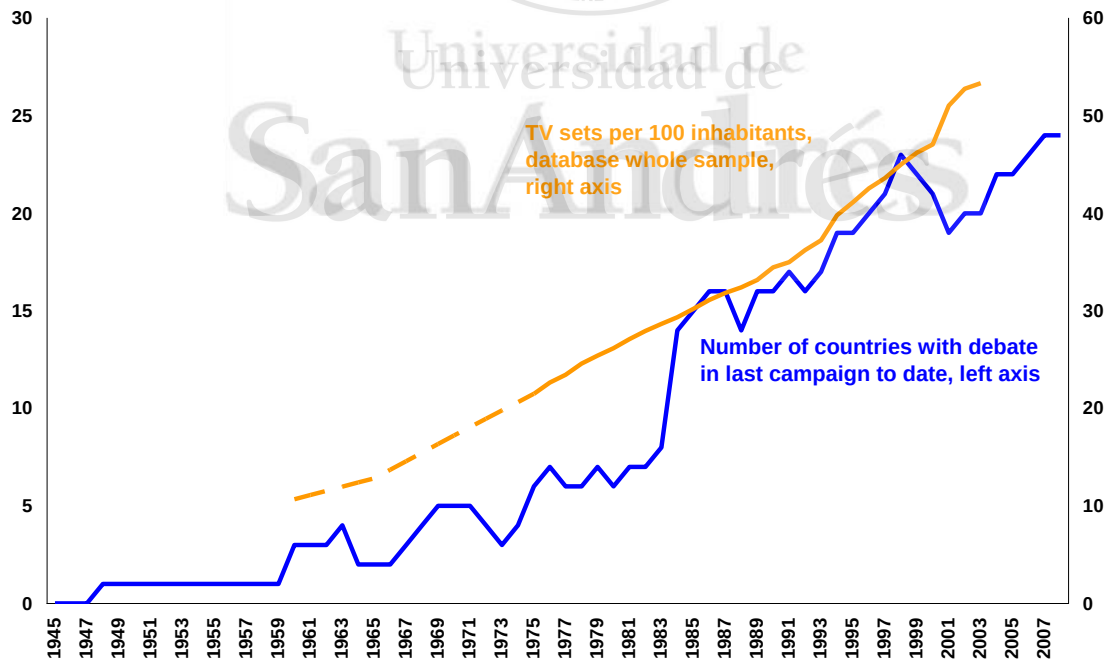


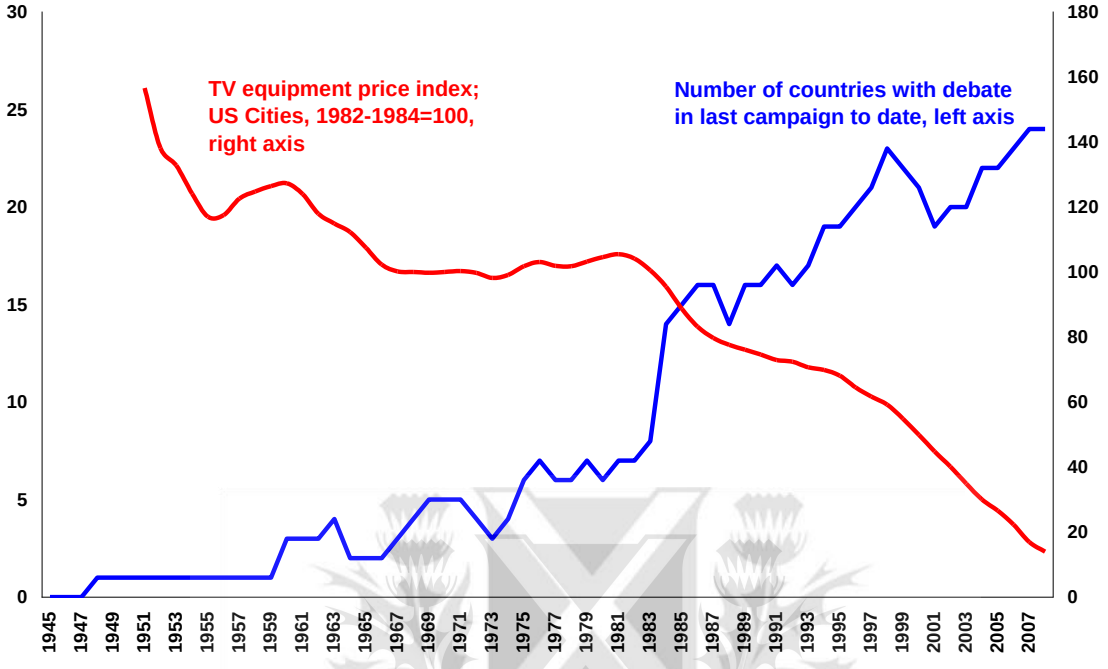
Chart 2 – Debates and TV penetration



Sources: own elaboration and ITU World Telecommunications/ICT indicators 2009

Universidad de San Andrés

Chart 3 – Debates and TV prices



Sources: own elaboration and US Bureau of Labor Statistics

QUAERERE VERUM
Universidad de
SanAndrés

Table 1

Dependent variable: *lastdebate* (=1 if debate in last campaign to date)

Variables	(1)	(2)	(3)	(4)	(5)
	All sample	All sample	All sample	Obs. in democracy	Obs. in democracy
tvper100	**0,012** **	**0,012** **	**0,011** *		
	0,005	0,005	0,006		
	[0.007]	[0.007]	[0.007]		
dtv1				**-0,506** **	
				0,221	
				[0.223]	
dtv2				**-0,344** **	
				0,145	
				[0.123]	
dtv3				-0,096	
				0,105	
				[0.131]	
dtvmed					**-0,247** **
					0,098
					[0.100]
democracy		0,029			
		0,085			
		[0.094]			
lgdppc	0,189	0,187	**0,489** **	**0,529** **	**0,518** **
	0,144	0,145	0,243	0,238	0,233
	[0.196]	[0.199]	[0.214]	[0.222]	[0.202]
educ	0,028	0,026	0,034	0,034	0,035
	0,028	0,038	0,041	0,041	0,041
	[0.021]	[0.020]	[0.026]	[0.026]	[0.027]
Year effects	Yes	Yes	Yes	Yes	Yes
Observations	242	242	194	194	194
Countries	32	32	32	32	32
R^2	0,29	0,29	0,20	0,20	0,22
F-Test	1,39	1,32	1,46	1,55	1,79
Year effects	Prob=0.22	Prob=0.25	Prob=0.197	Prob=0.166	Prob=0.104
F-Test				1,47	
dtv1=dtv2				Prob=0.228	

*	Statistically different from zero at the .1 level
**	Statistically different from zero at the .05 level
***	Statistically different from zero at the .01 level

[country-clustered standard errors in brackets]

Universidad de San Andrés

Table 2

Dependent variable: *lastdebate* (=1 if debate in last campaign to date)

Variables	(1)	(2)	(3)
	Observations in democracy	Traditional democracies	Developed Western in democracy
dtvmed	**-0,247** **	**-0,371** ***	**-0,283** **
	0,098	0,124	0,124
	[0.100]	[0.134]	[0.132]
lgdppc	**0,518** **	**0,682** **	0,252
	0,233	0,318	0,454
	[0.202]	[0.286]	[0.389]
educ	0,035	0,037	-0,017
	0,041	0,042	0,083
	[0.027]	[0.025]	[0.090]
Year effects	Yes	Yes	Yes
Observations	194	124	121
Countries	32	16	16
R^2	0,22	0,26	0,33

* Statistically different from zero at the .1 level

** Statistically different from zero at the .05 level

*** Statistically different from zero at the .01 level

[country-clustered standard errors in brackets]

Universidad de San Andrés

Table 3

Dependent variable: *lastdebate* (=1 if debate in last campaign to date)

Variables	(1)	(2)	(3)	(4)	(5)
	Observations in democracy	Observations in democracy	Observations in democracy	Observations in democracy	Observations in democracy
dtvmed	**-0.247** **	**-0.246** **	**-0.232** **	**-0.249** **	**-0.561** ***
	0.098	0.098	0.098	0.098	0.208
	[0.100]	[0.100]	[0.099]	[0.101]	[0.137]
lgdppc	**0.518** **	**0.518** **	**0.518** **	**0.509** **	**0.468** **
	0.233	0.233	0.233	0.236	0.235
	[0.202]	[0.205]	[0.210]	[0.204]	[0.205]
educ	0.035	0.035	0.037	0.034	0.039
	0.041	0.041	0.041	0.041	0.041
	[0.027]	[0.028]	[0.029]	[0.027]	[0.025]
polity4		0.002			
		0.024			
		[0.026]			
xconst			0.064		
			0.052		
			[0.049]		
polcomp				-0.013	
				0.047	
				[0.051]	
dtvm*legor_uk					0.285
					0.241
					[0.157]
dtvm*legor_fr					**0.398** *
					0.224
					[0.178]
Year effects	Yes	Yes	Yes	Yes	Yes
Observations	194	194	194	194	194
Countries	32	32	32	32	32
R^2	0.22	0.22	0.22	0.22	0.24

* Statistically different from zero at the .1 level
** Statistically different from zero at the .05 level
*** Statistically different from zero at the .01 level
[country-clustered standard errors in brackets]

QUAERERE VERUM
Universidad de
SanAndrés

Variable definitions

lastdebate: dummy variable equal to 1 if a debate between candidates was conducted during the last electoral campaign

tvper100: TV sets per 100 inhabitants

dtv1: dummy variable equal to 1 if *tvper100* value is in the first quartile of its distribution (i.e. less than 15 TV sets per 100 inhabitants)

dtv2: dummy variable equal to 1 if *tvper100* value is in the second quartile of its distribution (i.e. more than 15 TV sets per 100 inhabitants and less than 27 TV sets per 100 inhabitants)

dtv3: dummy variable equal to 1 if *tvper100* value is in the third quartile of its distribution (i.e. more than 27 TV sets per 100 inhabitants and less than 42 TV sets per 100 inhabitants)

dtv4: dummy variable equal to 1 if *tvper100* value is in the fourth quartile of its distribution (i.e. more than 42 TV sets per 100 inhabitants)

dtvmed: dummy variable equal to 1 if *tvper100* value is below the median of its distribution (i.e. less than 27 TV sets per 100 inhabitants)

democracy: dummy variable equal to 1 if country's political regime is a democracy

educ: average years of schooling (Barro and Lee database)

gdppc: GDP per capita in 1990 Gheary-Kamis dollars (Maddison database)

lgdppc: log of *gdppc*

polity4: Polity IV index – range from -10 (strongly autocratic) to 10 (strongly democratic)

xconst: Index of constraints to executive power – range from 1 (unlimited authority) to 7 (executive parity or subordination) (Polity IV database)

polcomp: Index of political competition – range from 1 (suppressed political competition) to 10 (institutionalized electoral competition) (Polity IV database)

legor_uk: dummy variable equal to 1 if country has UK legal origins (La Porta et al. database)

legor_fr: dummy variable equal to 1 if country has French legal origins (La Porta et al. database)

legor_ge: dummy variable equal to 1 if country has German legal origins (La Porta et al. database)

Universidad de San Andrés