Endorse or Not to Endorse: Understanding the Determinants of Newspapers' Likelihood of Making Political Recommendations

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Abstract

This paper investigates the determinants of newspapers' provision for political endorsements. I empirically examine the role of newspapers' political preferences and market competition on newspapers' decision. Regression results suggest that market competition inhibits newspapers from making endorsements. Results from a simple model show that newspapers' ideology determine their endorsements, turning partisan papers more likely to make political recommendations and more likely to endorse challengers than non-partisan newspapers.

1 Introduction

The newspaper industry has an important societal role: it collects information and reports to readers. Understanding the determinants of these practices is a continuous concern for policy makers.

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Previous studies show that American newspapers are politically biased in their news reporting. Gentzkow and Shapiro (2010) find that sales motivation is an important determinant of the political slants on news reports. Kim (2008) finds that newspaper owners' political contributions correlate with newspapers' choice of which candidate to endorse. A vast economic and political science literature is focused in understanding how information reported by media is shaped.

Despite that, the determinants of newspapers' provision of information have been overlooked in the literature. This paper takes a step towards filling this gap, in investigating newspaper political endorsements. It aims to answer the question: How do newspapers decide whether to make an endorsement or to abstain in a political race? I investigate the empirical association between newspapers' likelihood of making endorsements and: (i) newspapers' political orientation and, (ii) market competition.

Political endorsements are useful because they circumvent measurement challenges in identifying newspapers' decision whether to provide information. Firstly, endorsements are an objective measure of newspaper political opinion, since they represent a clear stand, favoring a candidate.

Secondly, during elections, newspapers face an identical opportunity of taking a stand. Therefore, their choice set is observable (as opposed to news that is determined by a random occurrence of events and is unobservable to readers until reported). Measuring the correlation between competition and newspaper's reporting practice is also challenging. Newspapers face a different set of competitors in different geographical areas, while news itself is supposed to reach all newspaper readers. Political endorsements are tailored messages for a subset of readers: those who live in a particular political jurisdiction. This feature allows one to test whether the level of competition a newspaper faces in an electoral jurisdiction correlates with its behavior. By design, there is a "separation wall" between the editorial and news section. However, many studies show that editorial page opinions infiltrate news pages (Puglisi and Snyder 2008, Larcinese, Puglisi and Snyder 2007, Druckman and Parkin 2005, Kahn and Kenney 2002). For these reasons, political endorsements qualify as a good object of study to uncover the

relationship between market competition and newspaper' speech.

To identify this relationship, I collect a new dataset on demographics and newspaper industry structure at the county level. I propose a simple data transformation to identify these characteristics at the newspaper-jurisdiction level. I first construct a variable that is the fraction of the political jurisdiction in which a newspaper operates as a monopolist. Then, I test whether this variable correlates with the likelihood of an endorsement with probit regressions. The variation in the data allows me to make comparisons of endorsement behavior across areas where newspapers face a different degree of competition, holding constant politicians' behavior, readership and newspapers' intrinsic characteristics. Hence, I am able to circumvent some confounding effects regarding the measurement of the impact of market structure on newspaper behavior, such as the selection of politicians that run for election in different jurisdictions or characteristics of newspapers that are established in markets with different market structures.

Understanding this association is important for policy reasons. With the decline of newspapers' circulation, public efforts, such as the Newspaper Preservation Act, have been undertaken. The goal is to preserve competition, aiding the survival of multiple daily newspapers in a given market (Busterna and Piccard 1993). Despite this, there is little empirical evidence of whether (or how) newspapers' speech responds to competition.[1]

In the second part of the paper, I address a different question: whether and to which extent newspapers' ideological preferences affect endorsement behavior. I develop a simple model of newspaper endorsements. I consider an environment where newspapers are characterized by a political orientation – left-, neutral or right-wing– and only make well-informed endorsements. The model internalizes the characteristics of candidates running in a race on newspapers' decision whether to make an endorsement. The model is estimated using endorsement choices from ninety American newspapers over 154 races in the 2002 and 2006 American Elections. Previous studies have quantified newspapers'

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[1]Lacy and Davenport (1994) and Entman (1985) empirically investigated this relationship.

political preferences based on their political endorsements (Puglisi and Snyder 2008, Knight and Chiang 2008, Larcinese, Puglisi and Snyder 2007). The advantage of this proposed framework is that it is able to determine whether and to which extended newspapers' political orientation affect their likelihood of making endorsements.

The results are consistent with the view of newspapers as politically biased: they take their political preferences into consideration when choosing their endorsements and are more likely to be partisan than non-partisan. This in turn makes partisan papers at least 25% more likely to declare endorsements than non-partisan papers. Ideological heterogeneity across newspapers explains endorsements to challenger candidates. While non-partisan papers are at least eight times more likely to endorse incumbents rather than challengers, partisan papers are no more than three times more likely to endorse incumbents rather than challengers that share their political views.

Turning to the remaining results, market competition strongly correlates with newspapers' endorsement practice. Newspapers are more likely to make endorsements in jurisdictions they operate as monopolists than in areas they face more competition. This finding is new. It is observed in both raw correlations and regressions controlling for newspaper- and electoral race-fixed effects.

This paper proceeds in six sections. Section Two discusses why and how the likelihood of endorsements might be correlated with market competition. Section Three explains the data and the constructed measure of the degree of competition faced by newspapers at the jurisdiction level. Section Four presents the results of a probit model. Section Five describes a simple structural model of endorsement, and presents its results. Section Six concludes.

2   Endorsements and Market Competition

Political endorsement are located in the editorial or opinion-editorial (Op-Ed) section of the newspaper. The editorial section is the institutional opinion of the newspaper, representing its voice for endorsing candidates, taking a stance on issues, criticizing

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official decisions and commenting on events. The editorial board decides the newspaper's endorsements (Meltzer 2007). It consists of the editorial page editor, the editorial cartoonist and other writers, and is many times officially subordinate to the publisher, who is the business executive of the paper.[2] He/she might make choices taking into consideration the level of competition faced in a market (Black 1982). Overall, competition might influence newspapers' characteristics and politicians' behavior. These, intern, might affect newspapers' endorsement practices. I will describe four main mechanisms.

First, market structure might affect newspapers' political orientation (Gentzkow and Shapiro 2010, Chiang 2008, Mullainathan and Shleifer 2004). Newspapers' political orientations probably determine their evaluation of candidates and their likelihood of making endorsements.

Second, politicians' behavior might be correlated with market competition. Stromberg and Snyder (2010) provide evidence that incumbents attend to their constituencies' needs better in areas with higher newspaper coverage.[3]Market structure might be correlated with media exposure. For example, citizens that live in competitive markets might have characteristics – such as being more educated or politically informed– which makes them more prone to read newspapers. In this case, incumbent "quality" might respond to market structure, turning newspapers more likely to make endorsements.

Thirdly, despite (or in addition to) politicians' behavior and newspaper political views, profit-motivated newspapers might react to competition. How market forces directly affect newspapers' willingness to make endorsements is ambiguous. On one hand,

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[2]This position is occupied by a career executive with vast knowledge of the newspaper market. For example, the New York Times publisher—Arthur Sulzberger, Jr—joined The Times in 1978 as a correspondent and since then has worked in a variety of business departments, such as production and corporate planning. He also worked as assistant publisher and deputy publisher, overseeing the news and business departments, before becoming publisher of The New York Times in 1992.

[3]They find that politicians who are less covered by the local press are less likely to stand witness before congressional hearings and to serve on constituency-oriented committees. Also, federal spending is lower in areas where there is less press coverage of the local members of Congress.

endorsements represent (possibly useful) information readers look for during elections. It is presumably costly to gather political information and newspapers have a limited amount of resources to allocate to this end. They might allocate those in areas where they face more competition, as a way to further differentiate themselves and gain readership with respect to other newspapers.

On the other hand, one could also expect a higher likelihood of endorsement when newspapers face less competition. Newspapers adapt their reports to the preferences of their readership (Gentzkow and Shapiro 2010, George and Waldfogel 2003.) Readers that live in areas with a monopolist newspaper do not have alternative access to information about local politics and because of that, might be more demanding of this service. For a different reason, one could also expect newspapers to be less willing to make endorsements under competition. Newspapers are bound to disagree with some of their readers, when making endorsements (San Francisco Chronicle, 2002) and this can affect their readership. Under competition, this fear might be exacerbated, inhibiting newspapers from taking political sides.

This paper has primarily the goal of identifying an association between the degree of newspapers' competition and their likelihood of endorsements. This is an open question. It aims to verify whether this association exists in addition to newspapers' or politicians' intrinsic characteristics that self-select into jurisdictions with different market structures. The goal is to infer whether and how newspapers respond to market competition.

3   Data

This study explains the political endorsement choices of ninety American daily newspapers in electoral races for the U.S. Senate, the U.S. House of Representatives, State Governor, Secretary of State, state Attorney General and the state Senate in 2002 and 2006. In total, 154 electoral races are considered. For each newspaper, endorsement choices are observed in up to twenty-five political races. The chosen newspapers are

in seven states—California, Florida, Michigan, Ohio, Oregon, Texas, and Wisconsin—comprised of 658 counties. Endorsements were collected from Lexis, Newsbank databases and newspaper websites. Newspapers and electoral races considered are listed in the Appendix.[4]

The remaining data are candidate and newspaper characteristics, cross-sections of readership demographics and political leanings, and measures of newspaper reader share and market competition in a county. Candidate characteristics were collected from the Election Divisions of the Secretaries of State. The construction and sources of the market structure measure and readership characteristics are explained in Sections 3.1 and 3.2. In the remainder of Section Three, I explain how I constructed a measure of market competition and readership characteristics at the newspaper-jurisdiction level.

3.1 Market Competition Measure

The utilized measure of market competition is the proportion of the newspaper circulation in monopolistic areas within an electoral jurisdiction.[5] In constructing this variable, I first classified counties as monopolistic or not monopolistic, following the methodology utilized in Borenstein and Rose (1994). A county was classified as having a monopolistic structure if a single newspaper has more than 90% of total circulation among newspapers circulating in the county. A county was classified as not having a monopolistic structure if no single newspaper accounts for more than 90% of total circulation. To identify these classes, I used information about newspaper county circulation,

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[4]The sample of newspapers was selected from papers that report to the Audit Bureau of Circulations (ABC). Of this group, only newspapers that made at least one political endorsement during any election were selected (the ones identified as having an endorsement practice).

[5]Alternative measures of competition in the newspaper market are used in the literature. For example, Chiang (2007) identified newspapers as monopolist or duopolist according to The Editor and Publisher International Year Book classification, which lists multiple-newspaper cities. This paper's proposed measure has the advantage of identifying variation in the market structure faced by a newspaper across jurisdictions within an Election.

available from The Audit Bureau of Circulation (ABC).[6]

3.2 Readership Characteristics

This study identifies correlations through cross-sectional comparisons. In order to help isolate the effect of competition on newspaper behavior, I consider readership characteristics.[7] Census characteristics— race, gender, total population, income and level of urbanization– were collected from the Census Bureau at the county level. To identify a county's political leanings, I used the two-party vote share to John Kerry in the 2004 presidential elections, collected from the Election Divisions of the Secretaries of State. Based on this variable, I created another variable to capture the political homogeneity of readers. It is the absolute distance between the 2004 presidential two party vote-share to John Kerry, and 0.5.[8]

Table 1 shows the characteristics of counties in this sample (Column 3).[9]Column 1 and 2 compare counties with a monopolistic and a non-monopolistic market structure. Monopolistic counties constitute 35.6% of the sample. They have a higher concentration of hispanics, blacks and they are more politically homogeneous than non-monopolistic counties.

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[6]For the 658 counties considered, I identified all the operating newspapers and their participation at that level based on 2005 Audit Bureau circulation data. For the seven states in this study, the newspaper market is composed of two hundred and thirty-one newspapers. Larger newspapers are over-represented in this sample. The sample represents 20.4% of total newspapers in the seven states.

[7]The composition of newspaper readership is not observable at the county level. In this study, I assume that county population is representative of the readership at this level.

[8]For example, if John Kerry received one hundred percent of the votes (or zero percent of the votes) in a county, this measure would be equal to 0.5. If he received half of the votes, this measure would be equal to zero. Within this index metric, heterogeneous counties must be closer to zero and more homogeneous counties must be closer to 0.5.

[9]Among all considered counties, 14 do not report any newspaper circulation. For this reason, these are excluded from the analysis and I considered only 644 counties.

Table 1: Characteristics by Newspaper Market Structure - Average Values

	Monopolist	Non-Monopolist	All counties
Male	49.99 (2.50)	50.03 (2.21)	50.02 (2.31)
White	72.55 (20.81)	79.13 (19.61)	76.79 (20.27)
Black	5.51 (7.45)	5.41 (7.27)	5.44 (7.33)
Hispanic	18.87 (21.30)	11.97 (17.25)	14.42 (19.07)
Some College	44.99 (10.84)	42.87 (10.20)	43.57 (10.48)
Two party vote share to John Kerry	35.75 (14.91)	40.11 (11.83)	38.56 (13.16)
Political Homogeneity Index	17.49 (10.90)	12.64 (8.80)	14.36 (9.87)
Income (in U$1000)	52.33 (15.13)	51.38 (15.07)	51.72 (15.08)
Population (in 10000)	13.68 (31.45)	16.69 (57.92)	15.62 (50.31)
Urban	49.28 (33.80)	48.35 (28.47)	48.68 (30.45)
Number of newspapers	2.04 (1.41)	3.65 (1.50)	3.08 (1.66)
Number of counties	229	415	644

Note: Standard deviations are reported in parenthesis.

3.3 Aggregation at the Newspaper- Political Jurisdiction Level

Endorsement choices are observed at the jurisdiction level. Since newspaper readership characteristics and market competition are only available at the county level, I aggregated those at the political jurisdiction level. The races considered in this study are the ones for which the county is a subset of an electoral district.

The aggregation rule is a simple (weighted) average of county characteristics across counties in a jurisdiction. The weights are newspaper specific. They are the ratio between a newspaper's reader share at the county level[10] and its total reader share at the political jurisdiction level.[11] They were constructed in the following way: a newspaper j circulates in a jurisdiction d, composed of m counties indexed by u. Using the information about newspaper county circulation, I calculated the newspaper county reader share (RC_{ju}), jurisdiction reader share (RD_{jd}) and $Weights_{jd}$ as described below:

$$RD_{jd} = \sum_{u=1}^{m} RC_{ju}$$

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[10]Newspaper county reader share is the percentage of newspapers' readers that live in a county.

[11]Newspaper district reader share is the percentage of newspapers' readers that live in a district.

$$Weight_{jdu} = \frac{RC_{ju}}{RD_{jd}}$$

Next, I constructed newspaper-jurisdiction characteristics (X_{jd}) as described below, using county characteristics (X_u) and $Weights$.

$$X_{jd} = \sum_{u=1}^{m} (Weight_{jdu}) X_u$$

This aggregation was performed for all characteristics (readership and market structure), for all newspapers, in every political jurisdiction, for every jurisdiction where a newspaper circulates. In this fashion, I created newspaper-jurisdiction-markets. Note that this simple aggregation rule generates (helpful) variation that comes from three facts: (i) for the considered races, a jurisdiction is composed of several heterogeneous counties; (ii) different newspapers have different reader share in the counties that make up a jurisdiction, and (iii) different political jurisdictions are composed by different counties. The variable of interest in this study is $Monopolist_{jd}$. It represents the proportion of a political jurisdiction in which the newspaper operates as a monopolist.

3.4 Probit Results

This section reports the results of probit regressions explaining newspapers' probability of making an endorsement. The empirical specification is expressed by (1).

$$y_{jrt} = \alpha + \gamma Monopolist_{jd} + \delta z_{jd} + \beta_r v_r + \theta_j + \theta_r + \theta_t + \varepsilon_{jrt} \qquad (1)$$

The dependent variable is a dummy of value one if a newspaper j made an endorsement in race r in year t, and zero otherwise. The coefficient of interest is γ. Other characteristics, possibly correlated with the newspapers' probability of making an endorsement, are controlled for. These are z_{jd}, representing newspaper readership (demographics and of political views). Electoral race characteristics are represented by v_r. Newspaper-, electoral race- and year-fixed effects are represented by θ_j, θ_r, θ_t, and

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ε_{jrt} represents a stochastic error term. Robust standard errors are clustered at the level of the 154 races.

Table 2: Probability of an Endorsement

	(1)	(2)	(3)	(4)
Monopolist	0.2638	0.2137	0.1582	0.1548
	(0.079)**	(0.103)**	(0.076)**	(0.100)
Readership and Electoral race characteristics	n	y	y	y
Year- and Electoral race-fixed effects (d=154)	n	y	n	y
Year- and Newspaper-fixed effects (j=90)	n	n	y	y
R^2	0.015	0.108	0.122	0.130
Number of observations	3186	2520	2630	2520

Notes: 1) Standard Errors are reported in parenthesis.
3) Readership controls include gender, income, education, population, urban, two party vote share to John Kerry, ideology index, race (black, white and Hispanic), and a dummy indicating whether a newspaper circulates in the jurisdiction. Electoral race controls include a dummy indicating whether the race is statewide, a dummy indicating whether the incumbent is not running for re-election in the race. 4) **Significant at the 5% level.

The results are described in Table 2. Newspapers are more likely to make endorsements in jurisdictions they are more likely to operate as monopolists. This is observed in the raw data (Column 1) and in regressions controlling for readership and newspaper-fixed effects (Column 2) and electoral race-fixed effects (Column 3.) The results are weaker for the specification including all controls (Column 4). The coefficient γ is only statistically significant at 12% level. These estimated results suggest that newspapers prioritize to provide political endorsements in areas where they operate as monopolists. This association is present regardless of candidates that self-select to run for Election in these markets, or newspapers' intrinsic characteristics (such as their ideological views) correlated with market structure.

This association can be observed for different reasons. Newspapers might prefer to provide their advice in monopolistic areas because their readers have less access to local politics and face a higher demand for newspaper opinion than other readers. A simple

Table 3: Probability of an Endorsement

	Gubernatorial and US Senate	US House and State Senate
	(1)	(2)
Monopolist	0.5987**	0.0707
	(0.308)	(0.1198)
Year- and Electoral race-fixed effects (d=154)	y	y
R^2	0.0850	0.0322
Number of observations	344	836

test for this is to examine whether this relationship holds across different electoral races.

In higher ballot races, such as Gubernatorial and US Senate, voters have more alternative sources of media information than local newspapers, such as television or national newspaper election coverage. If newspapers are more likely to make endorsements in monopolistic areas because these readers are more in need of information, then this association should be smaller in these higher ballot races than in lower ballot races.

Table 3 presents the result for regressions, using jurisdiction fixed-effects and reader share as controls. I conducted regressions separately to different type of races: (i) Gubernatorial and US Senate presented in Column 1 (ii) US House and State senate presented in Column 2. The coefficient γ is only significant in Column 1.

Candidates running for election in higher ballot races are more well-known than those running for lower ballot races. In these races, readers can more easily judge newspapers based on these endorsements, and compare endorsements across newspapers in competitive areas. Reputational concerns and the effects newspapers believe endorsements might have on their future readership might play a role in newspapers' decisions. Consistent with the idea that this motive is explaining the observed association, a relationship between market competition and likelihood of endorsement is not observed for the US House and State senate races. In these races, readers rely more on local newspaper endorsements to decide their votes (Leon 2009.)

In the next section, I present an investigation about the impact of newspapers' ideo-

logical preferences on the likelihood of endorsements. The kinds of candidates that are running for election might influence newspaper choice whether to make an endorsement in a race. Partisan papers might derive more gratification from supporting candidates than non-partisan papers, making them more likely to make political recommendations than other papers.[12] In order to test this, I propose and estimate a simple structural model. It takes into consideration the interdependence among endorsement choices (of whether and whom to endorse) and quantifies newspapers' political preferences.

4   A Simple Model of Endorsements

To illustrate the model's main features and assumptions, consider the environment faced by a hypothetical newspaper. It is characterized by a political orientation – left-wing, neutral or right-wing. In a general election, the newspaper faces several simultaneous two-candidate races for which it can make political recommendations. The endorsement represents the newspaper's expressive vote, as opposed to an instrumental model whereby the newspaper seeks to influence the election outcome. The newspaper likes to endorse candidates it thinks highly of. The value of an endorsement is determined solely by its evaluation of the endorsed candidate.

For any election, the newspaper has knowledge about some characteristics of the candidates running: it is aware of candidates' incumbency and party affiliation. These characteristics may affect the newspaper's evaluation of candidates, but the newspaper is not yet fully informed about other characteristics such as honesty, competence and political record. These are important determinants of its assessment of candidates and consequently of its endorsements. To find out about these, the newspaper has to investigate candidates' records and conduct interviews.[13]

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[12]Most reader perceives newspapers as politically-biased (Pew 2005). Larcinese, Puglisi and Snyder (2007) have shown that newspapers vary in the frequency with which they endorse candidates of a single party. This is possibly explained by difference in newspapers' political views and therefore on their evaluation of candidates.

[13]Meltzer 2007, Post Crescent 2006, Lincoln Journal Star 2002.

The newspaper faces the following problems: it has to decide in which of the races it will provide its endorsement to readers. Since newspapers only make well-informed endorsements and the research process is costly, the newspaper has to decide whether to endorse or not in a race. For any given election, it makes the decision of whether to make an endorse in a race by comparing the expected value of its (future) endorsement with its cost of it. Once the research is done, the newspaper, fully informed, declares its endorsement.[14]

I next summarize and introduce the notation. A newspaper j has one of three possible political ideological positions ($H \in \{h_1, h_2, h_3\}$), which are left-wing (h_1), neutral (h_2), and right-wing (h_3). In general elections, it faces several races e, where two candidates c, $c \in \{D, R\}$ are running for election. For any of these, it potentially makes two sequential decisions. First, it makes a decision $t \in \{0, 1\}$ to endorse in a race ($t = 1$) or not ($t = 0$). In making this decision, it compares the cost of investigating an election (and making an endorsement) with the expected value of its announcement. Second, conditional on endorsing in a race, it can make three types of announcements $i \in \{D, R, \varnothing\}$, "endorse the Democrat" ($i = D$), "endorse the Republican" ($i = R$), or explicitly declare "no endorsement for either of the candidates" ($i = \varnothing$). This last announcement represents newspaper abstention in a political race once it determines that neither of the candidates meets its standards to receive an endorsement.[15] I will next detail the payoffs and decision problem for both decisions, starting with the second. After these components are described, choice probabilities and estimation procedure are specified.

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[14]Newspapers report they always investigate candidates before making endorsements (Post Crescent 2006).

[15]This assumption is based on evidence from the data. When newspapers declare "no endorsement for either candidate," they justify this choice as due to the low qualifications of the candidates. For example, The Record-Eagle made the following announcement in a race, in the 2006 election:

"There's no good choice in this race. Incumbent Republican Mike Cox has shown he'll put politics over policy. His challenger, Democrat Amos Williams, isn't qualified."

4.1 Decision of Which Candidate to Endorse

In the second decision, conditional on having incurred costs in the research process, the newspaper can make two types of announcements. The first type favors a candidate. The payoff derived from this type of announcement is the newspaper's satisfaction from endorsing its preferred candidate and it is determined by newspaper evaluation of the candidate. It has three components: (i) a deterministic component related to newspaper political preference; (ii) a deterministic component unrelated to newspaper political preference; and (iii) the newspaper's overall evaluation of the candidates' unobservable characteristics - such as quality, honesty, and historical record - revealed through research $(\varepsilon_j^D, \varepsilon_j^R)$. These are assumed to be drawn from a type I extreme value distribution with mean zero and scale parameter $\sigma = 1$. The overall payoff from endorsement of a candidate, denoted by S_j^c, is:

$$S_j^c(H, c) = v(H, c) + Z^c(XC_j) + \varepsilon_j^c, \qquad c = \{D, R\}$$

Ceteris paribus, left-wing (h_1) and right-wing (h_3) newspapers have an endorsement for the Democrat and the Republican candidate, respectively, as their most preferred decision. Neutral newspapers are indifferent between Democrats or Republicans. The payoff $v(H, c)$ that a newspaper of each type derives from its endorsement of a candidate c, is as follows:

$$v(h_1, c) = \left\{ \begin{array}{l} \gamma_D, \ \text{if } c = D \\ 0, \ \text{if } c = R \end{array} \right\}$$

$$v(h_2) = 0$$

$$v(h_3, c) = \left\{ \begin{array}{l} 0, \ \text{if } c = D \\ \gamma_R, \ \text{if } c = R \end{array} \right\}$$

The value of $v(H, c)$ when a newspaper makes its less preferred decision is normalized to 0. The payoff when it makes its preferred decision is γ_c.

The component unrelated to newspaper political preference, Z^c, is a linear function of other candidate characteristics. I represent this term with a dummy of value one if the candidate is an incumbent, and zero otherwise. The second term is supposed to represent the ideological alignment between the candidate and readers in a political jurisdiction. It is represented by a variable that assume value 1 if the candidate is a Democrat (Republican) and most of newspaper readers in the political jurisdiction voted for John Kerry (George Bush) on the 2004 presidential Election. It assumes value -1 if the candidate is a Democrat (Republican) and most of readers voted for George Bush (John Kerry) on the 2004 presidential Election.

Besides endorsing the Democrat or Republican, newspapers can explicitly announce "no endorsement for either of the candidates" ($i = \varnothing$).[16] This decision's payoff has two components: (i) a deterministic component that represents the newspaper's standard for making an endorsement. Its value is normalized to zero; (ii) newspaper shock specific to this alternative $\varepsilon_j^{\varnothing}$, assumed to be drawn from a type I extreme value distribution with mean zero and scale parameter $\sigma = 1$.[17] The payoff of this alternative is:

$$S_j^{\varnothing}(H) = \varepsilon_j^{\varnothing}, \qquad \text{for any } H$$

At this (second) stage, the newspaper becomes fully informed and is able to evaluate the respective payoffs of the three alternatives. It decides on its announcement i^* according to the rule below:

$$i^* = \arg\max\{S^i(H) : i \in \{D, R, \varnothing\}\}$$

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[16] It is assumed that every time the newspaper incurs costs in the investigation process, it makes an announcement. I allow for this option - abstention - to ensure newspapers are maximizing total utility.

[17] This component is supposed to capture the unobservable heterogeneity among newspapers in their standards for declaring an endorsement. If newspapers only care about providing helpful advice to their readers, they would just need to pick the "least worst" among the candidates. However, in some elections, newspapers might worry about some reputational damage from endorsing a "bad politician."

4.2 Decision to Endorse in a Race

In the first decision, the newspaper faces the choice of whether or not research the candidates to find out their (ex-ante) unobservable characteristics, and to make an endorsement in a race. The payoff to the newspaper's endorsement in a race has two components: its expected benefit and the cost of endorsement. The payoff of the endorsement alternative, denoted by END, is described below:

$$END_j = E(Z_j^D, Z_j^R) - COST_j(RC_j)$$

The first element, $E(Z_j^D, Z_j^R)$ denotes the expected benefit of a (future) endorsement. This is the foreseen value of an endorsement and is a function of the characteristics of candidates running in a political race combined with newspaper political orientation, as described in section 4.1.

$$E(Z_j^D, Z_j^R) = E_\varepsilon \max\{S^{i^*}(H) : i \in \{D, R, \varnothing\}\}$$

$$= \ln((\exp(Z^D(CAN_j)) + \exp(Z^R(CAN_j)) + 1))^{18}$$

The endorsement cost, $COST$ conveys both research and reputation costs in making endorsements. I assumed a simple functional form for this, as described below:

$$COST_j = \beta_0 + \beta_0 \cdot (RCE_j) + \beta_0 \cdot (RCD_j) + \beta_0 \cdot (RCM_j) + \zeta_j^{COST}$$

It is determined by a fixed endorsement cost common to all newspapers (β_0). I then let the cost vary by newspaper size, reader share in a jurisdiction and election characteristics (RCE_j). These characteristics might affect the research cost as they convey, respectively, different levels of paper resources and employees, previous political knowledge of the place and politicians' visibility. I allow the cost to vary by readership demographics and political leanings in a district (RCD_j) as these might explain specialization in a market or different perceived costs in making endorsements.

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[18]Under the stochastic term assumptions, this expectation has a well-known close form derived in Small and Rosen (1981).

Lastly, the cost might vary by the market structure faced in the district (RCM_j).[19] These parameters partially identify the correlation between newspapers' likelihood of making endorsements and market competition. The cost variables are compressed in RC_j, where $RC_j = (RCE_j, RCD_j, RCM_j)$. These are detailed in the Appendix. The cost of endorsement is also determined by a research cost shock ζ_j^{RES}, assumed to be drawn from a type I extreme value distribution with mean zero and scale parameter $\sigma = 1$.[20]

The payoff to non-endorsing, denoted by $NEND$, has two components: a deterministic component normalized to zero and a taste shock ζ_j^{NRES} associated with this alternative.[21] This is assumed to be drawn from a type I extreme value distribution with mean zero and scale parameter $\sigma = 1$.

$$NEND_j = \zeta_j^{NRES}$$

A newspaper's first decision is whether to make an endorsement $(t(H) = 1)$ or abstain form endorsing $(t(H) = 0)$ in the race, solving the following problem:

$$Max_{t(H) \in \{0,1\}} \quad t(H)[END - NEND]$$

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[19]Note that another way to incorporate market competition in the analysis would be to properly model the interaction of newspapers on their endorsement decisions. However, taking this road would inevitably require some assumption about how readers evaluate newspapers based on their announced endorsements (and therefore how newspapers react to that with their endorsement decisions in competitive markets as opposed to monopolistic markets.) Mostly for this lack of prior about what readers consider to be a good endorsement, I will abstain from including this explanation in the model and treat competition in a reduced form way.

[20]This component is unobservable to the researcher and reflects, for example, a shortage of interns to collect information about the politicians, or politicians directly contacting newspapers to facilitate an interview.

[21]This stochastic term is supposed to explain any remaining difference in the endorsement decisions of different newspapers when the research costs they face are the same. This could be related to the editor's mood, for example.

4.3 Choice Probabilities and Estimation Procedure

The model is estimated by maximum likelihood. For the construction of the likelihood function, one needs to derive the choice probabilities. I will first specify the probability of a decision to make an endorsement and the conditional probabilities of an endorsement after the newspaper has decided to invest in the research process. Next, I specify the likelihood function, and the estimation procedure.

Choice Probability of Endorsement in a Race. In the first decision, the probabilities of endorsement $(t(H) = 1)$ and no endorsement $(t(H) = 0)$ are derived based on integration over ζ_j and described:

$$\Pr(t(H) = 1) = \frac{\exp(E(CAN_j) - COST(RC_j))}{1 + \exp(E(CAN_j) - COST(RC_j))}$$

$$\Pr(t(H) = 0) = \frac{1}{1 + \exp(E(CAN_j) - COST(RC_j))}$$

Choice Probability of Endorsement to a Candidate: Conditional on deciding to make an endorsement and investing in research, the newspaper learns ε_j^i, and decides which announcement to make. Integrating the shocks, the probabilities of endorsing a Democrat, a Republican, or declaring "no endorsement for either candidate" are respectively:

$$\Pr(i(H) = R) = \frac{\exp(Z^R(CAN_j))}{1 + \exp(Z^R(CAN_j)) + \exp(Z^D(CAN_j))}$$

$$\Pr(i(H) = D) = \frac{\exp(Z^D(CAN_j))}{1 + \exp(Z^R(CAN_j)) + \exp(Z^D(CAN_j))}$$

$$\Pr(i(H) = \varnothing) = \frac{1}{1 + \exp(Z^R(CAN_j)) + \exp(Z^D(CAN_j))}$$

The likelihood of an endorsement observation for a given race e and a given newspaper political orientation type is denoted by L_{je}:

$$L_{je}(H) = [\Pr(t(H) = 0)]^{I(t(H)=0)} + [\Pr(t(H) = 1)\Pr(i(H))]^{I(t(H)=1)}$$

4.3.1 Likelihood of the Entire Newspaper Endorsement Profile

Multiple endorsement choices are observed for each newspaper. By combining the sequence of endorsement choices and summing over the possible types of political orientation, the contribution of a newspaper j is Y_j :

$$Y_j = \sum_{H \in \{h_1, h_2, h_3\}} \Pr(H) \left\{ \prod_e L_{je}(H) \right\}$$

The log-likelihood function is then equal to the sum of the log of the individual contributions Y_j, over all newspapers in the sample: $K = \sum_j \ln Y_j$. The parameters to be estimated are: i) editorial boards' valuation of politicians' characteristics; ii) newspapers' costs of making endorsements and iii) a probability distribution for newspapers' political orientation. The estimated parameters are the ones that maximize the log-likelihood.

5   Results

The estimates for the parameters related to the newspaper's decision of whether to make endorsements are described in Table 4. These are the determinants for newspapers' endorsement costs. The parameters are measured in a utility metric, so I will focus the interpretation on their sign. Newspapers face lower (higher) costs in jurisdictions where they are more (less) likely to make endorsements.

Table 4: First Decision Payoffs: Determinants of Endorsement Cost

	Estimate	Stand Error
β_0	7.533**	0.319
$\beta_0 \cdot$ statewide race	-0.042	0.303
$\beta_0 \cdot$ open race	-0.932**	0.253
$\beta_0 \cdot$ Top 100 newspaper	-0.903**	0.222
$\beta_0 \cdot$ Newspaper reader share	-3.690**	0.359
$\beta_0 \cdot$ Urban	-0.176	0.278
$\beta_0 \cdot$ Population	0.682**	0.310
$\beta_0 \cdot$ Income	-0.963**	0.235
$\beta_0 \cdot$ College educated	0.116	0.248
$\beta_0 \cdot$ Political homogeneity index	-0.592**	0.186
$\beta_0 \cdot$ White	-1.382**	0.222
$\beta_0 \cdot$ Black	-0.747**	0.221
$\beta_0 \cdot$ Hispanic	-0.593**	0.251
$\beta_0 \cdot$ Male	0.082	0.212
$\beta_0 \cdot$ Monopolist	-0.841**	0.254

Note: ** Statistically significant at 5% level.

The results point to a positive cost of making endorsements as revealed by the sign of β_0 (7.533). Papers face different costs according to election, readership and newspaper characteristics. The cost is lower as the share of a newspaper's readers that live in the political jurisdiction increases. This is consistent with the expectation that newspapers hold more political knowledge and face lower research costs in these elections. Larger newspapers (those among the 100 largest newspapers in the US) face lower costs, and therefore are more likely to make endorsements, than other newspapers.

The cost depends on readership race and degree of political homogeneity. Newspapers are more likely to make endorsements in jurisdictions where there is a higher concentration of whites, blacks, Hispanics and where their readership is more politically homogeneous. Consistent with the probit regression findings, newspapers face lower costs for making endorsements in jurisdictions they are more likely to operate as monopolists.

The estimates for the parameters related to candidates' choice are described in Ta-

ble 5. They show that incumbency and ideology are determinants for endorsements. Both candidate ideological alignment with newspaper readership and candidate ideological alignment with the newspaper explain the endorsement. However, the estimated parameters indicate that newspapers value more their own ideological preferences than those of their readers when deciding whom to endorse.

The coefficients γ_R and γ_D point to an asymmetry between left-wing and right-wing papers on their valuation of candidates. It is larger for left-wing than for right-wing newspapers, suggesting that left-wing newspapers are more partisan than right-wing newspapers on their decision of whom to endorse. This difference is statistically significant at 5% level.

The model also predicts newspapers are more likely to be partisan (have a left-wing or a right-wing orientation) than non-partisan (have a neutral orientation), as described in Table 6. These results are consistent with the general view of newspapers as politically biased (Pew, 2005.)

Table 5: Second Decision Payoffs

	Estimate	Stand Error
Incumbent	2.083**	0.166
Political alignment between candidate and readership	0.359**	0.093
Political alignment with candidate and		
Right-wing newspaper: γ_R	1.269**	0.229
Left-wing newspaper: γ_D	1.954**	0.225

Note: ** Statistically significant at 5% level.

Table 6: Predicted Probability of Political Orientation

Left-wing	Neutral	Right-wing
0.422	0.281	0.297

A nice feature of the econometric model is that one can conduct counterfactuals with the estimated parameters of the model. Table 7 presents estimated probabilities of endorsements, when newspapers' political ideology is exogenously changed. In the model, I assumed that partisan newspapers have an extra incentive to make endorsements in comparison to non-partisan papers: insofar that they are supporting candidates with similar political views.[22] A direct implication is that this makes partisan newspapers more likely to incur costs for making endorsements than non-partisan papers. According to the results, partisan papers are at least 25% more likely to make endorsements than non-partisan papers (row 1). Consistent with the estimated parameters, left-wing (right-wing) papers are more likely to endorse Democrats (Republicans) than neutral or right-wing (left-wing) papers. The implication of these last facts is that most newspaper political endorsements are "politically biased" in the sense they are partially determined by newspapers' political preferences.

Rows (5)-(10) provide a figure about newspapers' trade-off between incumbency and ideology, when deciding whom to endorse. Incumbency is the main determinant of newspaper endorsements (Ansolabehere, Lessem, and Snyder 2006.) It reflects many candidates' attributes, such as experience, "quality" and greater likelihood to win the Election (Gowrisankaran, Mitchell and Moro 2004). As shown in Table 7, all types of newspapers are more likely to endorse incumbents than challengers. However, while non-partisan papers endorse incumbents at least eight times more often than challengers, partisan papers endorse incumbents no more than three times more often than they endorse challengers who share their political views.

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[22]Data shows that this is a reasonable assumption. The model assumes newspapers make two sequential choices. However, one can also imagine that newspapers make endorsements without a research process, using only the information they have on hand. In this case, the newspaper endorsement decision could be modeled by a multinomial logit. I compared this model's predictions with those of a multinomial logit with the same number of control variables. The model achieves a higher log-likelihood value (-813.80) than the multinomial logit (-855.18), and predicts newspapers' actual choices with higher success than a multinomial logit does in 57.4% of the cases. This evidence suggests that the adopted model' assumptions reflect the data better than the ones behind the simple model.

Table 7: Predicted Probabilities

	Left-wing	Neutral	Right-wing
Any endorsement	32.1	24.1	30.2
Conditional Probabilities (in %)			
Endorsement to a Democrat	67.8	32.1	18.8
Endorsement to a Republican	25.5	50.8	75.5
Endorsement to a Republican Incumbent (a)	54.90	81.18	84
Endorsement to a Democrat Challenger (b)	39.28	9.58	3.27
(a)/(b)	1.4	8.5	28.4
Endorsement to a Democrat Incumbent (c)	96.77	81.63	67.63
Endorsement to a Republican Challenger (d)	1.66	9.25	25.1
(c)/(d)	58.3	8.8	2.7

Notes: 1) Conditional Probabilities are calculated conditional on an endorsement.
2) Conditional Probabilities do not sum one because newspapers still can declare
"no endorsement to either candidate."

6 Conclusion

This paper examined the determinants for newspaper political endorsements. It focuses on uncovering two main relationships: (i) the association between the likelihood of endorsements and market competition, and (ii) endorsement decisions and newspapers' political ideology. Regression results show that newspapers are more likely to make endorsements in jurisdictions they operate more as monopolists. This relationship holds for higher ballot races (US Senate and Gubernatorial) and not for lower ballot races (US House and State senate.) This study only points to this empirical association that, to the best of my knowledge, is new. One explanation for this fact is that in monopolistic and politically uninformed markets, newspapers have more space to make discretionary endorsements affecting their willingness for making political recommendations. Further research is needed to understand the mechanisms by which market competition affects newspapers.

In the second part of the paper, I provide a simple model of newspaper political endorsements.Advancing from previous studies, the proposed model endogeneizes newspaper's decision to make any endorsement. It quantifies to which extent partisan papers are more likely to make endorsements and provides some estimates about the newspapers' trade-off between candidates' characteristics, such as incumbency and political alignment with the newspaper. The results show that newspapers take into consideration their own political preferences when deciding endorsements. These recommendations affect candidates' vote share (Leon 2009) and voters' perception about candidates (Knight and Chiang 2008, Ladd and Lenz 2009.)

An important motivation for newspapers to make endorsements is a possible desire to influence election outcomes and help to elect their favorite candidates. This mechanism has not been covered in this study. Future work can test this hypothesis by investigating whether newspapers are sensitive to the perceived ability to influence elections when choosing which races to endorse.

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List of Elections by State and Year

California		Florida	
2002	**2006**	**2002**	**2006**
Gubernatorial	Gubernatorial	Gubernatorial	Gubernatorial
State Attorney	State Attorney	State Attorney	State Attorney
Secretary of State	US Senate	US House - district 5	US Senate
US House - district 1	US House - district 1	US House - district 6	US House - district 1
US House - district 6	US House - district 2	US House - district 7	US House - district 4
US House - district 8	US House - district 3	US House - district 9	US House - district 5
US House - district 9	US House - district 4	US House - district 13	US House - district 6
US House - district 11	US House - district 5	US House - district 15	State Senate - district 10
US House - district 12	US House - district 6		State Senate - district 12
US House - district 17	US House - district 7		State Senate - district 16
US House - district 18	US House - district 8		State Senate - district 28
US House - district 23	US House - district 9		
US House - district 24			
US House - district 26			

Michigan		Ohio	
2002	**2006**	**2002**	**2006**
Gubernatorial	Gubernatorial	Gubernatorial	Gubernatorial
State Attorney	State Attorney	State Attorney	State Attorney
US Senate	US Senate	Secretary of State	US Senate
US House - district 1	US House - district 1	US House - district 4	US House - district 1
US House - district 2	US House - district 2	US House - district 5	US House - district 2
US House - district 3	US House - district 3	US House - district 6	US House - district 3
US House - district 4	US House - district 4	US House - district 7	US House - district 4
US House - district 6	US House - district 5	US House - district 9	US House - district 5
US House - district 7	US House - district 6	US House - district 10	US House - district 6
US House - district 9	US House - district 7	US House - district 11	US House - district 7
US House - district 10	US House - district 8	US House - district 13	US House - district 8
US House - district 11		US House - district 14	
US House - district 12		US House - district 15	
US House - district 14		US House - district 17	

Oregon		Texas	
2002	**2006**	**2002**	**2006**
Gubernatorial	Gubernatorial	Gubernatorial	Gubernatorial
US House - district 1	US House - district 1	State Attorney	State Attorney
US House - district 4	US House - district 4	US House - district 3	US Senate
US House - district 5	US House - district 5	US House - district 4	US House - district 1
US House - district 6	US House - district 6	US House - district 5	US House - district 2
State Senate - district 4	State Senate - district 3	US House - district 6	US House - district 3
State Senate - district 7	State Senate - district 4	US House - district 13	US House - district 4
State Senate - district 13	State Senate - district 6	US House - district 24	US House - district 5
State Senate - district 15	State Senate - district 7		US House - district 6
State Senate - district 17	State Senate - district 10		US House - district 7
State Senate - district 19			US House - district 8
State Senate - district 26			

Wisconsin	
2002	**2006**
Gubernatorial	Gubernatorial
State Attorney	State Attorney
US Senate	US Senate
US House - district 1	US House - district 1
US House - district 2	US House - district 2
US House - district 3	US House - district 3
US House - district 7	US House - district 4
US House - district 8	US House - district 5
	US House - district 6
	US House - district 7
	US House - district 8

Description of Explanatory Variables

First Decision variables	Description
RCE	
Cost of Endorsement	Dummy of value one for the Endorsement alternative, and zero otherwise.
Cost of Endorsement*Statewide	Dummy of value one for the Endorsement alternative in statewide races, and zero otherwise.
Cost of Endorsement*Open Race	Dummy of value one for the Endorsement alternative in elections the incumbent is not running for re-election, and zero otherwise.
Cost of Endorsement*Newspaper readers'share	Dummy of value one for the Endorsement alternative times the newspaper readers' share in the geographical area defined in the district, and zero otherwise.
Cost of Endorsement*Top 100 Newspaper	Dummy of value one for the Endorsement alternative if the newspaper is among the largest 100 newspapers in the US.
RCD	
Cost of Endorsement*Urban	Dummy of value one for the Endorsement alternative in districts where at least 47.9% of the newspaper readership lives in urban areas, and zero otherwise.
Cost of Endorsement*Population	Dummy of value one for the Endorsement alternative in districts where the newspaper readership lives in areas with, at least 153,164 habitants, and zero otherwise.
Cost of Endorsement*Income	Dummy of value one for the Endorsement alternative in districts where the newspaper readership mean income value is at least 51,534, and zero otherwise.
Cost of Endorsement*Political Homogeneity Index	Dummy of value one for the Endorsement alternative* political ideology index
Cost of Endorsement*John Kerry vote share	Dummy of value one for the Endorsement alternative* Two party vote share to John Kerry
Cost of Endorsement*College	Dummy of value one for the Endorsement alternative in districts where at least 16.7% of newspaper readership has a college degree, and zero otherwise.
Cost of Endorsement*White	Dummy of value one for the Endorsement alternative in districts where at least 76.7% of the newspaper readership is white, and zero otherwise.
Cost of Endorsement*Black	Dummy of value one for the Endorsement alternative in districts where at least 5.34% of the newspaper readership is black, and zero otherwise.
Cost of Endorsement*Hispanic	Dummy of value one for the Endorsement alternative in districts where at least 14.61% of the newspaper readership is hispanic, and zero otherwise.
Cost of Endorsement*Male	Dummy of value one for the Endorsement alternative in districts where at least 50.03% of the newspaper readership is male, and zero otherwise.
RCM	
Cost of Endorsement*Monopolist	Dummy of value one for the Endorsement alternative* fraction of the jurisdiction where the newspaper operates as a monopolist.