

## **Press and corruption in the Italian Regions: An empirical test**

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### **ABSTRACT**

Widespread information improves the monitoring powers of the citizens and increases reputational concerns of the public officers. Our paper focuses on the relation between the readership of newspapers and corruption in the Italian Regions by estimating a regression model for the period 1980-2004 and correcting for endogeneity. We find that local newspapers, which generally provide more information about the performance of the local governments and its possible malfeasance, play a relevant role in deterring corruption. This function might be blurred in the national newspapers, that in fact show an opposite effect. The informational content of the local vs national newspapers, in this perspective, might motivate this different effect.

JEL classification codes: C26, D83, K23

Keywords: Corruption, diffusion of newspapers, endogeneity

## 1. *Introduction*

Media are one of the most effective institutions to uncover government malfeasance. The idea that in well-functioning democracies news media are beneficial for voters as they provide a bulk of the information that people use in elections is rooted in the theory of liberal democracy. Indeed by reducing the information bias about the governmental activities, press may significantly reduce the incentives for rent-seeking and corruption by political officials and create an important synergy with the political institutions designed to increase political accountability.

Theoretical models of electoral participation suggest that a higher level of voters' information leads to an increase in turn-out (Matsusaka, 1995; Feddersen and Pesendorfer, 1996; Feddersen, 2004). Accordingly, empirical analyses generally find that more informed voters are also more likely to turnout (Chang, Golden and Hill, 2010; Lassen, 2005; Green and Gerber, 2008; Degan and Merlo, 2011; Larcinese, 2009). The political economy literature on news media has mostly analyzed the effects of an improved media coverage on political and public policy outcomes. A growing number of studies have shown that news media have a relevant impact on electoral participation (Stromberg, 2004; Gentzkow, 2006; Oberholzer-Gee and Waldfogel, 2010; Snyder and Stromberg, 2010; Gentzkow, Shapiro and Sinkinson, 2011; Miner, 2012), and on other important electoral and public policy outcomes (see Prat and Stromberg, 2011 for an exhaustive survey) such as incumbency advantage (Ansolabehere, Snowberg and Snyder, 2006; Prior, 2006; Ferraz and Finan, 2008; Snyder and Stromberg, 2010; Fergusson, 2012) and government spending and redistributive outcomes (Besley and Burgess, 2002; Stromberg, 2004; Snyder and Stromberg, 2010; Eisensee and Stromberg, 2007). A further line of research mostly focused on the effects of increased news media competition on the selection of politicians and their performance once elected (Drago, Nannicini and Sobbrío, 2013).

Quite recently the literature has developed a specific interest in the relation between press and corruption. Widespread information seems to improve the monitoring capability of the citizens,

resulting in an expected decrease in corruption ((Brunetti and Weder, 2003) and in an increased reliability of public officials (La Porta et al. 1997). Nevertheless this empirical literature is relatively scarce, mainly because of major difficulties in measuring both corruption and press characteristics, and limited to cross-country analyses (Brunetti and Weder, 2003; Chowdhury, 2004; Lederman, Loayza and Soares, 2005; Besley and Prat, 2006; Freille, Haque and Kneller, 2007).

Our paper aims to empirically investigate the role of the press coverage at national and local level in encouraging the prosecution of corrupt public officials in the 20 Italian Regions for the period 1980-2004. The choice of this case study is driven by different reasons.

First, newspapers is a vital source of political information at local level, especially in the period of our interest. As matter of fact starting from the mid-1980s the Italian newspaper industry experienced some technological innovation which decreased both the cost and length of production and greatly facilitated the expansion of the supply of the local news and related changes in readership. Moreover, the market for national and local news presents different characteristics with respect to the ownership. While the national news market is highly concentrated and subject to capture by political interest groups, the market for local news exhibits a wide range of variation in the extent of newspaper competition both across and within regions (see, on these aspects, Drago, Nannicini and Sobbrino, 2013).

Second, three important institutional and political events occurred in Italy in the 1990s which may have affected the dynamics of corruption: 1) a process of decentralization which increased the degree of both expenditure competences and tax autonomy of the Italian Regions; 2) a massive judicial investigation against corruption, called *Mani Pulite (Clean Hands)*, which the news media greatly highlighted informing voters of judicial allegations of public officials engaged in corrupt activities; 3) the reform of the electoral rules.

The paper is organized as follows. Section 2 reviews the existing literature on the nexus between media news and corruption within the political economy. Section 3 describes the

institutional setting, the empirical strategy and the variables. Section 4 discusses the results. Conclusions are drawn in Section 5.

## *2. Media and corruption: A review of the literature*

It has been long recognized that the media play an essential role in government accountability. Over the last two decades, a growing number of theoretical studies have endogenized the role of informative media coverage in the political agency models on political accountability. The delegation of decision-making and the policy implementation responsibilities inevitably opens up the possibility for significant inefficiencies and corruption because of the heterogeneous interests and informational asymmetries between the principal (voters) and the agent (policy makers). Therefore democratic institutions as well as mass media give voters resources to enforce (and reinforce) political control over (corrupt) politicians.

More generally, media may affect the key outcomes of the political process. Besley and Prat (2006) develop a theoretical model of democratic politics in which media affect the voters' information and consequently their voting decisions creating a link between media capture and government accountability. Establishing a link between observable characteristics of the media industry (concentration and ownership) and observable political outcomes (capture, corruption, and turnover), the model shows that media pluralism provides effective protection against capture, independent ownership reduces capture and media capture affects political outcomes (political turnover and corruption). While an increase in the number of media outlets decreases the probability of media capture (Besley and Prat, 2006) and consequently the electoral advantage of (corrupt) incumbent politicians, an expansion in the supply of news media facilitates good (incumbent) politicians to signal their type. Political outcomes depend on the information of the electorate. If voters learn more about the incumbent's true type, they are more likely to replace bad types with challengers (Prat and Stromberg, 2011).

These theoretical models offer a range of testable implications about how media affect policy outcomes such as selection of politicians, voting behavior, accusation of corruption. On the latter aspect the empirical literature is recently growing, mainly through cross-country and single case studies, and generally confirms a clear negative correlation between media and corruption. Indicators such as newspaper circulation (Besley and Burgess, 2002, Adserà et al., 2003, Pellegrini and Gerlagh, 2008), media ownership (Besley and Prat 2006, Djankov et al. 2003) and media competition (Suphachalasai, 2005) show strong and robust direct effects on levels of corruption, also when both alternative measurements and additional important explanatory variables are taken into account. Brunetti and Weder (2003) consider press freedom as an external control mechanism which works against both extortive and collusive corruption. They find evidence of a significant negative correlation between press freedom and corruption indices and a causal relation which goes from press freedom to corruption. Their results are robust to different specifications and alternative measures of corruption and press freedom. Chowdhury (2004) develops the idea that both media as an informative device and democracy as a punishing mechanism should be complementary in limiting corruption and finds robust evidence in this respect. Freille, Haque and Kneller (2007) test the relation between aggregate press freedom and corruption using an Extreme Bound Analysis and use previously unexplored disaggregated data on different forms of restrictions to press freedom, such as the legal and constitutional guarantees, the degree of political control over the content of news media, the economic considerations that influence media's activities. They find robust empirical evidence that both political and economic factors are strongly correlated to corruption while detrimental laws and regulations are not. In all cases the direction of causation runs from freer press to lower corruption. Lederman, Loayza and Soares (2005) show that political institutions that increase accountability, namely democracies, parliamentary systems, political stability and freedom of press, are all associated with lower corruption. Gentzkow et al. (2004) examine the changes in the U.S. newspaper industry that occurred between 1880 and 1920 and relate them to the reduction of corruption in politics in that same period. Finally, Ferraz and Finan, (2008) and Chang et al.

(2010) present evidence that changes in the informational environment radically modify voters' behavior and increase turnover.

The role of media supposedly reinforce and complement the working of *internal* mechanisms of political accountability such as fair elections, electoral rules, decentralization. The importance of the elections as a democratic device which equips voters to select the best politicians and replace those engaged in corrupt practice is extensively recognized in the literature (see, on this point, Manin et al., 1999; Ferraz and Finan, 2008). As far as the electoral rules and government concentration are concerned, the majoritarian system is considered more accountable than the proportional one because voters seek consensus among individuals rather than among parties, by deterring rent extraction practice. In other words, the election outcome tends to be more sensitive to the incumbent's performance (Persson and Tabellini, 1999; Persson et al., 2003). Moreover, larger voting districts are associated with less corruption, whereas larger shares of candidates elected from party lists (especially if blocked) are associated with more corruption. By developing a different line of reasoning Lijphart (1999) argues that the proportional systems are more accountable than the majoritarian because they lead to policy decisions closer to voters' preferences, which should discourages corrupt practices.

Corruption may also be affected by fiscal decentralization<sup>1</sup>. On this respect two conflicting theses are developed: a) the existence of competition at the level of the officials receiving bribes may reduce corruption. When officials compete to sell the same or substitutable benefits to private actors, the price they can charge is driven down zero. Consequently decentralized systems may induce more honest and efficient governments (Rose-Ackerman, 1978; Shleifer and Vishny, 1993); b) Corruption may be increased by a higher degree of decentralization at local level because the relationships between private agents and public officials are closer and more frequent. As a consequence it is easier for the potential briber to influence a smaller segment of the government (Tanzi, 1995).

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<sup>1</sup> For a recent survey of the literature see Fiorino, Galli and Padovano (2013).

Based on this literature, we will empirically investigate the link between news readership on corruption as a channel which potentially increases accountability and transparency.

### 3. *Empirics*

#### 3.1. *The institutional setting*

The Italian Constitution, promulgated in 1948 and recently revised on this matter in 2001, foresees the principle of decentralization of the government functions and the establishment of regional Governments (Article 5 and Title V of the Constitution). Italy has been divided in 20 Regions; five enjoy a special statute (*Regioni a Statuto Speciale*, or RSS) because of their multilingual status, borderline position or secessionist movements (Friuli-Venezia-Giulia, Sicilia, Sardegna, Trentino Alto Adige comprising the two Autonomous Provinces of Trento and Bolzano, Valle d'Aosta) while 15 Regions (Piemonte, Lombardia, Veneto, Emilia-Romagna, Toscana, Liguria, Marche, Umbria, Abruzzo, Lazio, Molise, Basilicata, Campania, Puglia, Calabria) are characterized by an ordinary statute (*Regioni a Statuto Ordinario*, or RSO). Since the mid-1990s a gradual, though slow, process of fiscal decentralization accomplished through several legislative acts and a constitutional reform in 2001 occurred and was aimed to increase the fiscal autonomy of the regional governments. The latter have the major responsibility of health care, social services, environment, local transportation, housing, culture and tourism, and differences in competences between the RSO and RSS have been reduced. Currently regional governments levy on own taxes (about 24% of the total national fiscal revenue), as well as shares of national taxes and transfers (about 53%) (Giardina et al, 2009).

In those years a massive judicial investigation against corruption, known as *Mani Pulite* or *Tangentopoli*, involved many Italian politicians for alleged bribery. The scandal, constantly highlighted by the media newspapers, deeply affected the Italian political scenario to the point that important changes were made to increase the political accountability of the national and regional representatives. The electoral system shifted from a proportional to a mixed system characterized by

a strong majoritarian component. More specifically in the Regions, before the mid-1990s, the members of the council were elected by a pure proportional system and remained in office for five years (L. 108/1968, art. 3). The reform of the electoral system in 1995 (law n. 43/95) concerning the OSR<sup>2</sup> introduced a mixed electoral system: 4/5 of regional council members are elected from *provincial lists* by a proportional system, while 1/5 are elected by a majoritarian system from a *regional list* (called the *listino*). In practice, the majoritarian component of the new system consists of a *majority bonus* being 1/5 of seats assigned to the winning regional list. Moreover the direct election of the Governor, who has the power to appoint and dismiss the members of the regional Cabinet, is introduced from 1999 (new art. 122 of the Constitution) and the duration of the Council (*i.e.*, the regional Parliament) changes from five to two years in case of a no confidence motion is approved during the first two years. Such a reform is aimed to guarantee larger majorities and greater government's stability, lower the cost of voting against the incumbent and favor governments' alternation (Galli and Villani, 2010).

### 3.2. *Model specification and variables*

We use a dataset which collects news media, politico-institutional and socio-economic for the 20 Italian Regions during the period 1984-2004. Overall we have 500 observations.

Due to the small number of degrees of freedom and the high degree of correlation among some variables, we apply an incremental approach, by starting with a relatively parsimonious specification and progressively introducing the politico-institutional (government concentration, election counter, size of the government, decentralization degree) and socio-economic variables (income and education). Since the results are robust to these changes of the empirical specification, for sake of shortness we present only the most complete specification, leaving the others available upon request.

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<sup>2</sup> In the SSR a proportional electoral system was adopted until 2000; afterwards, the regional councils of Sicily and Friuli Venezia-Giulia were elected in 2001 and 2003, respectively according to the same mixed electoral system as the ORS. Similar provisions of the law applied to the election of the regional council of Sardinia in 2004 and 2009. The regions of Valle D'Aosta and Trentino Alto-Adige have adopted a proportional system.

The data source, if not differently specified, is the Italian Institute of Statistics (*ISTAT*). The time series dimension is driven by the availability of our measure of corruption. Indeed from 2005 the classification of the corruption crimes is considerably changed making difficult to appropriately extend the series.

Equation (1) defines the structural equation:

$$[1] \text{CORRUPTION}_{it} = a_0 + a_1 \text{NEWS}_{it} + a_2 \text{POLACC}_{it} + a_3 \text{DEV}_{it} + u_{it}$$

for  $i=1, \dots, 20$  and  $t=1984, \dots, 2004$ .

The variables can be described as follows:

The dependent variable. An abuse of the political and administrative office can result in mis-governance or more specifically in corruption. As Tanzi (1998) observes, it is difficult to define corruption in abstract, also because corruption is illegal and consequently hidden. Moreover cultural and legal differences across countries make it hard to investigate corruption without taking country-specific features into account.

Following Rose-Ackerman (1975) and Glaeser and Saks (2006), we define corruption as crimes made by public officials for personal gain and measure it as the number of regional government officials prosecuted for crimes against public administration relative to the population. We consider the wider category of crimes against the public administration (Book II, Title II of the Italian Criminal Law) as a proxy for corruption since it is the only measure available for our sample period, reported in the Annals of Judicial Statistics (*ISTAT*, various issues).

Furthermore, data on prosecutions seem to be more appropriate than those on convictions for the same aggregate of crimes (*Casellario Giudiziale*, various years) because they detect the propensity to allege corrupt practices and capture part of the hidden corruption shelved by potentially corrupt judges.

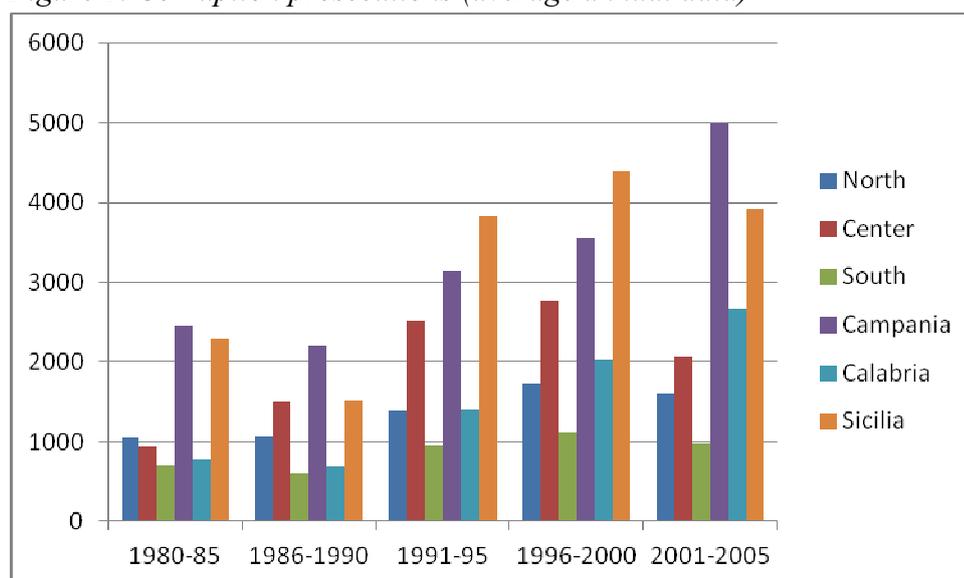
The Italian political system has been traditionally characterized by a strong interaction between politicians, bureaucrats and citizens aimed to reap high benefits through special laws or through political appointments (the so-called *clientelismo*). In the 1980s yet the increasing practice of bribing politicians and bureaucrats associated with the ongoing fiscal crisis of the public finances began to modify the general attitude towards corruption and to spread greater intolerance towards it in the public opinion. Del Monte and Papagni (2007) show that corruption crimes increased steadily between the mid-1970s and the first half of the 1990s, especially in the Southern Regions, and slightly decreased after 1993 as a consequence of the so-called *Mani Pulite* (Clean Hands) campaign undertaken by the judiciary system.

However, the distribution of corruption crimes is not homogeneous across the territorial areas of the country even though there is not an evident geographical pattern of corruption, since Northern Regions are not unambiguously less corrupt than the Central and Southern ones. Table 1 indicates the average per capita prosecutions in the 20 Regions for 1980-2004 per 1,000 inhabitants. Figure 1 shows that the number of corruption prosecutions slightly rises in the 1980s; a significant increase is recorded from 1991 to 1998, where the number of prosecutions jumps from around 600 to around 2400; finally, after a decrease in 2000, it increased again. Sicilia and Campania appear as the most corrupted Regions of Italy, followed respectively by the Northern, the Central and the Southern ones.

*Table 1 - Average per capita prosecutions per 100,000 inhabitants (1980-2004)*

Region	Prosecutions number
Basilicata	23.95
Molise	27.62
Calabria	30.06
Trentino Alto Adige	30.27
Marche	30.33
Veneto	33.26
Abruzzo	34.52
Sardegna	35.45
Valle d'Aosta	37.46
Umbria	38.07
Friuli Venezia Giulia	38.09
Emilia-Romagna	38.46
Puglia	39.90
Sicilia	41.87
Toscana	44.24
Campania	46.28
Piemonte	50.52
Lombardia	52.02
Liguria	63.84
Lazio	85.22

*Figure 1. Corruption prosecutions (average annual data)*



*Note: North: Piemonte, Valle d'Aosta, Lombardia, Trentino-Alto Adige, Veneto, Friuli-Venezia Giulia, Liguria and Emilia Romagna; Center: Toscana, Umbria, Marche, Lazio; South: Abruzzo, Molise, Puglia, Basilicata, Sardegna.*

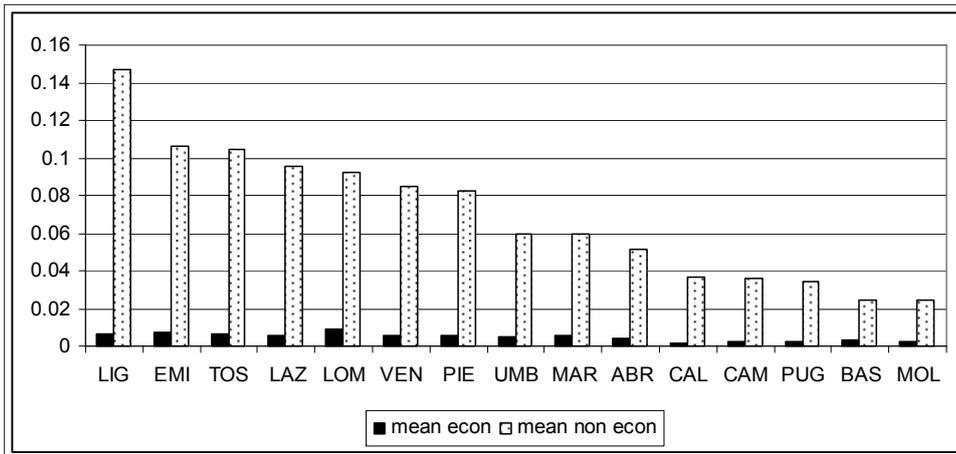
The explanatory variables. **NEWS** is our vector of interest concerning information which includes:

1) *Diffusion of newspapers.* The variable *News* is measured as the regional per capita number of newspapers. The diffusion of the press is a channel towards closer monitoring against corrupt activities as it reduces the informational problems that characterize the relationship between citizens and public officials. The higher is the number of citizen that are informed, the higher the degree of accountability of the system, then the lower the degree of corruption.

2) *Local/national newspapers.* The informational content of the press may differ depending on the geographical target of the newspaper: a local newspaper is more likely to provide detailed information about the performance of the regional government than a national one, therefore it is supposed to increase voters' awareness more significantly. Data on the variable **NEWS** come from ADS (*Accertamenti Diffusione Stampa*) which provides yearly certified data on circulation at the provincial level. We follow Petrarca (2014) and classify the journals as national if they are diffused in all the Regions. There are 12 newspapers in this class (national press): *Avvenire, Il Corriere della Sera, Il Giornale, Il Messaggero, Il Tempo, Italia Oggi, Libero, Il Manifesto, La Repubblica, Il Sole 24 Ore, La Stampa* and *L'Unità*. The remaining journals are considered as local press.

The diffusion of the newspapers is not homogeneous across Regions. Figure 2 depicts the regional per capita average diffusion of newspapers, showing that there are more readers in the North than in the South. The highest values are in fact associated to the Regions Liguria, Emilia Romagna, Toscana, Lombardia, Veneto and Piemonte; the Lazio Region is an exception, since it is located in the Centre of the country but is associated to a relatively large number of newspapers per capita. This exception is motivated with the presence in this Region of the city of Rome, that is the country capital and the center of political and institutional networks. On the contrary, the lowest levels of per capita newspapers are associated to the Southern Regions: Abruzzo, Calabria, Campania, Puglia, Basilicata and Molise (Petrarca, 2014).

Figure 2. Per capita average diffusion of newspapers in the dataset



Note: LIG=Liguria, EMI=Emilia Romagna, TOS=Toscana, LAZ=Lazio, LOM=Lombardia, VEN=Veneto, PIE=Piemonte, UMB=Umbria, MAR=Marche, ABR=Abruzzo, CAL=Calabria, CAM=Campania, PUG=Puglia, BAS=Basilicata, MOL=Molise. Source: own calculations on data from ADS (Accertamenti Diffusione Stampa)

From mid-1980s the technological innovation which characterized the Italian newspaper industry resulted into an expansion of the supply of the local news and a related increase in readership. The availability of the time series makes it possible to examine the dynamics of the relationship between readership and corruption. Figure 3 and 4 show the dynamics of readership at regional level.

Figure 3. Time evolution of corruption per thousand of inhabitants

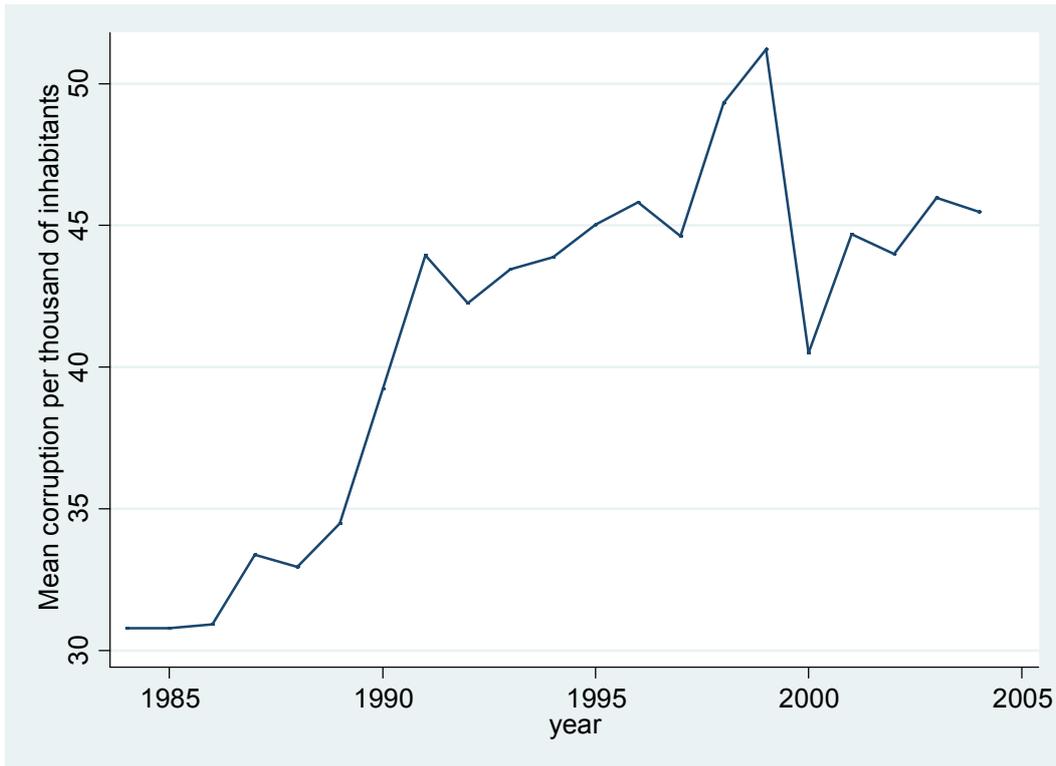
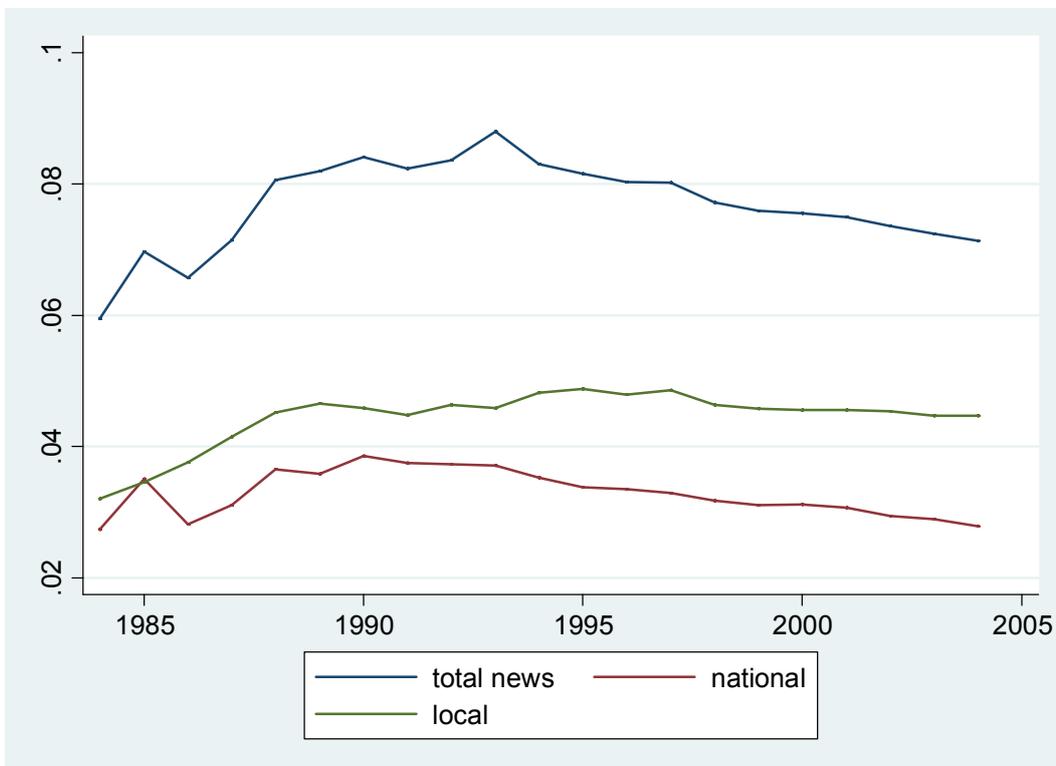


Figure 4. Time evolution of news per capita



Control variables. Our set of controls are classified in two groups: political accountability and socio-economic controls. The political accountability group (**POLACC**) includes:

1) *Concentration* index of the regional government. We measure government changes occurred in 1995 with the Herfindahl index for concentration. The index is built by using the seats of the majority supporting the regional government with respect to the overall legislature and ranges from 0 (a legislature in which each legislator belongs to a different party) to 1 (when all members belong to the same party)<sup>3</sup>. Data come from the *Ministero dell'Interno*. Theories develop different predictions about the nexus between electoral systems and corruption.

2) *Electoral counter*: a discrete variable assuming value 0 in the year of election and counting the duration of the legislature. This variable captures the idea of the political business cycle (Rogoff, 1990) and is introduced in place of a simple electoral dummy in order to avoid conflict with the time trend.

3) *Degree of decentralization*: Decentralized systems have been considered alternatively as a potential source of either corruption or honesty and efficiency of sub-national policy makers. Therefore, the effect of decentralization on corruption is, in principle, ambiguous. We measure the effective degree of decentralization in the Italian Regions by using the per capita total regional expenditure (*Exp*) as a measure of expenditure autonomy and the share of central government's grants over total tax revenue (*Share*) as a measure of tax autonomy. These variables measure the extent at which regional expenditures are through own taxes rather than through grants.

The last set of controls (**DEV**) is related to the socio-economic development. We choose income, i.e. GDP per capita and education, measured as the share of population enrolled in high school. Both data come from CRENOS. These variables are included to investigate the so-called Lipset hypothesis (1960): voters with higher income and education are expected to be both more

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<sup>3</sup> To calculate this index, we sum the seats of each party  $i$  of the majority, calculate the percentage  $s$  that these represent on the total number of seats of the Council and compute the Herfindahl index:  $H = \sum_{i=1, \dots, N} s^2$ , where  $N$  is the total number of seats of the Council. We then use the normalized Herfindahl index that ranges from 0 to 1 and is computed as follows:  $H^* = (H - 1/N) / (1 - 1/N)$ , where again,  $N$  is the total number of seats of the Council and  $H$  is the usual Herfindahl index, as above.

willing and capable to monitor public employees and to take action when the latter violate the law. Then, we expect a negative sign associated to both the coefficients of these variables.

*Table 2. Descriptive statistics of the dataset*

Variable	Obs	Mean	Std. Dev.	Min	Max
Corruption prosecutions (per 1,000 inhabitants)	420	41.07	16.80	14.08	113.02
News	500	240,090.7	227,684.2	6,520	1,098,279
Local news	500	148,038.3	164,291.4	100	672,535
National news	500	93,563.6	108,317.1	115	575,715
Population	375	3,226,196	2,306,274	320,456	9,700,000
Concentration	410	0.68	0.13	0.13	0.88
Electoral counter	471	1.99	1.41	0	4
Exp	375	4,769,437	4,490,520	220,783	28,000,000
Share	345	4.91	3.96	0.01	28.83
GDP	360	55,385.3	56,122.2	1,587	320,621
School attainment	374	0.047	0.008	0.02	0.07

One problem with testing our model is that the variables of interest might be related to Region-specific unobservable factors. To minimize the concern that the relationship between our covariates and corruption is driven by omitted variables, we estimate Equation 1 with a fixed effects model.

Another concern is that some of the covariates of corruption, i.e. per capita GDP, might themselves be functions of the quality of government, generating problems of reverse. We address the problem of endogeneity including these variables with a lag of one or two periods.

#### *4. Empirical results*

Table 3 reports the results from the estimation of Equation 1. The models differ with respect to the set of NEWS variables included. We started including the per capita diffusion of total press (*News per capita*, model 1), which we disaggregated into the local diffusion (*Local news per capita*, model 2) and the national diffusion (*National news per capita*, model 3). Finally, we use the share of local press over the total diffusion (*% local news*, model 4).

The results unexpectedly suggest that a larger diffusion of the total press is not related to corruption. If we disaggregated the components of the press variable, we see that local diffusion is associated to lower corruption (about -0.10) while national corruption is associated to higher corruption (about -0.05). If we use the share of local press, this evidence is confirmed.

With respect to the politico-institutional controls, more concentrated regional governments are associated with more corruption prosecutions, supporting Lijphart (1999) idea that the proportional systems are more accountable than the majoritarian because they lead to policy decisions closer to voters' preferences, which should discourages corrupt practices. Furthermore, as the electoral year gets further and the value of the counter increases, corruption increases as well but its impact is not statistically significant.

When the expenditure autonomy of the regional governments increase, the corruption's prosecutions increase. At the same time, when a larger share of resources of the Region come from transfers from the central government, more corruption is observed.

Finally, the coefficients associated to the variables in the DEV vector indicate that richer Regions are not significantly less corrupted. Differently from the prediction of the theory, school attainment is associated to more corruption detecting typically a 'white collars' phenomenon.

Table 3. Equation 1, fixed effects estimation

Dep var: ln COR per capita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>NEWS</b>								
News per capita, t-1 (ln)	-0.012 (0.062)			0.006 (0.062)	0.018 (0.058)			0.030 (0.058)
Local news per capita, t-1 (ln)		-0.122*** (0.043)				-0.107** (0.042)		
National news per capita, t-1 (ln)			0.058** (0.024)				0.062*** (0.023)	
% local news per capita, t-1				-0.380** (0.168)				-0.407** (0.165)
<b>POLACC</b>								
Electoral counter	0.005 (0.008)	0.006 (0.008)	0.002 (0.008)	0.005 (0.008)	0.004 (0.008)	0.005 (0.008)	0.001 (0.008)	0.005 (0.008)
Concentration	0.730*** (0.111)	0.758*** (0.109)	0.762*** (0.113)	0.786*** (0.113)	0.731*** (0.110)	0.751*** (0.109)	0.763*** (0.112)	0.790*** (0.112)
Exp per capita, t-1 (ln)	0.244*** (0.044)	0.270*** (0.043)	0.232*** (0.043)	0.247*** (0.044)	0.229*** (0.043)	0.255*** (0.043)	0.223*** (0.043)	0.236*** (0.043)
Share, t-2	0.008* (0.004)	0.009** (0.004)	0.007* (0.004)	0.008* (0.004)	0.008** (0.004)	0.010** (0.004)	0.008** (0.004)	0.008** (0.004)
<b>DEV</b>								
GDP per capita, t-1 (ln)	0.021 (0.033)	0.026 (0.033)	0.016 (0.033)	0.021 (0.033)	0.029 (0.033)	0.037 (0.032)	0.023 (0.033)	0.027 (0.033)
School attainment,ln	4.136* (2.386)	4.834** (2.292)	3.041 (2.337)	3.309 (2.398)				
Constant	-2.135*** (0.420)	-2.348*** (0.421)	-2.092*** (0.422)	-1.867*** (0.433)	-1.910*** (0.392)	-2.036*** (0.389)	-1.926*** (0.393)	-1.674*** (0.401)
Observations	336	336	325	336	341	341	330	341
R-squared	0.395	0.410	0.401	0.405	0.388	0.400	0.397	0.400
Number of id	19	19	19	19	20	20	20	20

Notes: standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

At a first sight, these results seem to reject the hypotheses of a general impact of the diffusion of the press on corruption. On the other hand, they unveil how local newspapers, which presumably provide more information about the local performance of the government and its possible malfeasance, act as a monitoring system and constrain corruption. This function might be blurred in the national newspapers, that in fact show an opposite effect. The informational content of the local vs national newspapers, in this perspective, might motivate this different effect.

In Table 4 we estimate a set of specifications where we included the interaction between the NEWS variables and the macro-area dummies to investigate a differential geographical effect.

The results indicate that the diffusion of the press *per se* does not influence the dependent variable. When we interact the variables of interest with the macro-area dummies, we find a constraining effect of the press on corruption limited to the north-eastern area, as the significant coefficients show. The higher is readership in the north-east, the smaller is corruption if compared to the other areas. This result is interesting in the light of the fact that Trentino Alto Adige, Veneto and Friuli Venezia Giulia, that are in fact regions of the North-East, show rates of corruption per capita below the mean (see Table 1). The coefficients associated to the control variables are consistent with the ones of Table 3.

*Table 4. Interacted model*

Dep var: ln COR per capita	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
News per capita, t-1 (ln)	0.013 (0.075)			0.003 (0.070)	0.046 (0.072)			0.026 (0.065)
News per capita*north west, t-1 (ln)	0.082 (0.172)				0.034 (0.150)			
News per capita*north east, t-1 (ln)	-0.610*** (0.186)				-0.640*** (0.185)			
News per capita*center, t-1 (ln)	0.245 (0.163)				0.236 (0.163)			
Local news per capita, t-1 (ln)		-0.004 (0.057)				0.015 (0.055)		
Local news per capita*north west, t-1 (ln)		0.255 (0.230)				0.219 (0.203)		
Local news per capita*north east, t-1 (ln)		-0.319*** (0.083)				-0.340*** (0.081)		
Local news per capita*center, t-1 (ln)		0.216 (0.176)				0.201 (0.176)		
National news per capita, t-1 (ln)			-0.009 (0.048)				0.001 (0.047)	
National news per capita*north west, t-1 (ln)			0.037 (0.081)				0.031 (0.079)	
National news per capita*north east, t-1 (ln)			-0.601*** (0.181)				-0.608*** (0.181)	
National news per capita*center, t-1 (ln)			0.112** (0.055)				0.105* (0.055)	
% local news per capita, t-1				-0.081 (0.259)				-0.120 (0.254)
% local news per capita*north west, t-1				-0.676 (0.640)				-0.586 (0.618)
% local news per capita*north east, t-1				-3.761*** (0.864)				- 3.838*** (0.855)
% local news per capita*center, t-1				-0.391 (0.397)				-0.350 (0.390)
Expenditure per capita, t-2 (ln)	0.246*** (0.043)	0.256*** (0.042)	0.235*** (0.043)	0.272*** (0.043)	0.235*** (0.042)	0.245*** (0.042)	0.227*** (0.042)	0.264*** (0.043)
Share, t-2	0.008** (0.004)	0.009** (0.004)	0.007* (0.004)	0.008** (0.004)	0.009** (0.004)	0.010*** (0.004)	0.008** (0.004)	0.009** (0.004)
Termcount	0.006 (0.008)	0.007 (0.007)	0.004 (0.008)	0.006 (0.008)	0.005 (0.008)	0.006 (0.007)	0.003 (0.008)	0.006 (0.007)

Concentration	0.746*** (0.110)	0.743*** (0.108)	0.723*** (0.110)	0.772*** (0.113)	0.742*** (0.110)	0.735*** (0.107)	0.725*** (0.110)	0.778*** (0.112)
GDP per capita, t-2 (ln)	0.010 (0.033)	0.013 (0.032)	0.012 (0.032)	0.015 (0.032)	0.016 (0.033)	0.021 (0.032)	0.020 (0.032)	0.020 (0.032)
School attainment (ln)	3.566 (2.365)	3.891* (2.258)	3.355 (2.284)	2.364 (2.366)				
Constant	-2.034*** (0.412)	-2.061*** (0.423)	-2.141*** (0.413)	-1.581*** (0.446)	-1.847*** (0.384)	-1.826*** (0.392)	-1.951*** (0.383)	1.447*** (0.407)
Observations	336	336	325	336	341	341	330	341
R-squared	0.424	0.449	0.438	0.441	0.419	0.443	0.433	0.438
Number of id	19	19	19	19	20	20	20	20

Notes: standard errors in parentheses. Significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

#### *4. Conclusion*

Our paper investigates the role that a widespread information had on deterring corruption in the Italian Regions during the period 1980-2004, a crucial period in the Italian political history. We find that the diffusion of local newspapers played a relevant role on the prosecutions for corruption while the national press did not. Local newspapers, which generally provide more information about the performance of the local governments and its possible malfeasance, seemed to play a relevant role in strengthening the monitoring powers of the citizens and deterring corruption. This function might be blurred in the national newspapers, that in fact show an opposite effect. The informational content of the local vs national newspapers, in this perspective, might motivate this different effect.

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