# **ECONSTOR** Make Your Publications Visible.

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Bignon, Vincent; Flandreau, Marc

## **Working Paper**

## The economics of badmouthing: Libel law and the underworld of the financial press in France before World War I

Graduate Institute of International and Development Studies Working Paper, No. 15/2010

## **Provided in Cooperation with:**

International Economics Section, The Graduate Institute of International and Development Studies

*Suggested Citation:* Bignon, Vincent; Flandreau, Marc (2010) : The economics of badmouthing: Libel law and the underworld of the financial press in France before World War I, Graduate Institute of International and Development Studies Working Paper, No. 15/2010, Graduate Institute of International and Development Studies, Geneva

This Version is available at: https://hdl.handle.net/10419/77379

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



## WWW.ECONSTOR.EU

#### THE GRADUATE INSTITUTE | GENEVA

INSTITUT DE HAUTES ETUDES INTERNATIONALES ET DU DÉVELOPPEMENT

GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES

> Graduate Institute of International and Development Studies Working Paper No: 15/2010

## The Economics of Badmouthing: Libel Law and the Underworld of the Financial Press in France before World War I

## Vincent Bignon Graduate Institute of International and Development Studies Marc Flandreau Graduate Institute of International and Development Studies

### Abstract

This article analyzes the economics of "badmouthing" in the context of the pre-1914 French capital market. We argue that badmouthing was a means through which racketeering journals sought to secure property rights over issuers' reputation. We provide a theoretical study of the market setup that emerged to deal with such problems, and we test our predictions using new evidence from contemporary sources.

© The Authors. All rights reserved. No part of this paper may be reproduced without the permission of the authors.

## The Economics of Badmouthing: Libel Law and the Underworld of the Financial Press in France before World War I

Vincent Bignon and Marc Flandreau\*

This draft: August 2010

#### Abstract

This article analyzes the economics of "badmouthing" in the context of the pre-1914 French capital market. We argue that badmouthing was a means through which racketeering journals sought to secure property rights over issuers' reputation. We provide a theoretical study of the market setup that emerged to deal with such problems, and we test our predictions using new evidence from contemporary sources.

<sup>&</sup>lt;sup>□</sup> Vincent Bignon is Visiting Professor at the Graduate Institute, Geneva. Marc Flandreau is Professor at the Graduate Institute of International Studies and Development, Geneva, and research fellow at CEPR. We acknowledge generous funding from Yves Mirabaud. Part of this paper was written while Bignon was a visiting scholar at the Mercatus Center at George Mason University, where the hospitality of John Nye is gratefully acknowledged. We are thankful for support and help from the librarians of the Graduate Institute in Geneva, in particular from Martine Basset and Yves Corpataux, and to the archivists of the Société Générale and the Banque de Paris et des Pays-Bas for their help and patience. We also thank Pierre Turgeon for excellent research assistance. For useful comments and criticism, we thank Daron Acemoglu, Fabio Braggion, Régis Breton, Robin Derby, David Dobrin, Claudia Goldin, Andrea Goldman, Eric Hilt, Naomi Lamoreaux, and Noel Maurer. We also thank Gabriel Geisler for directing our attention to an informative piece. We are grateful to Melanie Aspey of the Rothschild Archive for disclosing to us confidential information (not reported in this paper) suggesting that the story we tell has a modern counterpart. We thank the participants in the Third Financial History Workshop in Tilburg University (April 2009), the UCLA Department of History Spring 2009 Colloquium Speaker Series (30 April 2009), the 13th Annual Conference of the International Society for New Institutional Economics at the University of California at Berkeley (18-20 June 2009), the Harvard University Economic History Worskhop (13 November 2009), the Financial History Seminar series at Cambridge University (30 November 2009), and the Economic History Seminar at the University of Geneva (20 May 2010) for their comments. The usual disclaimer applies.

"A newspaper that wishes to make its fortune should never waste its columns and weary its readers by praising anything. Eulogy is invariably dull —a fact that Mr Alf had discovered and utilized" A. Trollope, *The Way We Live Now*, 1875

> "And did you threaten him with the newspapers?" H. de Balzac, *La maison Nucingen*, 1837

#### Introduction

Benjamin Franklin wrote that "glass, china and reputation are easily cracked and never well mended".<sup>1</sup> Anyone with a brand or public name is concerned with the costs of denigration by the press, because reputation is a source of rents. Libel laws exist to protect reputation, but—by the time compensation is obtained irrecoverable losses have been incurred. Once a journal has made false allegations, they linger with every subsequent mention of the libeled party despite efforts to publicize any court rulings that may have been secured. This means that journals own a claim on (say) an equity issuers' reputation, because reputation pretty much what the press makes of it. This externality cannot be easily addressed—nor can it be insured against, given the builtin moral hazard. Furthermore, there is a trade-off between libel law and freedom of speech. Full freedom of speech gives more people the opportunity to speak the truth; but this also creates the problems described here as it becomes harder to secure protection from being denigrated.

"Badmouthing" is a serious challenge to brands, which modern theory suggests play a valuable role in resolving informational asymmetries and, more generally, disciplining markets. By generating revenue and providing future rewards, brands discipline short-term tendencies to renege and cheat. Yet because reputation is valuable, it is possible to turn denigration, defamation, or badmouthing into an instrument of racket. Brand owners will sacrifice revenues to prevent damaging rumors (in fact, they are prepared to pay as much as the value of rents accruing to their brand, net of investment costs). Thus the value from brand ownership is reduced, as are the positive effects that brands can have.

How do markets respond to the risk of badmouthing? This is the topic of our paper. Badmouthing is an idiomatic term that refers to saying negative things about someone or something. As used here, this term covers the threat to print negative things (for extortion purposes) as well as the implementation of such threats. The badmouthing racket is different from blackmail. Blackmail is legally defined as the criminal offense of attempting to extort money by threats of exposure of a crime or disreputable conduct. Badmouthing is another type of extortion: whereas the blackmailer sells true information that she has come across or worked to uncover, the denigrating agent is selling information that he has fabricated. In other words, badmouthing is produced at zero cost. Hence we must emphasize the contrast between badmouthing and blackmailing. Because blackmailing tends to check wrongful behavior, not all economists agree that it should be punished. Some point out that a journal blackmailing a firm is comparable to the trader who shorts a stock based on insider information.<sup>2</sup>

The problems raised by badmouthing are of a different kind. In particular, badmouthing is based on making things up. Because they have a readership, journals are well positioned to promote such fabrication. They need not actually make allegations (since these could run afoul of libel law); rather, a journal need only imply, suggest, or let it be understood that something is wrong. The rumor can then grow on the premise that, as the old

<sup>&</sup>lt;sup>1</sup> Quoted in Whiting, Early American Proverbs, p. 176.

<sup>&</sup>lt;sup>2</sup> See Coase, "Blackmail"; and Ginsburg and Shechtman, "Blackmail," for the view that blackmail ought to be illegal in order to economize resources. This point is disputed by libertarian authors; see e.g. Block, Kinsella, and Hoppe, "Second Paradox." See Gómez and Ganuza, "Civil and Criminal Sanctions," for a more recent discussion.

saying goes, "where there's smoke, there's fire". Some situations are especially conducive to such denigration: firms accessing financial markets (via IPOs), experiencing financial difficulties, or selling risky technology are easy targets. In a society where freedom of speech prevails, badmouthing—provided it can be given some substance—is hard to distinguish from the free expression of negative views.

One thing that makes detection of badmouthing so difficult is that revenues may be secured in many different, legally admissible ways. Historians have pointed out that several racketeering cases did not involve open accusations. When a borrower (country or corporate) came under focus, some journals could suspend reporting on it. If it was the official policy of these journals that concern could be communicated by *lack* of coverage, then silence could amount to criticism.<sup>3</sup> It is argued that these circumstances could serve to coerce the "embargoed" agents to approach journals about actually paying for coverage. Apropos here are the more recent accusations made against rating agencies. Many are concerned that issuers are bullied into "legal" ways of paying bribes to financial analysts working in the press. In the past, these ways have included coercing the issuer into buying ads, purchasing a rating, or more generally subscribing to a service provided by the analyst. A recurring claim against rating agencies during the late nineteenth century (when they were known as "mercantile" agencies) was that firms who refused to subscribe would receive poor ratings.<sup>4</sup> In the twenty-first century, Hannover Re (a German insurer) charged that Moody's had tried to force it to purchase a rating and that the insurer's resistance to this racket is why Moody's subsequently reported an unsolicited negative rating (Hannover Re claimed that two other rating agencies it had employed reported a favorable outlook).<sup>5</sup>

In this article, we use a variety of theoretical insights and an entirely new database to address the following questions: Given that badmouthing is so easy to perform and that enforcement of rules against it is so difficult, why isn't badmouthing more widespread? Can potential victims manage, at least partly, to address this problem? We explore these questions in the context of the French financial press during the period 1870–1914. France was by no means exceptional, and a similar study could just as well be performed for other countries. But there are three reasons for choosing this period and place as a case study. First, as a result of the Law of 1881, the freedom of the press was complete. It provided free speech and guaranteed free entry. Historians hail it as France's "First Amendment".<sup>6</sup> Our situation is therefore as close as possible to a "natural experiment" in which legal attempts to control denigration were at a minimum. Second, the period is usually portrayed as being rife with defamatory rackets and related abuses by the press against banks, borrowing governments, and firms. Contemporary accounts give details regarding the various techniques employed. Marinitsch and Lajeune-Vilar provide concurring descriptions.<sup>7</sup> Graphic and informative details are also known from *L'Humanité* (a communist newspaper), which published between December 1923 and March 1924 material showing Russian authorities

<sup>&</sup>lt;sup>3</sup> For example, one financial newspaper (*Messager de Paris*) told readers that they ought to "read between [the] lines" and understand that in some cases "no report is equivalent to a forceful blame"; quoted in Albert, "La presse française," p. 172. Bignon and Miscio, "Media Bias," report evidence of information suppression.

<sup>&</sup>lt;sup>4</sup> In the words of one observer: "What [mercantile agencies] desire is to drive the man within their own inclosure, and force him to become a subscriber to their institution." *Brooklyn Eagle*, "Agencies," 15 November 1873, p. 2.

<sup>&</sup>lt;sup>5</sup> Alec Klein, "Credit Raters' Power Leads to Abuses, Some Borrowers Say," *Washington Post*, 24 November 2004. More recently, the *Wall Street Journal* reported on a Moody's employee who claimed to have been sacked for seeking an upgrade for Express Scripts (a corporation). The employee's supervisor is said to have argued that "Express Scripts doesn't pay us," and "they don't visit us and they don't deserve our upgrade" (Jennifer Levitz, "Moody's Sued in Ratings Case," *Wall Street Journal*, 26 March 2009). Such tactics may be viewed as a type of *greenmail*. Greenmail consists of acquiring shares in a company and then threatening to use them in a hostile way unless they are repurchased above market price. There is no need to make overt threats (the target firm usually deciphers the message) and so abuse is hard to document.

<sup>&</sup>lt;sup>6</sup> Albert, "La presse française."

<sup>&</sup>lt;sup>7</sup> Lajeune-Vilar, *Les coulisses*; Marinitsch, *La Bourse* 

being coerced to pay nearly 5 million pre-WWI FF (1 million pre-WWI USD) to the French press between 1904 and 1907. (Here "FF" denotes "French francs"; "USD", "U.S. dollars".) The third reason is that, despite these payments, the Paris financial market strove to become one of the most important international capital markets in the world-second only to London. Paris' market capitalization as a share of GDP was close to 100 percent, and Paris was a serious competitor against London for foreign government debt.<sup>8</sup> The implication is that badmouthing had been, to some extent, subdued. How this was achieved is the topic of our article.

Other modern papers have examined the impact of a free press on corruption and quality. Gentzkow, Glaeser, and Goldin argue that the rise of the informative press in the nineteenth-century United States was the result of technological progress and free entry.<sup>9</sup> Petrova argues that higher advertising revenues favored media independence.<sup>10</sup> McMillan and Zoido show how independent media created the opportunity for Peru to prevent a corrupt government from remaining in power.<sup>11</sup> Dyck, Volchkova, and Zingales study the role of the media in disciplining firms.<sup>12</sup> Besley and Prat show how competition can reduce media capture by government.<sup>13</sup> Gentzkow and Shapiro argue that, when media compete on the basis of reputation, *slanting* (i.e., providing biased information) is reduced if consumers can easily learn the "true" information.<sup>14</sup> The ability of editors or journalists to appropriate private benefits from their position is studied in Djankov et al. and Baron.<sup>15</sup>

In this literature, the press is considered to be helpful in monitoring managers and policy makers and in diminishing the number of frauds; a free press is expected to tell the truth and is more likely to report wrongdoings. Our paper takes a slightly different perspective. We examine the full logic of a complete free-press regime and find that it complicates the court enforcement of libel cases. We have already remarked that, from an empirical standpoint, it is difficult to distinguish ill-intentioned badmouthing from its honest, merely "critical", variant. The difference between our approach and previous studies is best stated in terms of the difference between what statisticians call Type I and Type II errors.<sup>16</sup> The current literature deals with truth in the market for news. It is therefore concerned with Type I errors, or with the risk that true facts remain concealed. We are concerned with Type II errors, or with the risk that false (and harmful) claims are circulated as truthful. Statistical theory shows that there is a relation between the incidence of Type I and Type II errors. Increasing the stringency of libel law (raising the cost of defamation) reduces Type II errors but increases the risk of not recognizing the truth (Type I errors). This explains why it may be optimal to tolerate a certain degree of defamation. We do not address here the normative issue of the optimal amount of libel punishment.<sup>17</sup> We do provide a positive study of the endogenous emergence of market solutions to contain denigration. Toward this end, France's pre-1914 regime of complete freedom of speech is a valuable test case.

This article explores how the market mechanism dealt with the risk of badmouthing. For this purpose we use empirical evidence on the organization of the French press and on a major defamatory racket. Note that certain media specialized in disinformation and racketeering. These were the smaller and less reputable journals, which we refer to as "bad" or "zombie" journals, that were called (or recalled) to life solely to wage a press campaign

<sup>16</sup> These refer (respectively) to the error of rejecting a correct hypothesis and the error of accepting a incorrect one.

<sup>&</sup>lt;sup>8</sup> Rajan and Zingales, "Great Reversals"

<sup>&</sup>lt;sup>9</sup> Gentzkow, Glaeser, and Goldin, "Rise of the Fourth Estate."

<sup>&</sup>lt;sup>10</sup> Petrova, "Newspapers and Parties".

<sup>&</sup>lt;sup>11</sup> McMillan and Zoido, "How to Subvert".

<sup>&</sup>lt;sup>12</sup> Dyck, Volchkova, and Zingales, "Corporate Governance Role".

 <sup>&</sup>lt;sup>13</sup> Besley and Prat, "Handcuffs."
 <sup>14</sup> Gentzkow and Shaipro, "Media Bias."

<sup>&</sup>lt;sup>15</sup> Djankov et al., "Who owns"; Baron, "Persistent Media Bias".

<sup>&</sup>lt;sup>17</sup> Garoupa, "Dishonesty"; Bar-Gill and Hamdani "Optimal Liability"; Dalvi and Refalo, 2008. "Economic Analysis".

and then were sent to rest by their proprietors. Our first finding is that, because they were small and lacked reputation, these bad journals had to solve a collective action problem: they were only really dangerous when they coordinated their attacks. Our second finding is that, while bad journals had an incentive to become more organized, their targets had an incentive to organize themselves in order to contain potential ill effects. To control the damages of badmouthing, institutions concerned with reputation (e.g., corporations, underwriting banks, governments) put together quasi-formal intermediaries, known as "publicity brokers", who acted as delegated monitors and replaced bilateral sanctions with multilateral, intertemporal ones.

A third finding concerns the implications of our theory for the funding of journals. We show that charging borrowers (information providers) was a *complement* to—not a *substitute* for—charging investors (information seekers). The reason is that the risk of bad publicity induces targets to seek press coverage from more prestigious sources of information. In other words, the best insurance against badmouthing by bad journals is "goodmouthing" by good ones: publicity of this type serves as an insurance premium (and this is how the practice was described at the time).<sup>18</sup> But then, as space in good journals becomes scarce, these journals can begin to charge information providers. Thus the threat of badmouthing may be viewed as the solution to the free-rider problem that underlies any provision of high-quality information as a public good: not only investors but also borrowers are interested in this information. We suspect that this analysis can go a long way toward solving the puzzle of why rating agencies, which began as publishers that charged only the purchasers of their "manuals", switched to a regime where also the borrowers were charged.<sup>19</sup> Proposals suggesting that agencies should now switch back to the former regime miss an important aspect of the current setup: it is a natural market outcome and, in many respects, a desirable one.<sup>20</sup>

A corollary of this logic is the risk of capture. Good media are in a strong bargaining position with respect to institutions that are concerned about their reputations. Because such journals can easily apply "soft" badmouthing (e.g., providing coverage only on certain, select institutions), they are able to overcharge reputation-concerned institutions. In other words, the threat of badmouthing provides more serious journals with de facto property rights over agents' reputations. The extent to which the situation is costly or damaging depends critically on the degree to which free entry prevails in the market for good media. This result highlights the difficult balancing act between competition and monopoly power by private certifiers of reputation—issues at the heart of discussions about rating agencies' role in the recent subprime crisis.<sup>21</sup>

The balance of the paper is organized as follows. Section I provides stylized facts on badmouthing in France before World War I. We survey the legal background (and contrast it to Great Britain's), provide canonical examples of badmouthing, describe the industrial organization of financial journals, and document the rise of what we call a *zombie press*. We also document an association between the extent of badmouthing and IPO activity in the Paris Stock Exchange. Section II provides a theory of badmouthing and derives a number of testable implications. This theory is eclectic in that it relies on several strands of literature and does not build on a single family of insights. The key contributions made here are introducing the role of quality signals, the relation between price (ability to charge readers) and longevity, the two-sided aspect of markets (i.e., the complementarity of prices and advertising revenues), and the role of competition in checking badmouthing and

<sup>&</sup>lt;sup>18</sup> Modiano, *La presse pourrie*, p. xi.

<sup>&</sup>lt;sup>19</sup> See Cantor and Packer, "Credit Rating Industry"; Smith and Ingo, "Rating Agencies"; Byoun and Shin, "Unsolicited Credit Ratings."

<sup>&</sup>lt;sup>20</sup> A contemporary discussion of feasible charging structures can be found in Raffalovich, *L'abominable vénalité*, p. 207.

<sup>&</sup>lt;sup>21</sup> Mathis, McAndrews and Rochet, "Rating the raters", White, "Credit Rating Agencies".

"nonmouthing" (or, as we call it, the *rating agency racket*). Section III provides evidence: using new data from previously unused sources, we establish results that are consistent with several of the critical predictions underlying our description of the market for fabricated news. We end with conclusions and extensions. Our analysis has broader implications for the funding of a high-quality press (a public good), and we review possible challenges to the public provision of reliable information.

#### Section I. Stylized Facts about Badmouthing

#### A. Libel Law and the Era of Journalistic Freedom in France (1871–1914)

The period we study is usually portrayed as the heyday of journalistic freedom in France, which historians associate with the landmark Law of 1881. Two distinct aspects of legal constraints on the press have been discussed. On the one hand were direct political constraints (censorship, nicknamed *Anastasie*), which were tight under Second Empire (1851–1870) but gradually softened towards the last years of the period.<sup>22</sup> It is also said that substantial freedom prevailed for economic and business matters. The advent of the Republic in the early 1870s ushered in an era of relaxed supervision. There was also pressure for lax implementation of libel laws, which was due to political activism by the left-of-center *Radicaux*. When this party won the elections of 1876, a debate ensured over giving full freedom to the press. The judiciary, which was never fully independent in France, reacted by softening the implementation of existing libel laws in anticipation of the full formal freedom of the press granted by the landmark Law of 1881.

The new law severely checked the ability of the executive to control the content of newspapers,<sup>23</sup> and it abolished all remaining types of entry cost, authorization, and registration. Finally, the law transferred cases pertaining to libel and freedom of the press from *correctionnelle* tribunals, which were ruled by professional judges who could be influenced by the executives, to *assises* courts—that is, popular juries. Historians have emphasized that the new statute of 1881 (described as France's "First Amendment") encouraged a violence of language that was unmatched in other countries. (Later on, continued pressure by MPs from the left and the center sustained the existing legislation with few qualifications—against pornography and anarchism—in the 1890s.)<sup>24</sup> One leading history of the period summarizes the situation as follows: "Offences retained [in the Law of 1881] were few and narrowly defined so as to remove any leeway from the executive.... This legal impunity, combined with a de facto impunity as to defamation and insults to individuals had the effect of endowing the French press with a total freedom of speech and criticism, but also to permit, in both writing and attacks, a frightening degree of violence."<sup>25</sup>

A useful comparison of France's regime is with that of Britain.<sup>26</sup> By the end of the century the two countries had done away with stamp duties and other market entry restrictions, but they differed as far as libel law was concerned. Britain was ruled by the Campbell Act of 1843, which had a strong anti-badmouthing bias. First, it

<sup>&</sup>lt;sup>22</sup> Palmer, *Des petits journaux*,; Albert, "La presse française."

<sup>&</sup>lt;sup>23</sup> For a classic discussion, see Albert, "La presse française."

<sup>&</sup>lt;sup>24</sup> The libel and insult cases declined steadily with the passing of the new legislation from 6.9 to 3.2 convicted per 100,000 inhabitants between 1881 and 1911. In 1872, 3,898 people were accused of libeling or insulting others in the press and 2682 were convicted. In 1911 those numbers have decreased to 1,871 and 1,344 respectively. Plaintiffs faced delays and uncertainties (popular juries made outcomes less predictable). The proportion of convictions fluctuated around 70 percent. See appendix A.1. for detailed evolution and sources.

<sup>&</sup>lt;sup>25</sup> Albert, "La presse française," p. 243.

<sup>&</sup>lt;sup>26</sup> See Koss, *Rise and Fall*, for an account of the British experience.

provided substantially higher penalties for malicious *libels that were known be false*, versus "plain" libel (the former provided for up to three years' imprisonment, including hard labor; the latter was capped at one year in an ordinary prison). Second, the Act punished attempts at racketeering—threatening to publish a libel (or to abstain from publishing anything) with intent to extort money or any other private benefit (appointment, office, etc.)—with forced labor for up to three years.<sup>27</sup> Third, the "defense of truth", which gave defendants in libel cases the right to prove the truth of their accusation, was limited to cases where publication of the libel was in the "public benefit". Finally, those defendants convicted of libel had to bear the plaintiff's legal expenses.

No such bias existed in France. The Law of 1881 certainly did not introduce higher penalties for libels known to be false. Under its provisions, penalties for libel were also smaller than those prevailing in Britain for a similar tort (up to six months or one year, depending on the violation). Finally, France's Law of 1881 (Article 35) allowed the defense of truth to be used against directors or board members of industrial, commercial, or financial enterprises making public offerings in the market.<sup>28</sup> This meant that one could print any insulting or denigrating statement at all—provided it was based on "facts". As a result, previous work has suggested that the pre-1914 regime in France had more than its share of badmouthing. A substantial contemporary and subsequent literature discussed what seems to be a sad *exception française*.<sup>29</sup> A classic theme among social historians is that tighter libel laws in Britain led to the early disappearance of duels in Britain and their continuation in France.<sup>30</sup> In French literary and political circles, duels were a way to deal with badmouthing; in fact, some leading journals had in-house facilities to train for fencing.<sup>31</sup> The early years of the *Annuaire de la presse*, the main statistical source for information on journals, also reported on the "most important duels". Yet risking one's life to defend a reputation may have been too chivalrous a deed for bankers and businessmen, who are rarely found among the casualties of famous duels.<sup>32</sup>

#### B. Badmouthing in Practice: Examples

To define badmouthing, we start with three illustrations. Lajeune-Vilar tells the "typical story" of a low-cost stove maker whose product is involved in an accident (carbon monoxide intoxication, causing the death of a customer).<sup>33</sup> Journalists take advantage of the situation to threaten the entrepreneur with press coverage unless he buys their silence. Lajeune-Vilar emphasizes that the stove in question was no more dangerous than competitors', but journalists could write a story that implied this brand was less reliable. Faced with the threat of bad coverage and a resulting decline in sales, the entrepreneur coughed up. This is the essence of a badmouthing racket. Strictly speaking, there is nothing "false" in reporting a deadly accident as news. But clearly this could be done in a disingenuous way that enables the journal to appropriate some benefit. The concepts of "blackmailing"

<sup>&</sup>lt;sup>27</sup> "An Act to Amend the Law respecting defamatory words and libel," CAP. XCVI, Anno Sexto & Septimo, Victoriae Reginae.

<sup>&</sup>lt;sup>28</sup> "La vérité des imputations diffamatoires et injurieuses pourra être également établie contre les directeurs ou administrateurs de toute entreprise industirelle, commerciale ou financière, faisant publiquement appel à l'épargne ou au crédit" (Law of 1881, Article 35).

<sup>&</sup>lt;sup>29</sup> Contemporary accounts may be found in Robert-Coutelle, *Le Crédit Foncier*; Marinitsch, *La bourse*; Lajeune-Vilar, *Les coulisses*; Lysis, *Contre l'oligarchie*; Neymarck, *Finances*; Raffalovich, *L'abominable vénalité*. Key contributions by French historians include Albert, "La presse française"; Jeanneney, "La vénalité"; Eveno, *L'argent*.

<sup>&</sup>lt;sup>30</sup> Simpson, "Dandelions on the Field of Honour"

<sup>&</sup>lt;sup>31</sup> Duels were legal, and killing one's opponent did not entail penalties if the conventions were scrupulously respected (number and qualification of witnesses, rules for choosing weapons, etc). Some senior journalists and politicians were reported to have made their career from threatening badmouthers with duels.

<sup>&</sup>lt;sup>32</sup> The two instances we found in Dujardin's 1891 *Annuaire du duel* occurred in 1880 and 1882. All told, there were 38 duels in 1880 and 58 in 1882. The 1880 duel opposed Arthur Meyer, director of *Le Gaulois*, to the banker Gaston Dreyfus. When Meyer is wounded, the fight is stopped as won. But Meyer, having been insulted by Mr. Lange (another banker) while fighting Dreyfus, challenges Lange to a duel. Lange refuses, claiming he does not care about being "killed" in the press.

and "slanting" do not really apply to this type of situation. Here the stove maker is a victim, not a wrongdoer. As for the journalist, his oblique coverage of the truth is not intended to inform readers so much as to appropriate private gains.

A famous instance of the badmouthing racket is an episode involving a Russian government representative in Paris (Arthur Raffalovich). As revealed by his correspondence published during the 1920s by the French Communist Party (with help from the Soviet government), the French press had extracted substantial resources from the Czarist regime. This scheme's point of departure was Japan's surprise attack on Russia's Pacific fleet at Port Arthur on 8 February 1904; so began the Russo-Japanese War, which Japan would eventually win. Russia's situation was comparable to that of the stove maker. Its debt burden was moderate and its track record was impeccable—hence, financially speaking, there was not much to report upon.<sup>34</sup> But Russia was involved in a difficult war that it was not winning, and large portions of its external debt were held in the portfolio of Western (here, French) investors. Any press accounts suggesting that Russia was "living beyond its means" or "on the "breaking point" would create a sensation. Moreover, Russia had many enemies that were prepared to subsidize and thus spread rumors.<sup>35</sup> Articles printed abroad and paid for by foreign powers could be picked up by local journals at zero cost, resulting in still more coverage with negative outlook. Like the stove maker, Russia had no choice but to forestall bad press with money and bribes. In one letter, a demoralized Russian agent Raffalovich called French journals "hideously venal" (in French, *l'abominable vénalité de la presse*)—an expression that would stick.

The contemporary press offers literally hundreds of instances of badmouthing rackets. Consider the example of *Semaine economique et financière*, a financial weekly. On 22 January 1912 this journal ran a story about the Banque Suisse et Française, which was raising capital in Paris. The story's language suggested that investors should be cautious. No clear statement or allegation was made; rather, the story made reference to a "troubled past" and to the bank's being less "Swiss-French" than "German-French" and, in fact, "more German than French" (the journal inferred this from the names of directors). Of course, in the pre-1914 climate, being "more German than French" was tantamount to being owned by the enemy. The story claimed that the journal—unlike other newspapers that "knew nothing but praise"—felt "compelled" to forewarn readers and that one "could never be too prudent". The article concluded with an ominous warning that they would "soon" give more details. With this story, the journal was exploiting the libel law's "loophole": making statements that were literally true but hiding its racket behind the Article 35 provision that any true facts could be published if they concerned companies that were taking public subscriptions. Of course, no further details were ever given, and it is easy to imagine what transpired thereafter.<sup>36</sup>

These cases have in common a number of features. First, the rumor is cheap because it is not based on information that is costly to originate. Second, the attempt at circulating a rumor takes place precisely when the target is most vulnerable: immediately after an accident involving a household product, or when the target is about to need capital market access (to finance a war or to fund a capital increase). Finally, the allegation cannot be refuted in court because it is literally "true": this stove was involved in an accident; Russians were actually

 $<sup>^{34}</sup>$  As Raffalovich (*L'abominable vénalité*, p. 407) complained in one letter: "we [Russia] are not in the same situation as Argentina, Brazil". Russia would default some years later, but this was after straining its finances in the First World War and undergoing a political revolution.

<sup>&</sup>lt;sup>35</sup> These enemies included outside political rivals (such as Germany), domestic opponents to the Czar's autocratic rule, and international lobbies trying to protect oppressed Jewish minorities (see Miliukov, *Russia and its crisis*).

<sup>&</sup>lt;sup>36</sup> The association between rackets and IPOs is emphasized in Lajeune-Vilar (*Les Coulisses*, pp. 33–34) and in an article published by *Le Globe*, 11 November 1909, p. 858.

attacked by Japan and lost part of their fleet; and the *Banque Suisse et Française* did have directors with German names.

#### C. Payments, Intermediaries, and Participants

Various vehicles were used to pay journalists, and there were no legal provisions against such payments. Marinitsch, and Lajeune-Vilar all argue that some financial journalists received monthly stipends.<sup>37</sup> Another technique was the distribution of stock options.<sup>38</sup> Neymarck, who was both an economist and the director of a leading financial journal (*Le rentier*), describes the promotion of initial public offerings in newspapers through advertisements, paid articles, and distribution of stock options as part of the normal process "in France and abroad".<sup>39</sup> Buying space in journals was another avenue. A preferred way to do this was to publish massive amount of technical information on bonds (e.g., announcements of the drawings of lottery bonds). For instance, during 1905–1906 *Le rentier* devoted an average of two pages (out of sixteen) to information on Russian bonds—all paid for by Russian authorities.<sup>40</sup> Similarly, banks had voluminous announcements regarding their services, deposit rates, provision of safes, et cetera published in journals; they even had transcripts of board meetings printed. Anecdotal evidence mentions other creative ways of channeling money to the press, such as interest-free loans (to journal directors) that were never reimbursed.<sup>41</sup>

All available accounts suggest that every journal was involved in one way or another. They also suggest that any entrepreneur had to expect, whenever some new project was launched, the visit of many individuals coming with offers of "help" that thinly disguised badmouthing threats. These accounts also imply that the precise forms in which such rackets were carried out varied according to the journal's standing. Journals with a relatively high reputation were said to attract revenues through publicity, and Lysis actually calls publicity a "gentlemanly form of racket".<sup>42</sup> Outright threats of badmouthing were the hunting preserve of journalist-thugs. Contemporaries explain that financial gossip could be acquired in a spot where rumormongers were known to congregate. The spot was located under the péristyle of the stock exchange (a colonnade on the side of the Paris Bourse) "in front of Notre Dame des Victoires street".<sup>43</sup> The place's nickname-Académie nationale de chant-was a hard-totranslate joke that implied this was where the country's blackmailers received officially sanctioned training: faire chanter is slang for blackmailing (the National Academy of Blackmail is a possible rendering). Once a racketeer had found his rumor and prey, he needed only to fabricate a journal. Printers tended to this by offering, at very low cost (close to the price of the paper on which it was printed), ready-made four-page journals with cheap news inside, which they took from a variety of open sources.<sup>44</sup> The printer would leave it up to the racketeer to provide the information for the front page. Thus was a "journal" created. The next stage was the newsboys hawking it in the street.

An interesting and not well-understood aspect of the industrial organization of badmouthing is the existence

<sup>&</sup>lt;sup>37</sup> Marinitsch, La bourse, p. 296; Lajeune-Vilar, Les coulisses, p. 62

<sup>&</sup>lt;sup>38</sup> Lajeune-Vilar, *Les coulisses*, p. 51; D'Avenel, "Le mécanisme", p. 643.

<sup>&</sup>lt;sup>39</sup> Neymarck, *Les coulisses*, pp. 63–64, 66.

<sup>&</sup>lt;sup>40</sup> Authors' own estimates.

<sup>&</sup>lt;sup>41</sup> A file (box B3323) in the archives of a leading deposit bank—the Société Générale—indicates that it made a loan to M. Chavanon, director of L'Information. A few years later, when the department for judicial affairs tried to secure reimbursement, Chavanon simply ignored the request. Documents show that the bank manager ordered the lawyers to stop asking for repayment, which suggests that Chavanon had paid a visit to the bank's management.

<sup>&</sup>lt;sup>42</sup> Lysis, *Les coulisses*, p. 48.

<sup>&</sup>lt;sup>43</sup> Lajeune-Vilar, *Les coulisses*, p. 53. The *péristyle*, a colonnade that surrounds the Paris stock exchange, protected against the weather and enabled anybody to meet in any season.

<sup>&</sup>lt;sup>44</sup> Lajeune-Vilar, *Les coulisses*.

of racket intermediaries, which were called upon by the target prey to distribute monies.<sup>45</sup> Even though there could have existed direct relations—especially between major borrowers or banks and major press outlets, a huge share of payments to the press appear to have been managed by publicity brokers. These "racket brokers" were described as *agents de publicité financière* (dealers in financial advertising). No study was ever made of publicity brokers, and none of their own material survives. However, these brokers invariably appear in archives related to press racketeering during the period as well as in secondhand accounts. Police monitored them, and police archives contain interesting (albeit fragmentary) material.<sup>46</sup> Secondary accounts describe a world where contracts are never written and where publicity brokers, who centralized the distribution of bribes, reign supreme.<sup>47</sup>

Despite monitoring these activities, the police did not interfere. This suggests that the executive branch of government was involved and that there was a tacit agreement to support this arrangement. Indeed, government officials were sometimes found among racketeers. At a broader level, the total freedom of the press made journals ideal vehicles for laundering political bribes: compelling a target to buy ads in a journal was legal, whereas payments without counterpart services were not.<sup>48</sup> Lefébure remarks that when tax inspectors performing audits came across a line that read "publicity" or "press", they "smiled and moved on".<sup>49</sup> This, he indicates, means that bureaucrats avoided digging too deeply into such matters because it carried the risk of leading them straight to the executive.

In the Russian bribery case, Russia's agent Raffalovich was first approached by the head of the Paris Stock Exchange and then called by senior civil servants from the finance ministry's staff. Later on, senior members of the stock exchange tried to influence Raffalovich's list of journals to be bribed, and it seems reasonable to conclude from the available evidence that this list included clients and political friends. There is also evidence of operations whereby senior politicians instructed Russians to pay certain journals, who then used the bribe monies to buy votes in parliament.<sup>50</sup> Finally, Lysis claims that there existed a cozy relation between publicity brokers and politicians—with the latter, in effect, supporting the former:

The publicity brokers are not poor shameful agents working in the shadow, they are officials, they are treated well, they receive distinctions, they represent a social function. These agents of corruption have close links with ministers, they have access to their office. The government gives them medals. In February 1907, the distributor of Russian bribes received the *Légion d'Honneur*. Some time ago a press corruptor offered game for lunch to his friends in a *chateau*. He had the most distinguished guests. On the table were Mr the Minister of Finance, Mr. the Governor of the Bank of France, Mr the Governor of the Crédit Foncier, administrators of credit institutions, etc. In summary, the highest names from the financial

<sup>&</sup>lt;sup>45</sup> Lajeune-Vilar, *Les coulisses*, pp. 54ff; Marinitsch, *La bourse*, pp. 292–96.

<sup>&</sup>lt;sup>46</sup> A detailed and well-informed report is available in the French National Archives in Paris (F/7/12842; file Société Générale des Annonces, report dated 30 May 1914).

<sup>&</sup>lt;sup>47</sup> Lajeune-Vilar, *Les coulisses*; D'Avenel, "Le mécanisme", p. 642. An interesting discussion of the problems associated with writing formal contracts emerges in a letter from the Agence Havas (France's leading provider of primary information) negotiator in Budapest and Henri Houssaye, the group's director in Paris: "You probably remember that in the first letter you sent me on this Hungarian business, you insist on the necessity, in case of the talks succeeds, to sign a written contract. After having thought about that, I did not hide that such an arrangement, in its written form, could have serious drawbacks for the Hungarian government. Indeed an indiscretion can always happen, and in that case this government will risk to see numerous European newspapers asking for a similar settlement and he would bear the risk, in case of it refusing them, to notice the build up in those newspapers of a stream of opinions damaging for the Hungarian interests. I told those thoughts to people in Bupadest and they agreed with me … and that it would be preferable to be stuck with the current practice. " (Archives Havas, 5AR/428).

<sup>&</sup>lt;sup>48</sup> Lajeune-Vilar, *Les coulisses*, pp. 59–62. See Ellschot, *Lijmen*, for a novel describing this mechanism in 1920s Flanders.

<sup>&</sup>lt;sup>49</sup> Lefébure, *Havas*.

<sup>&</sup>lt;sup>50</sup> Raffalovich, L'abominable vénalité, Ageron, "La vénalité de la presse française".

who's who came to his invitation.<sup>51</sup>

#### D. Data: The Demography of Financial Journals

Figure 1 tracks the evolution of economic and financial journals in Paris and London – the main financial centers of France and England respectively – between 1874 and 1913. Our source for France is the *Catalogue des Journaux Imprimés* for the early years and the *Annuaire de la presse* for all the subsequent years (a yearbook described in greater detail in Section III). These sources provide a list of journals organized by specialty, and we collected the total number of journals listed under *finance* and *économie politique* (political economy). For England, we use the *Tercentenary handlist of English & Welsh newspapers, magazines & reviews* which gives a census of all the periodicals published each year in London between 1620 and 1920.<sup>52</sup>

Two facts are evident from Figure 1. First, between 1870 and 1880 (i.e., when markets anticipated that libel standards were to be reduced), there was a dramatic increase in the number of French financial journals (from about 50 to about 200). In contrast, the number of similar journals in London rose much more gradually. Second, absolute numbers for Paris seem astonishingly high – around 1900 they were more than threefold comparable numbers for the London (which are found around 50-80). We can think of but two possible explanations. One is that the Parisians were passionate readers of financial news; the other is that not all of the 310 journals that existed in 1913 were bona fide publications. Anecdotal evidence suggests this latter explanation has merit. In the Paris list, many journals had pseudo-addresses, existed only episodically, and/or cannot be found in any library on earth.<sup>53</sup> Many of those we found from exploring the records of the *Bibliothèque Nationale* in Paris lacked continuity—not because the library saved only some copies but rather because the journals' sense of "periodical" was a creative one (and this is just for those journals that librarians kept in their collections).<sup>54</sup> IN this paper, we shall interpret this difference, which is consistent with discussions of the widespread problem of badmouthing in France, as resulting from differences in libel law. With weak libel law, there was a greater benefit in France to engage in badmouthing rackets, and this may explain that country's large number of journals.

#### Figure 1 about here

We conclude this section by introducing one last stylized fact. In Figure 1, three peaks are discernible in the French series.<sup>55</sup> The first coincides with the speculation and crisis of 1881, which ended up with the Union

<sup>&</sup>lt;sup>51</sup> Lysis, Les coulisses, pp. 162-63.

 $<sup>^{52}</sup>$  As for London, the source we use did not classified journals along specialty. We then do this classification ourselves. Moreover the source only listed which journals appeared each year. To obtain the number of financial periodicals published each year, we then constructed a database in which for each journal that appeared during the period 1844–1914, we created an entry of 1 or 0 depending on whether the journal was (or was not, respectively) in operation during that year. The sum for each year then gives the number plots on figure 1.

<sup>&</sup>lt;sup>53</sup> Among the addresses that journal directors gave to the makers of the *Annuaire*, we find private jokes such as the reference by the weekly *Finance-revue* to the *Cour des miracles*—the leprosy-ravaged place where thugs enjoyed immunity from the Paris police during the Middle Ages—a way of saying: "I am a swindler but try to catch me!" (Mermet, *Annuaire*, p. 52).

<sup>&</sup>lt;sup>54</sup> For instance, a "weekly" journal might not be published every week, and number 12 could appear several months after number 11. The journal *Moniteur des intérêts matériels francais* appeared only twice during the first half of 1909, on 15 and 22 March. The next issue is dated 10 February 1910. The weekly *Le message du rentier* put out 16 issues during the same period, thus failing to publish 10 issues. The weekly *La semaine économique et financière* was similarly published only 12 out of a possible 26 weeks, and its numbering is doubtful: issue number 11 appeared on 15 March but the next issue, published on 19 April, was numbered 16. The newspaper *La fortune internationale* had seven issues published during the first half of 1909 on (roughly) evenly spaced dates (6 January, 3 March, 11 March, 17 April, 10 May, 28 May, and 14 June). The last two newspapers were identified as financial newspapers by the *Annuaire de la presse* (1909). Details on timing of the issues were gathered from the collections of the *Bibliothèque Nationale de France*.

<sup>&</sup>lt;sup>55</sup> See Bouvier, *Le krach*, for a history of the 1881 bubble. For the second peak, see Bouvier, *Deux scandales*; Simon, *Panama Affair* See de Folleville, *Rapport*, for the affair linked to the third peak.

Générale crash and the so-called Bontoux affair, a political and financial scandal.<sup>56</sup> The second peak (1892–1893) coincided with the Panama Canal scandal, which took place in an era of heavy speculation in the Paris stock market. The scandal erupted when an anti-Semitic and xenophobic newspaper published a list of about 500 MPs who had received bribes.<sup>57</sup> The last peak (which overlapped with the Russian episode) was in 1905–1907, another period of intense stock market activity. All three episodes thus coincided with IPO booms—in other words, the number of journals increased during peaks in financial activity. To construct this as a stylized fact, we combine our aggregate number of journals with data for IPOs in the Paris Stock Exchange.<sup>58</sup> We then plot one factor against the other (Figure 2) and find a large and significant correlation that is all the more intriguing because badmouthing seems not to have entirely quashed financial development. Instead, Paris was able to compete against London. The reason, as we shall see, is that a market setup emerged to cope with badmouthing.

#### Figure 2 about here

#### Section II. Badmouthing in Theory

The previous section has identified several important stylized facts. We now construct a theoretical argument to account for these critical features of the economics of denigration. In so doing, we also derive predictions regarding market structure, intermediaries, amounts appropriated, and the role of politicians. Our theoretical inspiration is eclectic, as we draw on insights from finance economics, procurement theory, and option theory. The starting argument relates to the literature on intermediaries' veracity and reputation liability. In a classic paper by Chemmanur and Fulghieri, concerns over reputation provide incentives for truthful revelation.<sup>59</sup> Another connection is with the literature on the role of external audits in defusing the reputation helps protect market share over time (and so confers a degree of monopoly power), brand owners are prepared to be honest. Any intermediary with a large market share and a long time horizon will lose if it tries to extract short-term gains.<sup>61</sup> The literature has extensive applications to the role of quality certification in initial public offerings.<sup>62</sup> This is not surprising when one recalls that IPOs are characterized by a high degree of information asymmetry, which makes certification more valuable.

The dynamic described here explains the connection we made between journal demographics and IPOs, and accordingly we apply these insights to badmouthing rackets by journals. Threats of badmouthing provide short-term gains (to a successful racket). To be credible, the threats must be carried out if the prey does not surrender; yet this creates an opportunity for readers to observe that the journal is not reliable: credibility with readers will be lost if and when the target turns out to be successful. Hence the short-tem benefits from rackets must be balanced against the long-run costs of brand damage. In sum: reputation plays a disciplinary role in monitoring negative coverage, as journals with a reputation will not engage in overt badmouthing (saying bad things about good concerns).

We therefore predict that two types of journals should arise. On the one hand, there should be an army of *zombie journals*. Each has no credibility and thus no concern about retaining it, which makes them extreme and

<sup>&</sup>lt;sup>56</sup> Bouvier, Le krach; Kindleberger, Manias, pp. 114–15.

<sup>&</sup>lt;sup>57</sup> Simon, Panama Affair; Bouvier, Deux scandales.

<sup>&</sup>lt;sup>58</sup> This from Saul, "Banking Alliances."

<sup>&</sup>lt;sup>59</sup> Chemmanur and Fulghieri, "Bank Reputation."

<sup>&</sup>lt;sup>60</sup> Hillison and Pacini, "Auditor Reputation"; Lenz and Ostrowski, "Auditor Choice."

<sup>&</sup>lt;sup>61</sup> Diamond, "Reputation acquisition"; Gorton, "Reputation formation".

<sup>&</sup>lt;sup>62</sup> Beatty and Ritter, "Investment Banking"; Allen and Faulhaber, "Signalling by Underpricing"; Michaely and Shaw, "Princing of IPOs"; Carter, Dark, and Singh, "Underwriter Reputation."; Albano and Lizzeri, "Strategic Certification".

voracious. But then they have no market share, either, and thus no real ability to destroy value. Owning a zombie journal is like owning a claim on certain states of the world in which rackets are successful. In equilibrium, if the cost of setting up a zombie journal is low (as was the case), then there should be lots of them. The condition for this scenario is that the wage opportunity cost of the time spent racketeering must not exceed the expected gain should the racket prove successful.

One way to view these journals is through the lens of option theory. By reducing the cost of entry and deterring libel suits, France in 1881 created a system that encouraged journals to pop up: the value of the badmouthing option was less. Relevant parallels may be made with defaulted bonds (whose values do not fall to zero because there is some chance the defaulter will eventually pay) and with models of urban migration (where agents leave the countryside, and add to urban unemployment, because of the relatively high wages possible if they are lucky enough to find a job).<sup>63</sup> Reference to option theory also helps explain why increased activity in the stock market was mirrored by an increase in the number of journals (Figure 2). Since there was free entry to the badmouthing racket and if there were no economies of scale in organizing a racket it follows that increases in the number of potential targets should lead to more fly-by-night journals entering in the *Annuaire* and not to existing ones doing more work.<sup>64</sup>

What we argue therefore is that the French regime fed the existence of a "reserve army" of fly-by-night journals that were put into circulation by their director as part of special racketeering operations and then put to rest afterward—before being resurrected by the same director (or a friend) under the same guise or in a slightly different reincarnation (same address but modified name or vice versa). Given this dynamic, we suggest calling such newspapers "zombie" journals—a tribute to their deceased yet aggressive nature. With no pun intended, they only existed "on paper"! We argue that zombie journals made up the file and rank of predatory badmouthing.

We can use the previous insights to estimate the number of zombie journals. Libel law was weak in France because of the policy (begun in the 1870s and sustained thereafter) to maximize free entry and prevent anyone from controlling freedom of speech. The result was a tight check on Type I errors (true information not being revealed) and an increase of Type II errors (there were damaging fabricated rumors). One benchmark estimate of the equilibrium number of journals that would have existed under a counterfactual scenario of tighter libel law in France may be provided by a comparison between Paris and London. It is unclear how many journals in finance and economics are needed by a given economy, but the 50 to 80 journals in London hardly stifled Britain's economic development.<sup>65</sup> This means that the difference between the Paris and the London numbers in Figure 1 provides a lower estimate of the number of journals that existed solely as instruments of rackets and/or to collect bribes. In 1900, there were roughly 250 of these. This is a large number.

Besides the zombies, were journals that care more about reputation—the *reliables*. There were much fewer of these, since they (unlike zombies) had positive market shares. This made the journals most able to circulate rumors (because they owned a readership and had credibility) yet also the least inclined (for the same reasons) to engage in racketeering. If they circulated views that could later be exposed as wrongful, the journals' own

<sup>&</sup>lt;sup>63</sup> See Hickman, *Corporate Bond Quality*, for defaulted bonds; see Harris and Todaro, "Migration," for rural–urban migration.

<sup>&</sup>lt;sup>64</sup> Lajeune-Vilar (*Les coulisses*, p. 53) gives precisely this (the decline of entry costs and the increase in financial optimism) as the reason for the association between the dynamics of the 1881 crisis and the boom in journals creation.

<sup>&</sup>lt;sup>65</sup> It is obvious from historical evidence that at least some British journals did not have perfect business ethics (see Trollope, *Way We Live*).

reputations would be destroyed.<sup>66</sup> This would be harmful to the reliables because it would deprive them of the revenue from their large pool of readers, which would shrink if journal reputations were compromised.

The interactions described so far should have implications for the relation between reliability and market share, and if circulation figures were known then a natural test could be made. However, a major limitation of contemporary sources is that circulation was not documented properly. This imprecision was part of the period's more general laissez-faire, and it was not until the 1930s that some (half-hearted) attempts at publicizing figures were made.<sup>67</sup> In particular, no reliable circulation figures existed for commerce and finance journals. We therefore focus instead on another theoretical implication of our model. Namely, we study the relation between a journal's longevity (time horizon) and its ability to charge readers. The reliables have a longer life because they made investments in trustworthiness. Conversely, that they have a longer horizon encourages them to make such investments. Reliables are more expensive not only because they are more costly to produce but even more so because their high quality enables them to charge readers more. We recognize here the familiar arguments, from finance and signalling theory, about rents accruing to reputation and providing incentives for truthful behaviour.<sup>68</sup> Zombies, in contrast, have short horizon. Their point is not to invest in reputation; they seek merely to take advantage of a target's readiness to pay in order to avoid badmouthing.<sup>69</sup> As a result, they cannot really charge readers. Their main threat to targets is not that damaging views would reach their loval readers (since they had none) but rather that the newsboys would cry down some security. Such a journal is prepared to subsidize readers because it needs to influence enough of them that its prey fears possible damage. For all these reasons, we expect to observe a positive association between journals' longevity and price.

Our analysis has relevance also for journals' governance structures. The very reputation of a reliable journal creates an opportunity for hostile takeover by a rogue publisher seeking to profit from badmouthing scandals (asset stripping), who could take over a journal with a reputation and use it for racketeering purposes. As the process wears on and as some firms refuse to "cough up", the journal would be forced to print some damaging reports and eventually the credibility of the journal would be lost. Other stakeholders (journalists, minority shareholders, readers who paid for unreliable news) would bear the costs.<sup>70</sup> A reliable's own journalists likewise have an incentive to exploit the journal's credibility by attempting to racketeer firms. In particular, we speculate that the monitoring of journalists (as by the independent cross-checking of sources) and/or the forms of journal ownership (e.g., private versus joint stock ownership) could be studied as possible responses to this problem. Lajeune-Vilar suggests that journalists in bad journals were paid less and that this encouraged them to try racketeering firms and politicians.<sup>71</sup> Our analysis suggests an alternative interpretation: journalists in good journals were paid excess wages so as to increase the cost of being fired. Examining this prediction could yield valuable insights, but the lack of much information beyond the anecdotal prevents us from further exploration;

<sup>&</sup>lt;sup>66</sup> This hypothesis has been questioned in behaviorist experiments, but economic historians have ascertained that mistrust in one's newspaper may lead to systematic patterns of voting against that newspaper's recommendations (Bloch, *L'Etrange défaite*, p. 163).

<sup>&</sup>lt;sup>67</sup> It must also have supported the operation of the fly-by-night press. An open question is why the reliables did not band together to discipline the market by revealing circulation to readers.

<sup>&</sup>lt;sup>68</sup> A classic reference in this vein is Spence, *Job Market Signaling*.

<sup>&</sup>lt;sup>69</sup> Details are provided in Lajeune-Vilar, *Les coulisses*, pp. 41–46, 58.

<sup>&</sup>lt;sup>70</sup> See Lajeune-Vilar (*Les coulisses*, pp. 115–49) on Portalis, a swindler who mounted a hostile raid on *Le XIXè siècle*, a reputable journal that he left essentially bankrupt. Portalis would later be involved in rackets related to the Panama scandal. See the *New York Times* articles entitled "The Rise and Fall of a Brilliant Newspaper's Man in Paris" (2 January 1895, p. 7) and "Paris Blackmailers Punished; Portalis severest sentence—Canivet and Trocard acquitted" (22 February 1895, p. 5).

<sup>&</sup>lt;sup>71</sup> Lajeune-Vilar, *Les coulisses*.

we thus leave the matter to future research.<sup>72</sup>

Another important and testable implication of our analysis is a logical extension of the fact that good journals are a reputable source of information. Press coverage by a reputable journal can be viewed as a "certification" service for which issuers may be prepared to pay. To gain a journal's attention, the firm may be willing to buy advertising space. As we shall see, there's a thin line between this approach and the rating agency racket described previously. A natural way to think about it therefore is to recognize that reputation is a scarce resource, which implies that the ability to charge readers and the ability to charge issuers are complements. This view echoes findings from the literature devoted to the study of so-called two-sided markets. The theory of such markets explores situations in which "platforms" court two (or more) parties that use the platform to interact with each other. For instance, the journal (the platform) reports financial information on firms (one party), and investors (the other party) use that information to make investment decisions. The platform (or intermediary) must decide how much to charge each user type while ensuring that both types will participate, since the platform's charges affect the parties' willingness to interact and hence their net surpluses from potential transactions. Of course, attracting many agents at one end of the market increases the amount a platform can charge the other end.<sup>73</sup> In our framework, we predict that good journals can extract more revenues from both ends. A reliable journal can charge readers for reliability, and it can attract lots of publicity because it has so many readers. We will argue that good news was chasing bad news in the sense that the best insurance against badmouthing in bad journals was "fairmouthing" in fair journals—which potential targets secured in return for buying publicity. This empirical prediction has strong relevance at a time when the rating agencies' model of "issuer pays" is coming under scrutiny; our analysis suggests that this model is a natural outcome of the market mechanism. At a broad level, then, in our model the threat of badmouthing increased revenues for reliables. Targets could use ads to make reliables more powerful and create a barrier against zombies—a mechanism that also ensured the target firm's loyalty to the journal. The argument is that of the efficiency wage theory, whereby a firm pays workers above their marginal productivity in order to ensure that they would incur substantial losses from shirking.74

Our analytical predictions have implications also for the rating agency racket discussed in the Introduction. We emphasized that reliables have no incentive to propagate false news. However, they may still coerce issuers into paying for coverage (through publicity) by "nonmouthing" them—in other words, by making no mention of them. This type of racket, which contemporaries described as a "gentlemanly racket" or the racket of the reliables, raises the theoretical possibility of the capture of issuers by journals with a reputation. A critical requirement for holding the rating agency racket in check is that there be enough competition between good journals.

Given what we have argued so far, the proper way to deal with rackets would be to ignore the zombies and buy advertising space in selected reliables. Two complications arise, however. First, there are information asymmetries. The targets had limited knowledge of the exact standing of each journal (after all, there were close to 300 economics and commerce journals in addition to the political press), and it was difficult for a nonspecialist to tell serious journals from the rest. The target had to know the proper response for each journal—

<sup>&</sup>lt;sup>72</sup> Theoretical insights that are closest to the ideas in this paragraph can be found in accounting and management journals. See e.g. Eng and Mak, "Corporate Governance," on governance and disclosure. <sup>73</sup> Rochet and Tirole, "Two-Sided Markets."

<sup>&</sup>lt;sup>74</sup> Shapiro and Stiglitz, "Equilibrium Unemployment."

whether to kick it out or to cough up. There were also some gray areas: the existence of journals that were near reliables and others that were near zombies. Both deserved some compensation, however modest, since rumors from anywhere could have an effect if they created a spin.<sup>75</sup> Finally, having a hangout (the *Académie*) helped the zombie predators organize campaigns and their prey did not know what was happening at the *Académie*.<sup>76</sup>

The second complication was the problem of monitoring. The traction of stock options is that they are selfenforcing. Because revenue from stock options is linked to price performance, stock options in some sense committed journalists to deliver. However, results did not relate directly to a single journalist's behavior. In other words, there was a need for a mechanism that would monitor that both zombies and reliable complied with their commitment—i.e. a mechanism to observe that the former has printed the low-value good information that had been paid for and that the latter did not forget to report their honest opinion. A few targets could make large investments to develop their own expertise and were in the market long enough to implement a credible punishments, but most firms did not have such expertise and longevity.

In this article we argue that the institutional device through which asymmetry of information and monitoring problems were addressed was the "dealers in financial advertising" described in Section I. In the first place, they had a detailed knowledge of the market for newspapers and thus knew the "price" of each rumor. Second, their employees spent time at the *Académie* and so were aware of the latest buzz. Third, they were large enough to concentrate on several "accounts". These features resolved the asymmetry of information and improved compliance. Pooling accounts created economies of scope that permitted brokers to implement credible rewards and punishment. Through the agency of brokers, a journal that misbehaved with one target—say, by taking money but then printing derogatory information anyway—could be punished when another target came to the market. The excluded racketeer could seek revenge, but it would be nothing more than an isolated loser with no credibility of its own. In other words, the leading publicity brokers were the strong-arm godfathers of the financial press underworld.<sup>77</sup>

Our conclusion is that the effect of such intermediaries was to contain badmouthing within limits that protected the market's operation.<sup>78</sup> The prediction we may draw from this conclusion is that the total value dissipated by the threat of badmouthing ought to have been limited. Yet before we compute relevant estimates, three remarks are in order that suggest the market solution we depict is fragile. A first problem is the risk of monopoly power by the brokers. Brokers have an incentive to provide the prey with a gloomy picture of the predator's possible effects so as to extract a higher rent as intermediaries. In other words, they can substitute for the racketeers. Competition among publicity brokers ought to limit this, but we have suggested that larger brokers were more effective. Second, a large part of the money that was being dispensed came (for obvious

<sup>&</sup>lt;sup>75</sup> There are reports suggesting that some rumors, once started, were picked up by other journals. See e.g. Lajeune-Vilar (*Les coulisses*, p. 76): "In the Paris press, when one or two journals start a campaign all others follow suit the day after."

<sup>&</sup>lt;sup>76</sup> Cooperation among rumormongers was difficult because of the obvious free-rider problem (i.e., other zombies would benefit from the launch of any campaign), and this protected the issuers to a limited extent. The actual ability of rumormongers to coordinate their attacks could not be discounted, but only a specialist could gauge the threat.

<sup>&</sup>lt;sup>77</sup> The parallel between publicity brokers and economic analyses of the mafia is striking; for a related discussion, see Olson and McGuire, "Economics of Autocracy."

<sup>&</sup>lt;sup>78</sup> Other benefits of the press broker included the ability for targets to deal with racketeers at arm's length. Lajeune-Vilar (*Les coulisses* p. 54) suggests that brokers freed the bank from the "predictable and unavoidable complaints" of newspapers, some of which had political connections that borrowers did not want to damage. By dealing with a press broker, individual targets and banks were able to redirect newspapers' attempts at extracting revenue toward brokers, thereby saving time for their managers. Another advantage of this arrangement is that it centralized payments, which were generally made to an anonymous bank account. Thus the distribution of money was made more transparent for the payer, who could see how much had been paid to each journalist.

reasons) from business and finance, so owners of capital wielded considerable influence on the publicity brokers. A third concern involves the politicians. The executive appeared at both ends of the game: as purchasers of press coverage for domestic loans, on the one hand; and, on the other hand, as publishers of journals (individual politicians could run their own zombies and, as politicians, had the power to complicate life for targets). In short, there was a huge risk of the certification business being captured by special interests.

#### Section III. Evidence: How Was Badmouthing Subdued and with What Effects?

#### A. Turnover and Quality

We begin by testing the prediction that better journals were able to charge more. The association between quality and price was suggested by contemporary observers. Lajeune-Vilar finds that the "8 or 9" more serious journals dealing with commerce, finance, and economics were also the most pricey because they were produced by "well-known and competent economists whose talent is expensive".<sup>79</sup> What we want to show is that these better journals were also the longest-lived ones.

To see whether this is true, we constructed longevity data from the *Annuaire*. This is a painstaking job in light of the sheer number of journals and because zombies tended to disappear and reappear. A favorite sport of zombie journals was to counterfeit the title of a reliable.<sup>80</sup> For simplicity we limited ourselves to journals listed under "finance" (thus leaving aside "political economy") because they constituted the vast majority of financial and economic journals. We then proceeded as follows. For each journal that appeared during the period 1890–1914, we created an entry of 1 or 0 depending on whether the journal was (or was not, respectively) in operation during a given year. The result is a total of 770 different journals in operation for at least one year between 1890 and 1914.<sup>81</sup>

Next, we used the *Annuaire* to secure price data. This was done by collecting, for each financial journal, the price per issue during a given year; this price was then normalized for periodicity.<sup>82</sup> The chosen year was the *Annuaire* volume for 1904.<sup>83</sup> The only reason for picking this volume was its location near the middle of the final period when the number of journals was greatest. (Experimenting with other years gave us confidence that results would be robust to a change of benchmark.) In 1904, the *Annuaire* documented 242 financial journals. A large number of these lacked exploitable price information and so were excluded, leaving 118 journals for which price is available. In the appendix A.2 we show that journals for which there is no price information were ephemeral. That journals without a price were zombies is consistent with our notion that reliable journals should have a price that is high and well advertised.<sup>84</sup>

The price data can now be matched with incidence rates (i.e., percentage of years during which a journal

<sup>&</sup>lt;sup>79</sup> Lajeune-Vilar (*Les coulisses*, p. 51). *Le messager de Paris*, *L'Economiste français*, and *Le capitaliste* were mentioned as reliables. On cheap unreliable journals, see Moron, *Journaux financiers bon marché*.

<sup>&</sup>lt;sup>80</sup> For instance, the title *La semaine economique et financière* (the zombie mentioned in Section I) bore a ressemblance to *La semaine financière*, a leading reliable.

<sup>&</sup>lt;sup>81</sup> One should keep in mind that "existence" may not be continuous, so not all journals publish in consecutive years. Our estimates also control for journals that started up later in the period and thus could not possibly have been in business during all years (see appendix A.2. for details).

<sup>&</sup>lt;sup>82</sup> As most newspapers were weekly, the benchmark periodicity we used is weekly. See appendix A.2 for details. We chose price per issue because subscription packages were not comparable across journals

<sup>&</sup>lt;sup>83</sup> Avenel, Annuaire.

<sup>&</sup>lt;sup>84</sup> One complication is that some zombies seem to have figured out that price was interpreted as an indicator of quality; hence they were occasionally sold at a fairly high price that was unjustified in view of their meager content. Our exploration of the data suggests that this practice became more prevalent over time. It was remarked upon by contemporaries such as Soreph (*Défends ton argent*, pp. 54–55).

published). This rate is computed as the probability that a journal is in operation in any given year during the period 1892 to 1914. Journals were then sorted into incidence categories (those appearing in 20 percent of the period, those appearing during 20–40 percent of the period, and so on). The results are plotted in Figure 3, which exhibits the predicted positive association between longevity and price. That is, short-lived journals (those in operation during less than 20 percent of the period) sold, on average, for about 0.10 French francs each; whereas long-lived journals (those in operation during 80–100 percent of the period) sold for an average price that was three times as high. This evidence supports the view that a journal's time horizon was strongly related to its pricing.

#### Figure 3 about here

#### B. Two-Sided Markets: Rating Agency Rackets Viewed as Insurance

We now move one step further and show that reliables were able to charge both readers and issuers through advertising. Obviously, journals of higher reputation are more attractive outlets and thus should attract greater publicity revenues. We interpret this as meaning that reliables could charge issuers for coverage, and we relate this result to the so-called rating agency racket (the allegation that rating agencies coerce issuers into paying for the privilege of being rated). Empirically, the hypothesis we want to test is whether there is a positive correlation between price (an indicator of quality) and advertising revenues.

Estimating advertising revenues is not easy, because journals did not generally publish accounts and have left no archives. For this purpose, we selected eight financial weeklies of varying quality to serve as a representative sample.<sup>85</sup> Next we picked one year (1909) with an eye toward accessibility of the journals in libraries, our source for information on price (per issue) and advertising schedules.<sup>86</sup> With the help of a ruler, we then constructed an estimate of annual advertising revenues by multiplying the column space of advertising by the rate charged for that space.<sup>87</sup> The outcome is displayed in Figure 4, which documents the partial correlation between journals' price and their advertising revenues. The result suggests that reliables attracted more advertising revenues. We see that *L'Economiste français*, France's renowned finance and economics weekly that was modeled after London's *The Economist*, was the French financial journal that sold at the highest price (a price that approximated, at existing exchange rates, the price of *The Economist*) and was also the one that collected the most advertising revenues.<sup>88</sup>

#### Figure 4 about here

An inference consistent with these remarks is that the mere threat of badmouthing generated returns to a journal's reputation. The threat led potential targets to support the high-quality press: it made sense to advertise in good journals not only because they were credible but also because doing so encouraged the journals to behave properly. Anecdotal evidence in line with this interpretation may be found in the Raffalovich correspondence. The Russian agent argued that payments to zombies had to be fiercely contained, and he

<sup>&</sup>lt;sup>85</sup> Six journals belonged to the *Annuaire's* "finance" category, and the other two (*Economiste français* and *Economiste européen*) were listed under "économie politique".

<sup>&</sup>lt;sup>86</sup> One limitation of this approach is that it may overestimate true revenues (since discounts could be granted to large purchasers of ads). However, we suspect that this problem is limited.
<sup>87</sup> The enormous cost of proceeding in this manner accounts for our limiting the exploration to a few journals in a single year.

<sup>&</sup>lt;sup>57</sup> The enormous cost of proceeding in this manner accounts for our limiting the exploration to a few journals in a single year. That being said, inspection of other years and journals gave the impression that relative amounts of advertising were stable over time, in which case focusing on one year only is a legitimate way to capture relative rankings.

<sup>&</sup>lt;sup>88</sup> Evidence suggests that the journal was also profitable. *L'Economiste français* was listed on the OTC market, and data from Cote Défossés ("Cours authentique et officiel de la Bourse de Paris"—the stock exchange and curb market list) show that it distributed dividends averaging 200,000 francs annually in the late 1900s (e.g., 180,000 in 1909, 200,000 in 1910, 180,000 in 1911, and 280,000 in 1912). The dividend over capitalization ratio fluctuated between 12 et 20 percent during the period.

favored regular paid advertising in what he thought were the reliable journals. Checking Raffalovich's list against Figure 5 we can see that he preferred the most expensive ones.<sup>89</sup> This result can be viewed as a rationalization of the "issuer pays" model that currently prevails in the rating industry. In particular, it may be efficient (from the target's point of view) to help promote a high-quality press because the high quality acts as a barrier against the rackets of low-quality journals. Of course, a condition for producing the desired outcome is that the certification business be contestable. As long as the reliables behave competitively, none of them can expect to extract super-profits.

#### Figure 5 about here

#### C. Publicity Brokers: Concentration and Value Appropriated

#### i. Market Setup

We have suggested that the institutional device through which racketeers were controlled was the delegation of monitoring to a large broker who acted as supervisor of the entire population of racketeers. Here we provide descriptive and statistical evidence that is relevant to this claim. We argued that large agents would be needed to provide a credible system of intertemporal rewards and punishments: each individual target delegated to its bank the supervision of the distribution of monies to the press, and the banks delegated to a small number of publicity brokers the task of dealing with requests.<sup>90</sup> Evidence of concentration in the market for advertising brokerage is consistent with our analysis. No quantitative study can be made of the brokers, since they left no material, but qualitative evidence for the 1890s in secondhand accounts is supportive.<sup>91</sup> Marinitsch and Lajeune-Vilar argue that, in the early 1890s, three "bosses" (Laffont, Batiau & Privat, and Lenoir) controlled most of the market.<sup>92</sup> Twenty years later, Lysis makes the same claim about three principal brokers cornering the market, adding that the market was "very centralized".<sup>93</sup> There is also much anecdotal evidence suggesting that market structures were stable over time.<sup>94</sup> For instance, Lajeune-Vilar reports that Lenoir was the agent for the French government.<sup>95</sup> Ten years later, the Raffalovich briefs show an official from the Ministry of Finance suggesting that the Russians should use the same Lenoir, whom they describe as "their" agent.<sup>96</sup>

The similarly stable relationship between brokers and banks created a risk of capture. The risk was partly limited because brokers were asked to provide the list of accounts that had received money; this prevented brokers from retaining valuable information and enabled targets to switch more easily to a new broker.<sup>97</sup> On the

<sup>&</sup>lt;sup>89</sup> Because Russian propaganda was published in daily, "general interest" periodicals, we can perform another, similar exercise. Comparing Raffalovich's list for these journals with estimates from Albert ("La presse française") for the circulation of general-interest journals in 1910, we find that Russians preferred to use those journals with the widest circulation.

 $<sup>^{90}</sup>$  Of course, this was not the only benefit; another was the ability of targets to deal with racketeers at arm's length (see note

<sup>80).</sup> <sup>91</sup> Marinitsch, *La bourse*, pp. 292–96; Lajeune-Vilar, *Les coulisses*, pp. 54ff; Lysis, *Contre l'oligarchie*, pp. 162–63. Contemporary accounts suggest that who dealt with whom (what broker with what bank) was common knowledge which indicates that these accounts are reliable-especially since they are so consistent with one another.. According to Lajeune-Vilar (Les coulisses, pp. 54ff), the House of Rothschild (an investment bank) and Comptoir d'escompte (a leading commercial bank) were in business with Laffont. Crédit Lyonnais and the Crédit Foncier (France's biggest commercial bank and main mortgage bank, respectively, the latter involved in the Panama scandal) used Batiau, and Lenoir serviced the French government.

<sup>&</sup>lt;sup>92</sup> Marinitsch, La bourse; Lajeune-Vilar, Les coulisses.

<sup>&</sup>lt;sup>93</sup> Lysis, Short Title, pp. 168–69: "Au point de vue financier, deux ou trois personnes [...] monopolisent [la corruption de la presse]." <sup>94</sup> In the 1900s, Favre (*Banques et banquiers*, p. 82) gave a list of the press advertising agencies that includes both more

<sup>&#</sup>x27;regular" agencies and the genuine brokers described here.

<sup>&</sup>lt;sup>95</sup> Lajeune-Vilar, Les coulisses, pp. 54ff.

<sup>&</sup>lt;sup>96</sup> Raffalovich, L'abominable vénalité, p. 90

<sup>&</sup>lt;sup>97</sup> All the contact details of dealers in financial advertising were published in various yearly books such as Favre, *Short Title*,

other hand, because rumors and gossip changed over time, brokers retained an edge and so, if they had served the client well, would naturally maintain that relation. We also have evidence that payment schemes were tailored to minimize moral hazard. For instance, Lysis reports that brokers were paid a lump-sum fee and thus lost money if payments to journals overran.<sup>98</sup>

A corollary prediction of our model is that the largest borrowers on the market were also those with the most incentive to develop their own monitoring schemes, since they could more easily internalize the needed expertise and could also inflict intertemporal penalties themselves (they accessed the market repeatedly and thus had a "memory"). Once again, the Russian case provides an illustration. As a frequent borrower in Paris, Russia developed an expertise in the Paris press by appointing special agents from the 1890s onward.<sup>99</sup> Much like the publicity brokers, these agents were knowledgeable about the press milieu (because they had been around for so long) and were able to monitor journalists through rewards and punishments (because Russia was such a large borrower).<sup>100</sup> For instance, at some stage we find Russians making payment to a journal conditional upon the nonpublication of damaging information. As Raffalovich explains: "It must be understood that it will last 'during good behavior' because if they cheat too openly on us, the Minister can always become angry."<sup>101</sup> Although eventually Russia dealt partly through the press broker Lenoir, they came to this decision late, and very partially.

#### ii. How Much Was Appropriated?

Here we provide estimates of the amounts paid to the press. We have emphasized the relation between IPO and rackets, so it seems natural to measure the "overall" revenues that the press (good or bad) derived from IPOs. Recall that, consistently with what we argued earlier, payments were made in normal times (each year) and also when borrowers felt vulnerable (whenever an IPO occurred). Good journals, in particular, received regular payments in the form of advertising or publicity, encouraging them to provide proper coverage in times of stress as already discussed. For the case of Russia, Figure 6 graphs total payments to the press and highlights the decomposition into regular payments ("publicity") and exceptional payments ("bribes"). The figure shows that racket payments were more volatile than publicity payments, vindicating our interpretation of the latter as an insurance premium. We can see that racket money peaked between 1904 and 1906—that is, between the outbreak of the war with Japan and the eventual consolidation of Russian finances through a 1906 security issue. In other words, issuers divested themselves of resources in normal times—most probably to reliable outlets—but during periods of stress had to increase divestments through the agency of publicity brokers, who distributed funds to reliable and zombie journals both. Focusing on IPOs and estimating the amounts paid to the press is therefore a natural way to assess the total damage from badmouthing and to show that, as we surmise, this damage was limited thanks to the existence of some institutional solutions.

#### Figure 6 about here

or the Annuaire de la presse during the 1890s.

<sup>&</sup>lt;sup>98</sup> Lysis, Contre l'oligarchie, pp. 162–63.

<sup>&</sup>lt;sup>99</sup> Raffalovich, *L'abominable vénalité*.

<sup>&</sup>lt;sup>100</sup> Raffalovich was possibly their best asset, since he was a Paris-based economist and published a noted financial market yearbook. Raffalovich also belonged to the distinguished *Société d'Economie Politique*, and he was acquainted with and respected by all relevant economists of the time. Raffalovich was a personal friend of Leroy-Beaulieu, editor of *L'Economiste français*; he also contributed to the main dictionaries of political economy and gave lectures and conferences in prestigious Paris institutions. Raffalovich established himself as a leading authority with the publication of a thick (close to 1,000 pages) annual macroeconomic outlook, *Le marché financier*, that was produced with a team of economists. *Le marché financier* rapidly became a reference that was avidly read by the public specializing in finance, both in France and abroad. *The Economist* regularly highlighted the publication of Raffalovich's macroeconomic annual (e.g., *The Economist*, 18 June 1898, p. 911).

<sup>&</sup>lt;sup>101</sup> Raffalovich, *L'abominable vénalité*, p. 187.

The underwriting contracts found in bank archives typically contain mentions of payments "made to the press". The numbers are never reported transparently, however, and it is possible that they mask additional opaque transfers made from the underwriter's (or some other) budget. Our methodology is to identify market access events for which we can match an independent source on payments to the press with data from underwriting contracts, thereby deriving a reasonably reliable estimate. Such an opportunity is provided by the disclosure/divulgence of press payments made public in 1909 by a reportedly upset director general of Banque de Paris et des Pays-Bas (contemporaries suggested there were motives beyond a sudden bout of honesty).<sup>102</sup> As a result, we have evidence for three issues that can be matched against information in underwriting contracts found in bank archives; this makes a high-quality test possible.

#### Table 1 about here

The three loans are a 1899 Hungarian Mortgage Bank bond (*Obligations Communales 3.5% du Crédit Foncier de Hongrie*), a 1902 Bulgarian 5 percent loan, and a 1905 Brazilian (Sao Paulo) 5 percent loan. For these, we have worked with sources to document the total payments made to the press on the occasion of the IPO against two relevant benchmarks: (i) the total amount appropriated by issuers and (ii) the share appropriated by banks through underwriting fees. These are natural benchmarks because bankers provided originating, marketing, distributing, and insurance services and also provided signaling and certification, thus competing with the press along some dimensions.<sup>103</sup>

We also document a 1906 Russian 5 percent loan that concluded the protracted period of "Russia bashing" that started with the Russo-Japanese War (1904–1906). In this case, the distribution of monies was not in direct relation to the loan itself because the campaign began before the loan was in sight; however, war almost always led to borrowing and Russian authorities coughed up because they wanted to keep their options open. As indicated by Figure 6, "bribes" were largely discontinued as soon as the war was over and the loan issued (in the spring of 1906). One reason for adding this loan to Table 1 is that Russia—unlike the other borrowers listed there— attempted to internalize to a higher degree the monitoring of zombies, and it is informative to see whether this resulted in higher or lower levels of spending.

Based on the sources mentioned previously, Table 1 documents the value appropriated by journals. Three features stand out. First, as a share of the capital actually borrowed, the amounts appropriated are relatively small: about half of a percentage point.<sup>104</sup> Second, the numbers remain small even when compared with the underwriting fees, of which they represent only a fraction (between 6 and 18 percent). This may be taken as proof that the problem of badmouthing was indeed under control. It also suggests that the bulk of the value resulting from certification services was appropriated by banks, not by the media.<sup>105</sup> This result is consistent with our finding that large banks disciplined badmouthing by aggregating customers and organizing centralized retaliation via the publicity brokers described here. One implication is that these publicity brokers were, to a large extent, delegated monitors of the underwriting banks. In fact, badmouthing was eating into banks' margins

<sup>104</sup> See Table 1 in Flandreau et al., "The End of Gatekeeping."

<sup>&</sup>lt;sup>102</sup> Le globe published the numbers of the Hungarian loan in its issue of 25 November 1909 (pp. 908–909). The Bulgarian numbers appear in the same periodical a week later (on 2 December 1909, pp. 930–31) and the Sao Paulo loan numbers appeared in the issue dated 9 December 1909 (pp. 948–50). For comment and a discussion of the reasons for the leak, see L'écho des capitalistes of 9 December 1909. L'écho reported that Albert Turrettini, the new director general of the bank declared "La presse, je m'en f...!" (in English, "F... the press!"). Other leaks followed until eventually interrupted.

<sup>&</sup>lt;sup>103</sup> For details of underwriting fees paid to French banks during the period, see Flandreau et al., "The End of Gatekeeping". Their study implies that fees in Britain and France were roughly competitive.

<sup>&</sup>lt;sup>105</sup> Note that appropriations by the press were relatively large compared with modern underwriting fees for similar securities, which averaged 0.54% for issues in New York from 1993 to 2007; see Flandreau et al., "The End of Gatekeeping."

and so controlling it was a necessary condition for the banks to compete internationally, at which they were quite successful. The numbers for Russia are also interesting. We see that, although the campaign was spread out over two and a half years, the total spent (as a share of sums eventually borrowed in Paris) is comparable to what we find for other deals where monies were paid in relation to one issue only. This fact suggests that Russia's campaign was cost-effective, which in turn supports our conjecture that bigger agents are better equipped to handle racketeers and also explains why Raffalovich strenuously tried to circumvent the publicity brokers.

Finally, combining our estimates of IPO-related appropriations with IPO data enables us to develop a sense of the total amounts appropriated by the press; the Appendix A.4 provides details and a chart. In 1913, these amounts rose to about 20 million French francs (from about 10 million FF at the beginning of the 1900s). These are large absolute numbers. They amount to more than a leading contemporary bank's annual budget for running a research department with about one hundred employees and an economic research library.<sup>106</sup> Also, the substantial increase explains why the number of zombies rose inexorably: more people each year were prepared to pay to keep them underground.

#### iii. Value Diversion by Zombies

We stated that, of the amounts paid to the press during IPOs, some went to zombies (and to the press agents who controlled them) and some went to reliables. We conclude this paper by providing estimates of the breakdown of bribes according to journal type. We speculate that, since reliables received money through regular publicity (akin to insurance), the bulk of the IPO payments went to zombies and associated crooks.

The evidence comes from the same three episodes discussed earlier (the Hungarian Mortgage Bank, Bulgaria's loan, and Sao Paulo). The relevant information leaked by the disgruntled director included a list of journals and intermediaries that were paid. We constructed the share appropriated by the press underworld as a residual (journals and press brokers).<sup>107</sup> Namely, we subtracted from total amounts paid to the press monies distributed to "reliables". Reliables were identified using Raffalovich (1931) list of more serious financial and general interest newspapers. In Table 2, they are identified as "influential financial newspapers" and "influential general newspapers". The Table then shows that the underworld appropriated between 62% and 70% of totals.<sup>108</sup>

The striking conclusion is that while the reliables did attract resources, their share barely reached 40 percent. Leading financial journals received but a tiny portion of the total, a fact that contemporary observers deplored.<sup>109</sup> Within the reliables, the main recipients of this money were the generalist newspapers. This makes sense because their nonspecialized form enabled them both to reach a wide audience and to apply extensive "soft"

<sup>&</sup>lt;sup>106</sup> Flandreau, "Caveat Emptor." Around 1900, the annual budget of Crédit Lyonnais' research department was 1 million FF. <sup>107</sup> Lenoir was referred to as "Mr. X". There were also some other brokers who acted for several journals at once and were referred to as "Régies".

<sup>&</sup>lt;sup>108</sup> As an alternative to the Raffalovich criterion, we also identify leading general-interest dailies by using circulation numbers for 1910 (Albert, "La presse française.") and selecting dailies with a circulation greater than 50,000. This category overlaps only partly with the Raffalovich newspapers. 5 journals (out of 12) had a circulation greater than 50,000 a day and were not paid by the Russians. Likewise, we selected the most pricey financial journals (50cts or more). Figure 5 shows the partial overlap between Raffalovich and this criterion. Computations with this alternative definition do not alter the basic message with about 60 to 70% of monies appropriated by the underworld. For more details see appendix.

<sup>&</sup>lt;sup>109</sup> "Les grands organes financiers, ceux qui engagent les capitalistes à souscrire dans les émissions, ceux dont les conseils financiers sont écoutés et suivis par leurs abonnés et lecteurs ne figurent dans ce budget de publicité que pour des chiffres infimes, relativement." *L'écho des capitalistes* (9 December 1909, #42, p. 1). *Le globe* (9 November 1909, p. 858) pointed out that "C'est pourtant avec l'argent de ces actionnaires [les établissements de credit] qu'on alimente la caisse de nombre de feuilles politiques notoirement incapables de faire, au point de vue financier, une publicité utile." Also, Raffalovich, also the disburser of Russian monies, was generally perceived as a moral character in a corrupted world : M. Raffalovich was well known in both financial and political circles of Paris, where he enjoyed wide personal respect because of the unfailing rectitude of his private conduct and official actions during a period when financial scandal was frequent both in French finance and in the Franco-Russian relations (p. 12, The New-York Times, 13 January 1922).

badmouthing by ignoring certain issuers. Thus the united zombies and publicity brokers were receiving the lion's share (more than 60 percent) of the total press expenses during IPOs. The rest was mostly received by the general press. Good financial journals, in contrast, were mostly funded by charging their readers and attracting regular publicity.

#### Table 2 about here

#### Conclusions

This article has reviewed some features of the market for financial information in France before World War I. We studied how libel law, or a lack thereof, created weak property rights over reputation. We saw that absence of strong enforcement procedures encouraged the creation of "zombie" journals, of which there were at least 250 in the field of finance around 1900. Yet we argued that, in practice, badmouthers did not wield disproportionate influence on the market because various arrangements emerged to cope with the situation. We found that journals with a reputation had no interest in making damaging allegations—unlike journals without a reputation. Coordination of the latter was assisted by bandwagon effects or explicit coordination (the *Académie de chant*). Finally, we found that rumors were more likely to be planted when there was a greater likelihood that others would pick it up. Initial public offerings provided the hunting ground.

We identified two main mechanisms that mitigated the problem of issuers being targeted by badmouthing racketeers.

First, the risk of racket increased the value of more serious journals. Some, such as *L'Economiste français*, emerged as standards of reliability. The result was that they were able to attract stable advertising revenues. This finding, we argued, may explain why providers of financial information were able to charge the concerns they rated—a conclusion that may be relevant now that the relations between issuers and rating agencies are coming under attack.

The second solution that emerged to deal with badmouthing was the corralling of borrowers by their bankers (the underwriters) and the pooling of bribes through delegated monitors called "publicity brokers", who were in charge of dispensing the "right" amount of bribes. The resulting equilibrium was enforced by brokers in two ways. First, by signing up a number of (financially incompetent) people for press campaigns, the brokers subsidized a "party" supporting the issuers that had paid for it: the badmouthers were paid above their opportunity cost, securing the coordination of information-poor media to *not fabricate* damaging information. Second, because of their concentration, brokers had the means to retaliate against deviating individuals.

This scenario belonged to the world of second-best solutions. For the "*Belle Epoque*" as the era leading up to WWI is known, we estimated that roughly 15 million francs (of 1913) were paid annually in "bribes", of which some 60 percent ended up in the pockets of racketeers. Although this may have been small potatoes compared to total issues in Paris or to the benefits that accrued to underwriters, the total sum (of about 150 million FF during the 1892-1913 period) is fairly high and is much larger than the profits earned by the reliable journals. In a better world, this money—instead of lining the pockets of white-collar thugs, politicians, and venal journalists—could have funded a higher-quality press.

The reasons for this equilibrium's emergence remain to be understood, just as we need also to work out relevant comparisons with other countries beyond the useful parallel developed here with Great Britain. Another possible outcome was parking all of the bribe money with the reliable media, thereby raising entry costs for the

racketeers. On this account, we note that the leading London financial journal (*The Economist* and its supplement, the *Investors' Monthly Manual*) was thicker—for a comparable price—than *L'Economiste français*. We found that *L'Economiste français* charged readers more than did its French competitors and also attracted more publicity, but that was not enough to vanquish the zombies. This failure was regretted by borrowers, such as the Russian financial agent Raffalovich.<sup>110</sup>

An interesting hypothesis that future research may well wish to explore is that certification by journals (or rating agencies) competes against certification by banks. Recent research shows that during this period, underwriting banks collected large revenues from underwriting and certification services.<sup>111</sup> A higher-quality press might have reduced the profit margins of banks sponsoring IPOs. Bankers may thus have preferred to bribe journals, and—by helping to maintain a critical level of corruption in equilibrium—they depreciated the quality of their competitor which amounted to protecting their own certification power -- and corresponding revenues.

Another (not mutually exclusive) interpretation emphasizes the role of politicians. As already told by earlier historians and as mentioned in this article, politicians and parties were generally involved in the most extensive briberies. Journals, some of which were controlled by parties, were ideal vehicles for laundering racket money. A racket could be used to buy political favors or votes in parliament, and the money paid could be simply registered under "publicity". The irony of this conclusion is that a regime based on freedom of speech does not guarantee that the truth will out.

Geneva and Paris, 27 August 2010

<sup>&</sup>lt;sup>110</sup> Raffalovich, L'abominable vénalité.

<sup>&</sup>lt;sup>111</sup> Flandreau et al., "The End of Gatekeeping"

#### Archives

Bank Archives

- Banque de Paris et des Pays-Bas Paris
- Crédit Lyonnais, Paris
- Société Générale, Paris

Agence Havas, Archives Nationales, Paris

#### References

- Ageron, Charles Robert. "La vénalité de la presse française dans la première moitié du XXe siècle. L'action des États étrangers." *Cahiers de l'Institut d'Histoire de la Presse et de l'Opinion* n°3, Tours, (1975): 107-30.
- Albert, Pierre. "La presse française de 1871 à 1940." in Claude Bellanger, Jacques Godechot, Pierre Guiral, Fernand Terrou (eds), Histoire générale de la presse française, tome III, Paris, PUF, 1972.
- Albano, Gian Luigi, and Alessandro Lizzeri. "Strategic Certification and Provision of Quality." *International Economic Review* 42(1), (2001): 267-83.
- Allen F. and G. Faulhaber. "Signalling by Underpricing in the IPO Market." *Journal of Financial Economics*, 23, (1989): 303-23.
- Avenel (D'), Vcte G. Le mécanisme de la vie moderne. La publicité. *Revue des deux mondes*, Janvier-Février (1901) : 628-59.
- Avenel (D') Henri. Annuaire de la presse, Paris : Annuaire de la presse, 1904.
- Balzac, Honoré de. La maison Nucingen. Paris: Flammarion, 1837.
- Bar-Gill, Oren, and Assaf Hamdani. "Optimal Liability for Libel." *Contributions to Economic Analysis & Policy*, Berkeley Electronic Press, vol. 2(1), (2003): Article 6.
- Baron, David P. "Persistent Media Bias". Journal of Public Economics vol 90, (2006): 1-36.
- Beatty, Randolph, and Jay Ritter. "Investment Banking, Reputation, and the Pricing of IPO." *Journal of Financial Economics* vol. 15, (1986): 213-32.
- Besley Timothy, and Andrea Prat. "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability." *The American Economic Review*, vol. 96(3), (2006): 720-736.
- Bignon, Vincent, and Antonio Miscio. "Media Bias in Financial Newspapers: Evidence from Early Twentieth Century France." Forthcoming *European Review of Economic History*, (2010).
- Bloch, Marc. L'Etrange défaite, Paris : Ed. Franc-tireur, 1940 [1946].
- Block, Walter N., Stephan Kinsella, and Hans-Hermann Hoppe. "The Second Paradox of Blackmail", *Business Ethics Quarterly*, Vol. 10(3), (2000): 593-622.
- Bouvier, Jean. Le krach de l'Union Générale, Paris: PUF, 1960.
- Bouvier, Jean. Les deux scandales de Panama, Paris: Julliard, 1964.
- Byoun, Soku, and Yoon S. Shin. "Unsolicited Credit Ratings: Theory and Empirical Analysis." Manuscript, 2003
- Cantor, Richard, and Frank Packer. "The Credit Rating Industry." *Quarterly Review, Federal Reserve Bank of New York*, Summer, (1994): 1-26.
- Carter, R. B., F. H. Dark, and A. K. Singh. "Underwriter Reputation, Initial Returns, and the Long-Run Performance of IPO." *Journal of Finance*, vol. 53 (1), (1998): 285-311

- Chemmanur, Thomas J., and Paolo Fulghieri. "Bank Reputation, Information Production and Financial Intermediation", *Journal of Finance* vol. 49(1), (1994): 57-79.
- Coase, Ronald H. "The 1987 McCorkle lecture: Blackmail." Virginia Law Review, vol. 74, (1988): 655-76.
- Cote Défossés, Cours authentique et officiel de la Bourse de Paris, Paris, various years.
- Dalvi, Manoj, and James F. Refalo,. "An Economic Analysis of Libel Law," *Eastern Economic Journal*, vol. 34(1), (2008): 74-94.
- Diamond, Douglas W. "Reputation acquisition in debt markets." *Journal of Political Economy* 97, (1989): 828-62.
- Djankov, Simeon, McLiesch Caralee, Nenova Tatiana, and Andrei Shleifer. "Who Owns the Media?" *Journal of Law and Economics* vol. XLVI (2003): 341-381.
- Dujardin, Édouard. Annuaire du duel, 1880-1889. Paris: Perrin, 1891.
- Dyck, Alexander, Volchkova, Natalya, and Luigi Zingales. "The Corporate Governance Role of the Media: Evidence from Russia." *Journal of Finance* vol. 63(3), (2008): 1093-135,
- Ellschot, Willem, Lijmen Amsterdam: Tepas, 1924.
- Eng, L. L., and Y. T. Mak. "Corporate Governance and Voluntary Disclosure", *Journal of Accounting and Public Policy* vol 22(4), July-August, (2003): 325-345.
- Eveno, P. L'argent de la presse française. Paris: Editions du CHTS, 2003.
- Favre, J. E. Banques et banquiers de Paris. Paris : Publications Financières Favre, 1909
- Flandreau, Marc. "Caveat Emptor: Copying with Sovereign Risk Under the International Gold Standard." In International Financial History in the Twentieth Century, System and Anarchy. M. Flandreau, C.-L. Holtfrerich, and H. James, eds. Cambridge University Press, (2003): 17-50.
- Flandreau Marc, Juan Flores, Norbert Gaillard, and Sebastian Nieto-Parra. "The End of Gatekeeping: Underwriters and the Quality of Sovereign Debt Markets, 1815-2007", NBER International Seminar on Macroeconomics vol 6, 2010.
- Folleville (de), Daniel. *Rapport de la commission chargée de procéder à une enquête sur les circonstances qui ont préparé, précédé, accompagné ou suivi l'arrestation du financier Rochette*, Paris: Imprimerie de la chambre des députés, 1911.
- Garoupa, Nuno. "Dishonesty and Libel Law: The Economics of the "Chilling" Effect." *Journal of Institutional and Theoretical Economics* 155(2), (1999): 284-300.
- Gébé Victor. Catalogue des Journaux Imprimés. Paris, 1875, 1877.
- Gentzkow, Matthew, Edward L. Glaeser and Claudia Goldin. "The Rise of the Fourth Estate: How Newspapers Became Informative and Why It Mattered", in *Corruption and reform: lessons from America's economic history*, E. Glaeser, and C. Goldin Eds. Chicago: Chicago University Press. Series: N.B.E.R. Conference Report, (2006): 187-230.
- Gentzkow, Matthew and James Shapiro. "Media Bias and Reputation." *Journal of Political Economy* vol. 114 (2006): 280-316.
- Ginsburg, Douglas H. and Paul Shechtman. "Blackmail: An Economic Analysis of the Law." University of Pennsylvania Law Review 141, (1993): 1849-76.
- Gómez, Fernando and Juan-José Ganuza. "Civil and Criminal Sanctions Against Blackmail: An Economic Analysis." *International Review of Law and Economics* vol 21(4), (2002): 475-498.

- Gorton, Gary. "Reputation Formation in Early Banknotes Markets." *Journal of Political Economy*, 104, 2 (1996): 346-97.
- Harris, John R., and Michael P. Todaro. "Migration, Unemployment & Development: A Two-Sector Analysis." *American Economic Review* vol. 60(1), (1970): 126-42.
- Hickman Braddock W. "Corporate Bond Quality and Investor Experience." Cambridge (MA): N.B.E.R. book, 1958.
- Hillison, William, and Carl Pacini. "Auditor Reputation and the Insurance Hypothesis: The Information Content of Disclosures of Financial Distress of a Major Accounting Firm." *Journal of Managerial Issues*. (2004): 65-86.
- Jeanneney, Jean-Noël. "La vénalité du journalisme financier pendant l'entre deux guerres." In *L'argent caché*. Paris: Points Seuil, 1981.
- Kindleberger, Charles P., Manias, Panics, and Crashes: A History of Financial Crises, John Wiley & Sons, New York, 1996 (third edition, first in 1978)
- Koss, Stephen. *The Rise and Fall of the Political Press in Britain*, Vol. 1, the Nineteenth Century, London: Hamish Hamilton, 1981.
- Lajeune-Vilar, André. *Les coulisses de la presse : Mœurs et chantages du journalismes*. Paris: A. Charles, 1895. Lefébure, Antoine. *Havas : les arcanes du pouvoir*, Paris: Grasset, 1992.
- Lenz, Hansrudi, and Markus Ostrowski. "Auditor Choice by IPO Firms in Germany: Information or Insurance Signaling?" International Journal of Accounting, Auditing and Performance Evaluation 2(3), (2005): 300-20
- Lysis (Letailleur, E.). Contre l'oligarchie financière, 11th ed. Paris: Albin Michel, 1912.
- Marinitsch, Oscar. La Bourse théorique et pratique. Paris: Ollendorf, 1892.
- Mathis, Jérôme, James Mc Andrews, and Jean-Charles Rochet. "Rating the Raters: Are Reputation Concerns Powerful enough to Discipline Rating Agencies?" *Journal of Monetary Economics*, vol. 56(5), (2009) 657-674.
- McMillan, John, and Pablo Zoido. "How to Subvert Democracy: Montesinos in Peru." *Journal of Economic Perspectives* 18, (2004): 69–92.
- Mermet Emile. La Publicité en France. Paris, 1878, 1879, 1880.
- Mermet Emile. Annuaire de la presse française, Paris : Mermet, various issues.
- Michaely, Roni, and Wayne Shaw. "The Pricing of Initial Public Offerings: Tests of Adverse-Selection and Signalling Theories." *Review of Financial Studies* vol. 7 (2), (1994): 279-319.
- Miliukov, Pavel. Russia and its crisis, Chicago: Chicago University Press, 1905.
- Modiano, René. La presse pourrie aux ordres du capital, Paris, Librairie Populaire. 116 p, 1935.
- Moron, A. La vérité sur les journaux financiers à bon marché contenant des renseignements indispensables à tous les capitalistes, Nantes. 80 p., 1882.
- Neymarck, Alfred. Finances contemporaines. Paris: Félix Alcan, 1911.

New-York Times.

- Olson, Mancur, and Martin C. McGuire. "The Economics of Autocracy and Majority Rule: the Invisible Hand and the Use of Force." *Journal of Economic Literature*, vol. 34, (1996): 72-96.
- Palmer, Michael B. Des petits journaux aux agences de presse. Naissance du journalisme moderne (1863-1914), Paris: Aubier, 1983.

- Petrova, Maria, 2009, "Newspapers and Parties: How Advertising Revenues Created an Independent Press", New Economic School Working Paper August, 2009.
- Raffalovich, Arthur. L'abominable vénalité de la presse. D'après les documents des archives russes 1897-1917. Paris: Librairie du travail, 1931
- Rajan, R., and Zingales, Luigi. The Great Reversals: The Politics of Financial Development in the 20th Century. *Journal of Financial Economics* 69, (2003): 5–50.
- Rochet, Jean-Charles and Jean Tirole. Two-sided Markets: A Progress Report. *RAND Journal of Economics* **37**, (2006): 645-67
- Saul, Samir. "Banking Alliances and International Issues on the Paris Capital Market, 1890—1914", in London and Paris as International Financial Centers in the Twentieth Century, Cassis Y. and Bussière E. ed., Oxford University Press, (2005): 119-50.
- Shapiro, Carl, and Stiglitz, Joseph E. "Equilibrium Unemployment as a Worker Discipline Device." *American Economic Review* 74(3), (1984): 433-44.
- Simon, Maron J. The Panama Affair, New York: Scribner's, 1971.
- Simpson, A. E. "Dandelions on the Field of Honour : Dueling, the Middle Classes, and the Law in Nineteenth Century England." *Criminal Justice History* vol 9, (1988): 99-155.
- Smith, Roy C., and Walter Ingo. "Rating Agencies: Is There an Agency Issue?" NYU Working Paper FIN-01-003, 2001.
- Soreph, Gustave. Défends ton argent: conseils pratiques pour éviter les pièges tendus à l'épargne. Paris: Larousse, 1909.
- Spence, Michael A. "Job Market Signaling." Quarterly Journal of Economics vol. 87(3), (1973): 355-74
- Trollope, Anthony. The Way We Live Now. London: Chapman, 1875.
- White, Lawrence, 2010, "Markets: The Credit Rating Agencies," Journal of Economic Perspectives, Spring.
- Whiting, Bartlett Jere. *Early American Proverbs and Proverbial Phrases*, Cambridge (Ma): Harvard University Press, 1977.

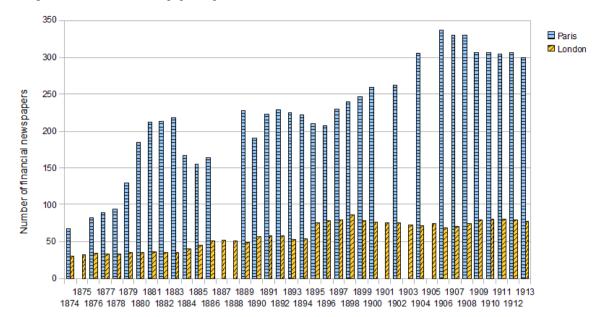


Figure 1. Number of Newspapers Specialized in Economics and Finance in France and Britain

Source : Authors' computations. French Data on the number of newspapers in France were published in the volumes of the yearly Catalogue des Journaux Imprimés (1875, 1877) edited by Gébé, La Publicité en France (1878, 1879, 1880) edited by Mermet and the Annuaire de la Presse (1881-1914), edited by Mermet (1881-1891), Avenel (1892-1904/05) and Bluysen (1907-1914). Each volume appeared at the beginning of the year, and then reflected the number of newspapers published in December of the preceding year. English data one the appearance of newspapers are taken in the Tercentenary handlist of English & Welsh newspapers, magazines & reviews (1920) which give a census of all the periodicals published each year in London between 1620 and 1920.

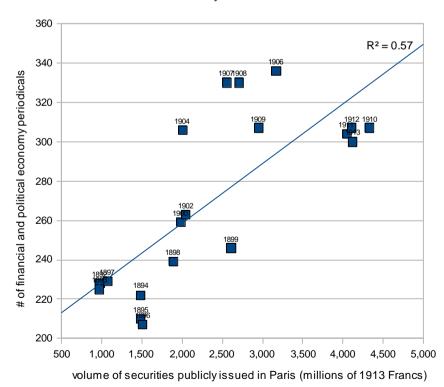
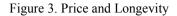
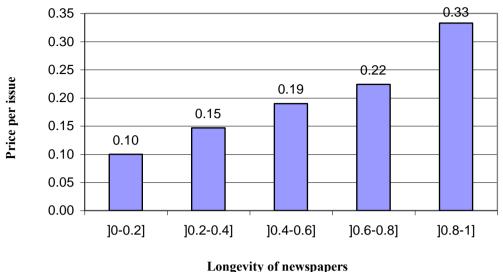


Figure 2. Number of Financial and Political Economy Journals and IPO Volumes in Paris

Source: Newspapers: Authors. Securities publicly issued in Paris from Saul (2005, p. 122, Stock publicly issued in France) citing Chadeau (1989, L'économie nationale au 19eme siècle) and the INSEE statistical yearbook (1951, 1961 et 1966). Nominal values were deflated using the index of Levy-Leboyer and Bourguignon (1985).





(probability that a newspaper is published during one sampled year)

Source: Authors' computations, from *Annuaire de la Presse*. See appendix A.2. for details on the computation of longevity numbers and prices.

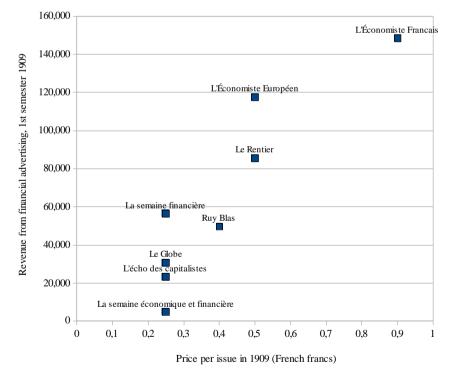


Figure 4: Advertising revenues versus price per issue, selected newspapers.

Source: Authors' estimates, from journals. See appendix A.3. for details.

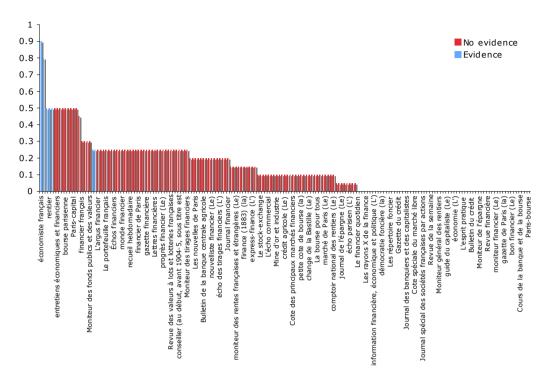


Figure 5. The ranking of financial journals (according to price per issue) and Russian publicity in them

Source: Authors, from Raffalovich (1931) and Annuaire 1904-05.

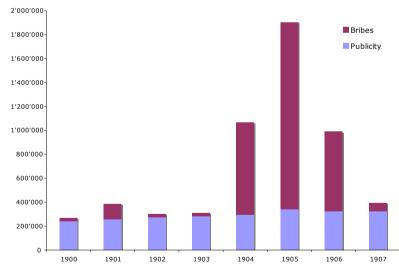


Figure 6. Russian Bribes and Publicity during the 1900s (FF).

Source: Authors, from Raffalovich 1931.

Table 1. The Cost of Badmouthin	g: Value Appropriated by In	termediaries

	Hungarian Mortgage Bank 3.5% 1899	Bulgaria 5% 1902	Sao Paulo 5% 1905	Russia 5% 1906
Date	1899	1902	1905	1904-1906
Amount raised by Borrower (a) Millions FF	18.6	86.4	38.24 (b)	1002.00 (b)
"Bribes" Amount (Millions FF)	n.a.	n.a.	n.a.	5.00 (c)
Percent of amount raised	n.a.	n.a.	n.a.	0.50%
"Bribes" and "Publicity" Amount (Millions FF)	0.94	0.43 (d)	0.37	6.00
Percent	0.53%	0.50%	1.06% (e)	0.60
Bankers' Fee				
Amount (Millions FF)	0.65	7.42	2.10	54.00
Percent	4.25	8.59	6.01	5.30
Press as % of Bankers' fee	14.54	5.8	17.59	11.00

Sources: Authors' computation from *Le Globe* November 25, 1909 (Hungary), December 2, 1909 (Bulgaria) and BNP Paribas archives, folder 11 DFOM 221/424 (Sao Paulo), Raffalovich (1931, Russia), Archive Banque de Paris et des Pays-Bas, BPPB, 6/DFOM/221 61 (Bulgaria), SuzBritaini (1994), Archive Crédit Lyonnais, Emprunt Russe 5% 1906, Schedule N° 29.336.

Notes

(a): This is the amount that borrowers actually received. Bankers' fees, plus stamp duty (not reported) must be included to give price of issue (or price to the public).

(b): Paris share.

(c): This is the sum of the amounts paid as bribes according to Raffalovich (1931) between February 1904 and June 1906 or 3 millions, and the appropriation for publicity in the contract with the Russian government, dated April 16, 1906 or 2 millions.

(d): including 0.054688 paid for advertisements in Amsterdam, Bruxelles and Geneva, see appendix A.4.

(e): The loan was issued by a syndicate lead by Paribas (40%) and the Dresdner Bank and Schaafhaausen' schen (60%). The percentage reported is for the Paribas' share only. It decreased to 0.49% when the press expenses are compared to the total amount of the loan.

Share distributed to brokers and influential periodicals (in percentage of the advertising budget)	Hungarian Mortgage Bank 3.5% 1899	Bulgaria 5% 1902	Sao Paulo 5% 1905
Quality:			
Total influential periodicals (financial and general interest), of which	29.36	34.26	38.26
- Influential political or general interest newspapers (a)	24.33	30.41	29.41
<ul> <li>Among which, those with a circulation greater than 50,000 a day</li> </ul>	16.4	17.25	19.81
<ul> <li>Among which, those with a circulation lower than 50,000 a day</li> </ul>	7.93	13.16	9.6
- Influential financial periodicals	5.03	3.85	8.85
Underworld:			
Total any other journals and publicity brokers (b)	70.64	65.74	62.74
Total	100	100	100

Table 2: Payments to Reliable Newspapers During Three Loan Issues.

Sources : Authors computations from various issues of Le Globe (November 25, December 2 and December 9, 1909) and Albert, "La presse Française" for the circulation numbers. Influential periodicals are those chosen by Raffalovich (1931).

Notes:

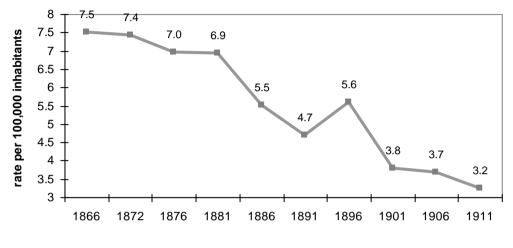
(a) This category included 7 dailies with a circulation greater than 50,000 a day and 5 with a lower circulation (among which one find for example Le Figaro and Le Temps)

(b) The numbers of this category were obtained as the result of the difference between the advertising budget as indicated in table 1 and the money received both by the influential newspapers and by those dailies that had a circulation greater than 50,000 a day although they were not considered as influential in the Raffalovich's definition.

### Data appendix.

#### A.1. French data on cases of libel and insult in newspapers

The data on libel cases in newspapers (under different labels during those years among which one find, under the headings "Presse", "Diffamations et injures, loi diverses" for the period 1866–1881, "Diffamations et injures (loi du 29 juillet 1881)" for the period 1886–1906 and "Presse (Loi du 29 juillet 1881) : diffamation et injures (Art 32 et 33)" in 1911) comes from the justice ministry in the *Compte de la justice* criminelle, a periodical publishing the judicial statistics on the cases judged by French courts. Numbers on people accused and convicted of defamation and libel were collected every five years at the national level. Figure A.1 draws the evolution of the rate of people convicted per 100,000 inhabitants. Albert (1972, p. 246-7) provides lower numbers. He cited during the period 1871 to 1913 724, a tiny figure, compared with the number of journals that existed in those years (several thousands).



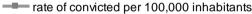


Figure A.1. Rate per 100,000 inhabitants of people convicted of libel and/or insult in the press and conviction rate in France (1866-1911)

## A.2. Data on the longevity of financial newspapers (figure 3)

#### Duration and characteristics of the newspapers in France

Data on the population of newspapers in activity during a year were collected for 17 years of the 1890-1914 period (1890, 1892, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1904-5, 1907, 1908, 1910, 1911, 1912 and 1914). In the end, 771 financial newspapers appeared at least once during the sampled years. For 108 newspapers, we were not able to find a founding year, in which case we assumed that it was the one of their year of appearance in the *Annuaire de la Presse*. The descriptive statistics on the years of founding and the incidence probability are in the table A.1. It shows that the median of the year of founding was 1893while the mean is 1891 It also helps to compare the average maximum duration of newspapers with the actual one (third and fourth columns). On average, after having took into account the founding year, a financial periodical could have been published during more than twelve years, the average newspapers appeared only during less than five years. The difference is stronger when the mode or the median are used. Consequently the incidence probability is only 39% on average. This shows that a newspaper has only 40% of survival during the next year. The median is lower at 33%.

	Founding year	Maximum numbers of years a newspaper could appeared	Number of years a newspaper actually appeared	Incidence probability
Mean	1891.77	4.88	12.82	0.40
Median	1893	3	15	0.33
Mode	1907	1	17	0.058
St. Dev.	13.19	4.26	4.84	0.29
Kurstosis	2.19	0.75	-1.26	-0.82
Skewness	-1.03	1.29	-0.65	0.59
Minimum	1829	1	1	0.058
Maximum	1914	17	17	1
# observations	770	770	770	770

Table A.1. Descriptive statistics on the longevity of newspapers

Sources: Authors from various issues of the Annuaire.

Computing longevity of newspapers

During the 17 sampled years, a newspaper founded before or in 1890 could have appeared in the Annuaire de la Presse between 1 and 17 times. The incidence probability is computed as the ratio of the number of years a given journal

appears in the 1890-1913 sample by the number of years of that period. Therefore, if a journal appeared 17 times, its probability is equal to one. A correction was made to those newspapers founded after 1890. For any newspaper founded after 1890, we adjusted the maximum numbers of years by the potential longevity of this journal. Indeed, a newspaper founded before 1890 may appeared during the 17 sampled years while a newspapers founded in 1914 could have appeared at most once. We adjusted by using the founding year (or the first year of appearance in the Annuaire in case of missing data). Therefore, for any newspaper founded in 1891 or 1892, we computed the same ratio but using 16 as the denominator. For any newspapers created in 1893 or 1894, we divided it by 15 and so on.

Each newspaper is then characterized by a probability that it appeared during the sampled years. Figure A.2. plots the distribution of newspapers' longevity by decile. The graph reads as follows. Among the population of 771 newspapers, 14.5% had a longevity lower than 10% while 7.4% experienced a longevity greater than 90%, which means that they were listed as active publisher on the market during at least 90% of the sampled years.

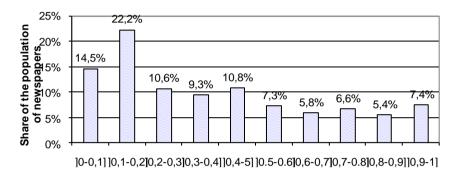


Figure A.2: Share Distribution by decile of the longevity of newspapers in Paris (1890-1914). Source : Authors' computation based on various issues of the *Annuaire de la presse* (Paris).

#### Connecting the probability to appear with the price per issue.

We use 1904 as the reference year to compute the relation between the price per issue and the longevity of newspapers. The price per issue is adjusted for the varying periodicity of each newspaper. We convert every price into the price of a weekly. The price per issue of dailies was then multiplied by 6, the number of working days in a week. The price of those appearing two times a month was divided by two. For those appearing two times a week, their prices were multiplied by 2 (and so one with the newspapers appeared three times a month). Two newspapers have a price well above the others' price (amounting at 3 and 4 francs per issue, about 11 (15 resp.) times higher than the mean or the modal price). In order not to bias the result, we excluded them for the analysis. We added *l'Economiste Francais* and *l'Economiste européen* because, although the Annuaire de la Presse classified them as political economy newspapers, they were among the most usual references in the financial industry. We ended up then with 243 newspapers.

Issue price (adjusted for periodicity)	$0 \le p < 0.2$	$0.2 \leq p < 0.4$	$0.4 \le p < 0.6$	≥ 0.6	no price	Total
# of newspapers	49	51	10	8	125	243

Table A.2: Distribution of the price of newspapers in 1904, adjusted for periodicity Source: Authors from Annuaire de la Presse, 1904-5.

	Adjusted price per issue	Longevity of priced journals	Longevity of non- priced journals
Mean	0.2367 FF	0.697	0.602
St. Dev.	0.1943	0.227	0.224
Median	0.20 FF	0.7058	0.588
Mode	0.25 FF	1	1
Kurstosis	4.5606	-0.746	-0.755
Skewness	1.919	-0.3902	0.0272

Table A.3: Descriptive statistics of the price of newspapers in France in 1904 Source: Authors from Annuaire de la Presse, 1904-5.

A Fischer-Snedecor test of the equality of variance between the population of the longevity of newspapers with a price and the population of the non-priced indicated that the hypothesis of equality cannot be rejected at a 5% confidence level. The variance longevity of both sub-populations did not differ too much. A test of equality of means indicated that the equality of the means of both sub-samples can be rejected at a confidence level of 5% (t-stat equal 3.298). The longevity of priced newspapers was therefore significantly higher than those of the non-priced.

## A.3. Estimating advertising revenues (Figure 4)

The estimate of the revenues derived by newspapers from financial advertising was computed using a measure of the volume of advertising and the price of advertising per line. All journals except Ruy Blas only published financial advertising, e.g., announcements of a security issue, reports of shareholders' meetings. As we want to measure the ability of each journal to

attract financial advertising, we exclude the revenues from commercial advertising from the estimation for Ruy-Blas. Three types of financial advertising may be distinguished at that time.

- The first type will be now considered as regular advertising, i.e. "conspicuous announcements printed in special characters and appearing in a predefined section" (Leroy-Beaulieu, 1906, p. 251). Their appearance in a distinct section of the journal made them especially easy for the readers to distinguish from regular editorial content. Among the types of advertising published in this section, one can found the serial numbers of bonds drawn at the lottery for reimbursement by the issuers, ads for the services proposed by banks or IPO announcements.
- The second type consisted in the publication, without editorial adds-on, of administrators' reports or of the decisions and/or minutes of the shareholders meetings. They usually appeared in a separate section.
- The third type consists in what was known as that time as *réclame*, i.e. laudatory articles that normally appeared in the editorial section of the newspaper and were paid for by the companies being lauded.

While estimating the advertising revenues of newspapers, we choose to exclude the *réclame* for two reasons. First, by its very nature, it is very difficult to distinguish one of them from regular editorial content. Second our aim is to measure the ability of each newspaper to attract advertisements, i.e. advertisements that can be easily distinguished from the edited articles (In a context in which it was said that companies prefered *réclames*). We then included in our estimates advertisements of the first and second types. Advertisement was invoiced to companies by charging a price per line. Each price of the various types of advertisements was usually printed just below the journal's title. The estimate of the revenues derived from advertising was constructed by multiplying the number of lines of advertising by their price.

To construct the number of lines, we proceed as follows. Each advertising section has a given number of columns (for most of the sampled newspapers, there exist between 2 and 3 columns). Because the typesetting and the organization of the space were standardized, a column always contained a given number of lines. Therefore the measure of the number of lines of advertising is the product of the number of columns by the number of lines times the number of pages devoted to advertisements. This estimate of a journal's advertising revenues was then computed as the product of the price per line (published on the front page) by the number of lines. The advertising revenues were estimated using all issues published during the 1<sup>st</sup> semester of 1909. Table A.4 sums up the main information on each of the sample journal.

Newspapers	Price	Periodicity	Total of pages published	Sum of ads pages	Advertising surface (%)	Ads Revenues (FF)	Price per line (FF)	# of lines	Price per line (FF)	# of lines
Le Rentier	0.5	Every 10 days	288	84.7	23.05%	85558.48	2.5	85559.48		
L'Économiste Européen	0.5	Weekly	1038	204	14.65%	117623	2.5	4982	4	26292
L'Économiste Francais	0.9	Weekly	990	194	19.36%	148410	2.5	59364		
L'intermédiaire du capitaliste	0.2	Every 10 days	288	12.43	3.50%	NA	NA			
Le Globe	0.25	Weekly	500	71.78	14.36%	30685.5	1.5	20457		
L'écho des capitalistes	0.25	Weekly	168	37	22.02%	23293	2	9317	3	1553
Ruy Blas	0.4	Weekly	696	169	24.28%	49708.30	Table A.5.			
La semaine économique et financière	0.25	Bimonthly	108	14.26	13.20%	4876.5	1.5	3251		
La bourse pour tous	0.1	Weekly	100	3.92	3.92%	NA	NA			
La semaine financière	0.25	Weekly	680	110	16.18%	56357.82	1.5	37572		

Table A.4 : Advertising space and advertising revenues in a sample of French financial periodicals, 1st semester of 1909. Sources: Source: Authors from the journals. Location of the various periodicals: *La Semaine économique et financière*, *Le Rentier*, *L'économiste européen*: Private collection. Any of the other newspapers: Bibliothèque Nationale de France, Paris.

Some remarks are noteworthy on the following newspapers.

Le Rentier announced a price per line of advertising equal to 2.5 Francs. Five categories of advertising were distinguished: (a) Announcements of coupons' payment, (b) announcement of the numbers of lottery bonds, (c) minutes and convocation of shareholders meetings and of the board of directors, (d) other financial advertising on 5 columns pages and (e) other financial advertising on 3-columns pages. The Rentier mentioned a single price per line for any advertising. Therefore the estimation of the advertising revenues was made by multiplying for each section the number of lines by the price per line. As for any other newspapers, self-promotion (3 pages or 3.5 percent of the advertising space) is not included in the estimates of advertising revenues.

*L'économiste Européen* published two types of advertisement, depending on the size of the printed characters. Advertisement with a small character size were invoiced 2.5 Francs per line while those in the bigger size (comparable to the size of the editorial content) was invoiced 4 Francs per line. The mean price of advertisement in this journal is 3.6 Francs per line, when computed using the observed distribution of ads as weights.

*L'Intermédiaire du capitaliste* was published by the printer & manager "Malin" whose translation in English is either 'malicious' or 'clever'. No price per line was indicated on the newspapers. On top of the ads pages, 8.57 pages of selfpromotion (69percent of the advertising surface) can be added.

*Ruy-Blas* is the sole sampled newspapers to cover both fashion and entertaining activities and financial information and advices. Therefore, the advertisement it published comprised is clearly divided between those two. As our aim is to measure the ability of a newspaper to attract financial publicity, we distinguished between commercial and financial ads. Commercial

ads were made by fashion shops, casinos or sea-side resorts. Financial advertisement were very similar to those of the standard financial periodicals. *Ruy-Blas* price –discriminated between the various types of financial advertising according to the type of announcement. As shown in line 4 of the following table, it charged the highest amount to advertisement of securities introduction of foreign companies on the Paris market (40 Francs per line) but only 5 Francs for announcement of the scheduling of shareholders' meetings. The average price per line was computed as the financial or commercial advertising revenues divided by the number of lines of each type of advertising. The section 'Financial notices' included shareholders' meeting convocation and minutes of those meetings. The section 'Financial announcements' included the other types of announcement linked to the financial market.

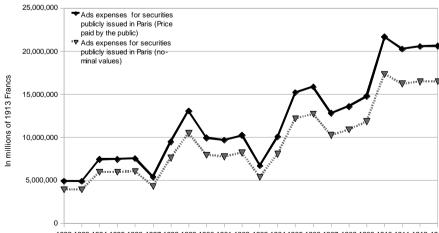
Details on Ruy Blas	Revenues from financial ads (FF)	Financial ads in percent of ads revenues	financial ads in percent of advertising space	Financial ads, average price per line (FF)	Commercial ads, av. price per line (FF)
Advertising	49 708	34.41	11.80	9.84	2.78
Type of advertising	IPO of foreign companies	IPO of domestic companies	Financial notices	Financial announcements	Total
Price per line (FF)	40	20	5	2	n.a.
Revenues (FF)	32 592	3 042	9 840	4 234.3	49 708.3

Table A.5: Financial and commercial advertising in Ruy-Blas, 1<sup>st</sup> semester of 1909. Source: Authors from the journal.

# A.4. Estimates of advertising revenues related to securities issues received by the French press. (Table 1)

The payments for the Sao Paulo 5% loan need additional information. According to Le Globe, the advertising expenses of the 1905 Sao Paulo loan amounted to 210,000 Francs. But a newspaper's article published in L'écho des capitalistes (9 December 1909) mentioned that this list is incomplete as some dailies did not appear. The archives of the syndicate leader of the loan mentioned 367,317 FF paid in publicity using Lenoir as the press broker (Paribas archives, folder 11 DFOM 221/424, "Frais d'émission Emprunt 5% de l'Etat de Sao Paulo"). The total amount is indicated at 426,330.4 FF to which 54688.4 FF for advertising in Amsterdam, Bruxelles and Geneva must be subtracted.

Figure A.3. gives estimations of the amount of publicity revenues that were appropriated by the French press in relation with securities issues on the Paris stock exchange. To construct these estimates, we multiplied the deflated value of securities publicly issued in France (Saul, 2005, p. 122 using the price series of Levy-Leboyer and Bourguignon, 1985) by the share of advertising expenses related to the issues of securities. It is unclear whether the series of the amount of securities issues were compiled using the nominal value of each issue or the price offered to subscriber. Table A.6 presents the percentages for both type of valuation method in the case of the three loans detailed in table 1. It appears that the share of advertising expenses in terms of the nominal values of the securities issued is at least 0.4 percent. But the share in terms of the price paid by the public is somewhat higher. Figure A.3 therefore presents two estimates of the advertising revenues derived from the public issues of securities. The lower bound is set at 0.4 percent of the total amount while the upper bound used for the computation is set at 0.5 percent. We did not used the numbers computed with the Sao Paulo loan as it was issued jointly by Paribas and a German bank (Dresdner) and the anti-German stance of France could explained part of this high level. In the end, the total of the lower bound estimates sums up at 209 millions 1913 French Frances or 654 millions of 2009 euros while the total of other sums at 261 millions (818 millions of 2009 Euros).



1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913

Figure A.3: Estimates of the amount of advertising revenues derived from securities issued in Paris received by the press Source: Securities publicly issued in Paris from Saul (2005, p. 122, series Stock publicly issued in France) citing Chadeau (1989, L'économie nationale au 19eme siècle) and the INSEE statistical yearbook (1951, 1961 et 1966). Nominal values were deflated using the price index of Levy-Leboyer and Bourguignon, 1985.

	Nominal value of	Paid by the public (valued	Advertising	share of ads expenses	Share of ads
	the loan	w/ issue price) (millions	expenses	(valued at nominal	expenses (valued at
	(millions FF)	FF)	(millions FF)	value, percent)	issue price, percent)
Hungarian M. B. 1899	20	18.6	0.094525	0.47	0.51
Bulgaria 1902	106.00	94.87	0.428877	0.40	0.45
Sao Paulo 1905	38.239	37.47422	0.367317	0.96	0.98

Table A.6: Share of advertising expenses in percentage of the nominal value or issue price.

Source: Authors from Paribas archives (Bulgaria: folder 11/DFOM221-309; others: see text).

## A.5. Payments to newspapers during three bond issues (Table 2)

Working with the data published by Le Globe, it appears that a company named *L'auxiliaire* received 80,000 FF. Research in the national archives (Paris, box 1 AR 108) indicated that it pooled the financial advertising business of the *Economiste Européen, Petit Journal, Figaro, Matin, Progrès de Lyon, Petit Marseillais, Petit Provençal* and *France de Bordeaux*. In all tables, we reported numbers that use the break down of the money paid to *L'auxiliaire* between the 5% fees for this company (counted in brokers) and those paid to the newspapers. Table A.7 helps to construct the percentage of table 2 using the totals of table A.9.

In French Francs	Hungarian Mortgage Bank 1899		Bulgaria 1902		Sao Paulo 1905	
In French Francs	Raffalovich	Non Raff.	Raffalovich	Non Raff.	Raffalovich	Non Raff.
Political newspapers w/ circulation > 50,000	15500	5500	74000	30000	42300	10510
Political newspapers, w/ circulation < 50,000	7500	24200	56430	60345	20500	47475
Total political newspapers	23000	29700	130430	90345	62800	57985
Financial newspapers	4750	18725	16500	43507	18910	17475

Table A.7: Breakdown payments to newspapers according to circulation and whether Russia advertise in them. Source: Authors from Le Globe, Albert, "La presse française" and Raffalovich, *L'abominable* 

Table A.8 the descriptive statistics of the payments made to periodicals and brokers for each loan issue are given in table A.9.

Hungarian M.B. 1899	Bulgaria 1902	Sao Paulo 1905
94,525	428,877	213,519
338.8	1559.6	1256
100	300	250
25	100	25
733.8	4156.5	3602.8
24.9	31.9	42.7
4.5	5.1	5.9
279	275	170
	94,525 338.8 100 25 733.8 24.9 4.5	94,525         428,877           338.8         1559.6           100         300           25         100           733.8         4156.5           24.9         31.9           4.5         5.1

Table A.8: Descriptive statistics on the payments to newspapers and brokers for three loan issues in Paris. Source: Authors from Le Globe.

Finally, table A.9 presents the complete break down of the payments to the periodicals and publicity brokers for each loan issue. To uncover the number of table 2, some computations are necessary. It is indeed needed to distinguish among the political and general interest newspapers those with a circulation greater or lower than 50,000 a day. The various items under the heading "Influential newspapers" of table 2 are also sub-categories of their respective categories in table A.8.

Share (in percent) of each loan distributed to	Hungarian M. B. 1899	Bulgaria 1902	Sao Paulo 1905
Publicity brokers	1.59	18.82	17.93
Political and general interest newspapers (a)	55.75	51,48	56.56
Local newspapers (b)	2.38	1,82	0.70
Financial and political economy newspapers	24.83	13,99	17.04
Group of periodicals (c)	5.29	8.26	3.04
Specialized journal and others (d)	10.16	4.24	4.72
Total	100	100	100

Table A.9: Sharing of the advertising payments to newspapers and brokers.

Source: Authors from Le Globe and various issues of the Annuaire de la presse.

- (a) They included the dailies mentioned in table 2 (i.e. influential newspapers or those with a circulation greater than 50,000 a day) but also the weeklies or monthlies not specialized in some specific topic. See table A.7 for a detailed breakdown between Raffalovich's paid newspapers and the other, ranked by circulation.
- (b) This heading includes any newspaper published with a focus on a specific town or region outside Paris or on a Parisian neighborhood.
- (c) Group of periodicals included either newspapers owned by the same person or those sharing a joint-venture company to deal with advertising. It proves impossible to disaggregate the money distributed through those groups.
- (d) The journals included under this heading included any periodical dealing with a specific topic (excluding finance and political economy, and political and general interest journals).