Havas and the Foreign Loan Market, 1889 to 1921

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Abstract
This paper examines contracts for clandestine financial publicity concluded between the French news agency Agence Havas and assorted sovereign borrowers in the period 1889 to 1921. I explore the reasons for the creation of these contracts, and examine the circumstances surrounding entry into a contract. I argue that the contracts were concluded by sovereign borrowers falling within Havas’ area of international news collection, and that the intent of the contracts was to raise the price at which sovereign borrower’s debt was traded. I present preliminary evidence supporting this hypothesis.

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Introduction

In July of 1914, Russia’s representative in the Paris markets – Arthur Raffalovitch – was getting tired of continually bribing the French press. Since at least 1906, and Russia’s unfortunate war with the Japanese, the French press had been hounding the Russians for payments – payments intended to forestall within the press criticism of Russia’s economic prospects such as might impede their ability to borrow money in Paris. Raffalovitch had dutifully dispensed the bribes, working through French press brokers to determine which newspaper proprietors really did require paying off, and which were so marginal as to be safely ignored. However, the demands were unrelenting, and so, by 1914, Raffalovitch was disillusioned. Reflecting on his work, he wrote: “I end up being very skeptical about this kind of relationship with the press. The public ends up figuring out that it is paid for. Despite the current organization, we place our government loans and with ease at that.”¹

Raffalovitch’s letters to the Russian government, published following the Russian revolution of 1917, have piqued the interest of historians, revealing as they do a hidden side of the functioning of the Parisian financial markets. The discovery of hidden payments from borrowers to journalists, for the purposes of promoting their securities, has provoked research into the press-finance nexus, with the goal of understanding the governance function of the press. This research agenda has been particularly pursued in the French context, where a variety of contemporary tell-all’s and exposés accused the French press of corruption.² Subsequent historians have expanded on these themes.³ Condemnation of the press focuses on both its corruption for the purposes of accessing the Paris market, as well

¹ Author’s translation, in M. Raffalovitch a M. Bark, 4 July 1914, in L’Abominable Venalite de la Presse: D’apres les documents des archives russes (1897-1917), Paris: Librairie du Travail, 1931, pp. 407. Throughout the rest of the text all translations are the author’s unless otherwise specified.
as its more general political corruption for propaganda – particularly in the interwar period.

However, with some exceptions, previous historians have been constrained in their work by the anecdotal and selective evidence available as to the size and timing of payments to the press. This is particularly the case in the analysis of bribes by sovereign borrowers, the existence of which is well-documented, but the specific characteristics of which are less widely known.4 The documentation on the Russian case is the most comprehensive, but hints as to the existence of payments by other sovereign borrowers have not yet received the same level of systematic treatment. However, a recent find by this author in the archives of the former French news agency Agence Havas offers a rare insight into this phenomenon.

The Archives of Havas yield 14 contracts with the South American governments of Argentina, Bolivia, Chile, Colombia, Peru and Uruguay, concluded between the years of 1901 and 1921.5 In addition, there are three more contracts – and additional correspondence – between Havas and Serbia, Hungary and the Ottoman Empire, concluded between 1889 and 1907. Unlike all the rest of the contracts held in the archive, these contracts are for the receipt of news by Havas from the aforementioned governments. Each government agrees to pay Havas a set fee for the transfer of information to Havas, and in turn, Havas agrees to give the information as much publicity as possible – while pretending that the information originated with Havas’ own foreign correspondent. For instance, in a 1912 contract Havas pledges – in language typical of the contracts, to “give to the aforementioned [information] service all the publicity at its disposal, both in Europe and in the Americas, on the condition that it contains nothing contrary to French politics or to the professional interests of Agence Havas, of which the agency will be the sole judge.”6

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5 There is an additional note held in SAR 428, dated 1940, that suggests the existence of a contract with the government of Venezuela. However, without a copy of the contract I have been unable to confirm this.

An example here is instructive. In December 1912, Havas concluded a contract with the government of Bolivia.\(^7\) The contract was to take effect on the 1\(^{st}\) of January 1913, for the duration of a year. For £25 a month Bolivia bought the right to send 1600 words a year to Havas in Paris for redistribution to Havas' subscribers. In addition, the Bolivian government could write two articles a month to be included in the *Correspondance Havas* – a journalistic circular Havas maintained that journals could pay to be able to copy from. The results of this arrangement are preserved in the pages of the French dailies. For instance, a French investor, opening the pages of *La Semaine Financiere* on Saturday the 1\(^{st}\) of March, 1913, would read that “The Crédit Mobilier Français will emit a public offering of a loan of 5% gold, for £1,000,000 pounds or 25,200,000 francs, of the government of the Republic of Bolivia.”\(^8\) The article went on to cite Bolivia’s rising revenues from export duties, and how easily they would cover the payments on the new loan. This same article, word for word transcribed, could be read again in the pages of *Le Temps* two days later on March 3\(^{rd}\).\(^9\) And indeed the following Tuesday, March 4\(^{th}\), the same news item could be found again in the pages of *Le Temps*.\(^10\) These repeated articles about Bolivia were taken from the newspaper's subscription to Havas' international news service. Ostensibly, they were penned by Havas' correspondent in La Paz, but in fact, they were written by the Bolivian government.

The contracts offer us a glimpse into a complex system of international reputation management – typically centered on the international sovereign debt market, but extending into other spheres such as political lobbying. A component of this system was Havas, whose network of telegraphic communications and newspaper subscription service enabled it to access millions of readers and would-be investors. In particular, Havas’ network of subscriber journals in France allowed it to influence the communications of borrowers with French savers. This position enabled Havas to act as an intermediary in the foreign debt

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\(^7\) 5 AR 428, Document 6.  
\(^8\) *La Semaine Financiere*, 1 March 1913, pp. 163.  
\(^9\) *Le Temps*, 3 March 1913, pp. 5.  
\(^10\) *Le Temps*, 4 March 1913, pp.5.

The discovery of the contracts invites speculation as to why the contracts were created and what they were aimed at achieving. Further, the existence of these payments from sovereign borrowers to media organizations invites speculation as to the consequences of a successful financial propaganda campaign. More broadly, the idea that major media organizations could have their coverage suborned, and thus by implication that the information set of an investor could be endogenously determined within a market for information, invites a careful rethinking about the informational foundations of capital markets. It is for this reason that it is important to approach the materials of our enquiry carefully and methodically. In consequence, this paper proceeds as follows. First, I examine carefully the contracts in our collection, focusing on their price and the type of information they were stipulated to transmit. Next, I turn towards financial theory to hypothesize why the contracts were created. I then examine – drawing on press accounts and secondary sources – why it appears that countries were contracting for financial publicity, and I evaluate the reasons for contracting quantitatively, with reference to the contracting country’s bond yields. I then conclude with some reflections on the implications of the contracts.

\textbf{Section I: The Sources}

\textit{The Geographic Coverage of the Contracts}

The reasons why certain sources come into the possession of a historian are rarely so innocuous as to be safely ignored. The documents frequently suffer from what a statistician would refer to as a sample selection bias, generated either by conscious decisions to preserve certain documents that were viewed as important, or less incriminating, or simply through “capricious fortuit,”\footnote{The phrase is Emilio Gabba’s quoted in Carlo M. Cipolla, \textit{Between Two Cultures: An Introduction to Economic History}, New York: W.W. Norton & Company, 1988, pp. 22.} which spares certain sources while erasing others. The
contracts in our possession are no different, and the question naturally arises as to why we see this collection of contracts between sovereigns and Havas and not others – given that we know from Raffalovitch that other payments to Havas existed.

The selection of contracts we observe is particularly puzzling as it bears little resemblance to the composition of the French portfolio. Esteves provides the most up-to-date estimates of the geographical distribution of French foreign investment. His estimates show that in 1913, the French portfolio held roughly 43.9 billion francs invested in Europe (including Turkey), 12.8 billion francs invested in North America, 21.2 billion invested in Latin America, 19.8 billion invested in Africa, and 7.2 billion invested in Asia and the Pacific.13 In contrast, the number of European contracts included in our sample is only four, including Turkey, whereas Europe represented a far greater percentage of French investment. Latin America captured a fair proportion of French investment, but Africa not far less – and the complete absence of African and Asian borrowers in our sample of contracting countries appears to pose a puzzle. In fact, a parsimonious explanation for why we observe contracts predominantly from Latin America can be provided by an analysis of Havas’ areas of overseas operations.

By the end of the 19th century international news provision was dominated by 4 firms: Havas in Paris, the London based service Reuters, the German service Wolff, and a growing role for the Associated Press in New York.14 From as early as 1858, the major news services – at this point only the major European agencies – recognized the economies that could be achieved by agreeing to cooperate, limit competition and share information. In 185915 the agencies agreed with each other 1.) to allow each service a monopoly on the provision of news in its country of origin, 2.) to divide the world into separate spheres within which one news agency would exclusively cover the news, and 3.) to then exchange information on the

15 According to Donald Read (see The Power of News, Oxford: Oxford University Press, 1992, p.56), there was a verbal agreement in place to limit competition as early as 1856. My thanks to Kars Aznavour for pointing this out to me and providing me with the citation.
part of the world that a given agency covered. The result was over a half-century of cartelization of the international media market.

In 1876, it was recognized that Havas would be the exclusive provider of news pertaining to South America. Prior to the 1876 agreement, Havas and Reuters had split the coverage of South America between them, now however, Havas took over exclusive coverage of the region, replacing Reuters’ agents in Chile, Brazil, Uruguay and Argentina with its own. Likewise, until the end of 1889, Havas’ split coverage of the Balkans, including Serbia, Montenegro, Romania, Roumelia, and Turkey with the small Austro-Hungarian news agency Corrbureau. In 1889 Havas ceded the coverage of Serbia and Montenegro to Corrbureau – which explains perhaps why Serbia has a contract with Havas in 1889 but not after. Thus, the nature of the cartel agreements – the geographic division of news production – seems to explain the geographic selection of contracts we observe in our sample.

The Content of the Contracts

The contracts we focus on span from an 1889 contract with the government of Serbia, to a 1921 contract with the government of Uruguay. A typical contract specified a start date, the number of words to be sent to Havas for unannounced publicity, the number of articles that could be published in the Correspondance Havas if any, what news Havas would send to the government in return, the duration of the contract or if it was automatically renewable, and what the entire arrangement would cost. Table 1 lists the contracts in our collection, their start date, and their monthly cost.

Whereas the contracts concluded with South American governments are very formulaic in their approach, the contracts concluded with Hungary, Serbia and the Ottoman Empire

20 The contracts were discovered in Havas’ archives, held at the National Archives in Paris. These archives are incomplete as they contain only documents from half of Havas’ business – the news collection half. Havas had a partner organization specializing in publicity whose archives have been lost to the researcher.
are far more heterodox, and the information contained in them is less complete. For instance, in the case of Hungary, rather than a contract we have a letter from Havas’ Hungarian representative to Havas’ Parisian director, outlining the terms of the deal while arguing that “an arrangement, existing in written form, (signed contract on *papier timbré*\(^22\) or an exchange of letters), could cause serious inconveniences for the Hungarian government” and thus (ironically) urging the conclusion of business without a written record.\(^22\)

The South American contracts are relatively formulaic in the types of information they stipulate to be transmitted. For instance, the contract signed with the Argentinians in 1901 stipulates that “Agence Havas will transmit to Europe for publication in the leading journals all the political, financial or commercial news that is of a nature tending to promote Argentinian interests.”\(^23\) This information was not official government dispatches, whose transatlantic telegraphic transmission was covered in a separate clause in the contract.\(^24\) In addition to this information service, Havas offered a supplementary service whereby the contracting country could publish a certain number of articles in the *Correspondances Havas* – which was, in the words of the 1901 contract with Chile – “[the] bulletin of this agency which is distributed to journals and that is the universal source of information for the press!! [exclamation marks in original].”\(^25\) This overblown description captured roughly the function of the *Correspondance Havas*, which was indeed circulated to journals for them to make use of the included articles. The sort of information which these articles written for the *Correspondance Havas* would contain was contractually stipulated to support the “progressive development of the country.”\(^26\)

**Pricing the contracts**

The contracts specify slightly varying services, and in consequence have slightly varying prices. Table 2 summarizes the price data and the services it covers for the contracts for which we have data. It is relatively clear from an analysis of Table 2 that price variation is

\(^{22}\) *Papier timbré* was paper stamped with a revenue stamp, which was necessary for official documents.

\(^{23}\) Letter to Henry Houssaye director of l’Agence Havas, S AR 428


\(^{25}\) Ibid. pp. 1 clause II.

\(^{26}\) 5AR 428, “Contract avec le Gouvernement Chilien”, document 1, pp. 2.

\(^{26}\) 5AR 428, “Contrat avec la Gouvernement Argentin” Document 1, pp. 2
most sensitive to the number of words a country could send for financial publicity. The number of articles that could be published in the Correspondance Havas seems to correlate roughly but imperfectly with the price of the contract. This can be seen in a comparison of the two scatter plots in Figure 1.

The different contribution of these two services to the price of a contract is instructive. The Correspondance Havas offered journals a choice of articles to pick from, and including an article in the Correspondance offered no guarantee that the article would be picked up by a newspaper and published. In contrast, news offered through Havas’ wire service was presumed to originate with Havas’ foreign correspondents, and was more likely to be included by newspapers. The fact that the Correspondance Havas does not seem to have been a particularly valuable service to pay for is perhaps explained by the perception that its articles were paid for. I explore this possibility in the next section.

Contextualizing the contracts

It is important not to judge the nature of the contracts by a 21st century standard. Bignon and Miscio discuss the widespread practice of the réclame in the French newspaper industry at the end of the 19th century. They follow an 1870’s dictionary in defining réclames as “laudatory articles that normally appeared in the editorial section of the newspaper and were paid for by the companies being lauded.”27 As they note, these laudatory articles were an established method of raising advertising revenue, but were not normally distinguishable from any other newspaper article, and hence demanded of the reader a wary skepticism. The fact that this practice was widespread, invites us to view the contracts less harshly then we might otherwise – looking back from a period in which the careful separation of news, opinion and advertising are assumed to be foundational distinctions in journalism. Further, given that the practice was widespread, we can imagine that the reader approached newspaper articles in a manner different to how we do now, and might happily read a hagiographic article about a new business director for the information it contained – and yet accord to it the bias we would associate with a press release. This is an important point to bear in mind as we turn toward the construction of a

theory that accounts for the creation of these contracts, as the extent to which this practice was acceptable or unacceptable has ramifications on how revelation of the existence of the contracts would impact Havas’ professional reputation. If in fact this sort of financial advertising was viewed as unexceptional, we can imagine that engaging in these sorts of activities might impose little reputational cost on Havas.

Section II: Deriving an Hypothesis

In this section we consider several explanations for why the contracts might have been created, and will attempt to narrow down towards a parsimonious explanation. The contracts can be considered both from the point of view of Havas, and the point of view of the sovereign borrowers. Let us call Havas’ supply of publicity the supply side of the market, and the sovereigns’ demand for publicity the demand side. First we will consider the motivations of the supply side of the contracts.

The supply of publicity – the motivations of Havas

Let us assume that a news wholesaler such as Havas would want to minimize its costs and maximize its profits. The contracts for financial publicity have the desirable property of driving the costs of information production negative – rather than having to pay a foreign correspondent, Havas is paid to receive extra information. Why then would Havas not want to monetize as much as possible its information production?

Media organizations derive revenue in part from their readership, and repeatedly taking bribes could alienate the readership and diminish the financial prospects of the firm. Nowhere is this truer than in the case of a media wholesaler, whose customers are extremely news-savvy. In theory therefore, we would anticipate that Havas would be reluctant to undermine the quality of its news provision if it risked alienating customers. In fact, some industrial organization theorists might argue that with Havas’ augmented market share it would have more to lose by risking its reputation than it might gain in side

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28 Havas’ motivations may have been more complex, and certainly in the 1930’s and after Havas’ close ties to the French government suggest that some of its decisions were motivated more by politics than profitability (see e.g. Julien Auvert, “De La Censure du Front Aux Colonnes Parisiennes: L’Agence Havas, L’Information et la Guerre Civile Espagnole,” Le Temps des Médias, No. 16, Vol. 1, 2011, pp. 52-62). However, during the time period under consideration Havas’ behavior seems best characterized by profit-seeking.
payments, and hence that rationally Havas should not accept bribes. However, Bignon and Flandreau have pointed out that reputation based solutions to information asymmetry problems involve a time-inconsistency: revelations of media malfeasance are not immediately apparent to readers, thus as a news organization’s reputation for honesty increases, the potential revenue from being dishonest increases. The result is that a stable reputation-based equilibrium cannot be intuited a priori.

The motivations of Havas: Badmouthing?

Several studies have documented the fact that in the late 19th century media companies occasionally engaged in blackmail, accepting payments for not publicizing negative information. If this is the explanation for the contracts than Havas is not being paid for financial publicity, rather, it is being paid not to publicize negative information. In Bignon and Flandreau’s formulation this phenomenon is particularly common for firms experiencing financial difficulties or issuing new securities.

However, were Havas engaging in ‘badmouthing’, we would expect that the price of the contract would vary with the severity of the country’s circumstances and not with the services stipulated in the contract. This is not what the data suggests, as the services included in the contract strongly predict the price of the contract. This is easily seen in Table 3, where a simple OLS regression of the price of a contract on the number of words sent to Havas per month, and the number of articles published in Correspondance Havas per month strongly predict the price of the contract – both the contemporary price and the price in current pounds. Not only are the t-statistics large, but the value of the R-squared suggests that almost all of the variance in price can be explained with reference to

33 Ibid. pp. 617.
differences in the services offered in the contract. Furthermore, the care and specificity with which the information services contracted for are described would seem excessive if the real purpose of the contract was simply to preclude the publication of unflattering information. For these reasons, it appears that ‘badmouthing’ is not the motivation for contracting.

*The Motivations of Havas: ‘Issuer Pays’?*

Another way we could consider the contracts is with analogy to ‘issuer pays’ models of credit rating. Bignon and Miscio demonstrated that in late-19th century Paris, newspapers were able to extract payments from firms for more coverage, albeit not necessarily biased coverage. This finding is consistent, as Bignon and Miscio point out, with a literature on two-sided markets. This suggests that Havas is willing to accept payments for news – and the production of that news by the borrower – understanding that the news is supposed to be accurate, albeit selective. Havas can charge for this service as were the news not paid for the country would go uncovered. This interpretation is consistent with the inclusion in all contracts of a clause stipulating that the news produced by the sovereign cannot be damaging to Havas’ professional interests – a condition which it retains sole discretion to enforce. The inclusion of this clause suggests that if the information being produced by the sovereign appears likely to damage Havas reputation it can refuse to publicize that information.

The ‘issuer-pays’ analogy appears a likely candidate to explain Havas behavior: it is able to monetize coverage of certain borrowers – and outsource the production of information about those borrowers – because it is valuable to the borrowers to be included in Havas’ coverage. However, we know from the wording of the contracts that the information supplied to Havas was far from uncritical – indeed it was contractually stipulated to be favorable. Thus we should be wary of taking a sanguine view that Havas’ devotion to its reputation could guarantee the quality of its financial coverage, rather it probably imposed limits on how outlandish (or inaccurate) the information could be. The ‘issuer-pays’ interpretation of Havas’ role is supported by the fact that Havas was a quasi-monopolist or

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monopolist in the regions where the contracts were created. Havas’ dominance of information collection in the regions from which the contracts originate lends credence to the view that Havas could demand payment for providing coverage of certain countries.

*The demand side – why countries contract for financial publicity.*

We might surmise that a reason why a country would bribe Havas is that bribes to international news agencies, or to the press, were highly effective in righting the fortunes of states whose financial condition would otherwise have been ruinous. In fact, this was the perspective of Russian finance minister Witte – quoted in Long – who informed Tsar Nicholas that “I have known that not one of our loans in France would have been realized without some influence on the press.”\(^{35}\) Seen from this perspective, bribing the French press is intrinsically valuable, and we would anticipate that every government who ever dreamed of cheap credit – and who could fudge an expense account – would have suborned the French press. However, this appears unlikely. For one thing, our sample is limited and not random and for this reason at least we should be skeptical of the efficacy of bribing the press. More broadly, if this sort of strategic communication was extremely successful, we would not expect it to be so relatively inexpensive. First, the undoubtedly high demand for this service would drive up the price. Further, as we saw above, media organizations might have qualms about indiscriminately providing this service. In the next few sections, we will review a few theories drawn from financial theory that might be used to explain the contracting we are observing.

*The Motivations of Borrowers: Strategic Communication?*

Financial theory provides some clues as to why countries would want to contract to send information – even if that information is true. For instance, Leland and Pyle,\(^{36}\) as well as Myers and Majluf,\(^{37}\) have shown why prior to a new issue by a firm, firm’s will wish to disclose information so as to demonstrate to investors that there is no adverse selection

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going on. A similar process can be imagined for potential sovereign borrowers, where information disclosure is undertaken prior to borrowing in an attempt to overcome the 'lemons' problem arising from the information asymmetry between borrower and lender. This line of inquiry is suggestive, as of the 17 contracts in our sample, for 6 of them the negotiation of a contract directly precedes the issue of a new loan.

Another line of inquiry suggests that information disclosure raises asset prices, and for this reason firms – and by extension countries – would be interested in disclosing information. Specifically, Diamond and Verrecchia argue that by disclosing information firms reduce information asymmetry and thus increase the liquidity of their securities. The combination of increased liquidity and reduced uncertainty about a security causes the securities' price to rise. The presumption in this model, as in much of the literature on strategic information disclosure by firms, is that disclosure is costly. Clearly this is the case for the contracts we are considering. Since communication is costly, it is reasonable to assume that the country believes the benefits to be obtained by paying for information transmission outweigh the costs. One scenario in which this is plausible is if the country wishes to issue more debt and information disclosure raises the price at which the country's debt is traded – either because of its effects on liquidity and uncertainty, or because the information is positive. In this context the benefits from information disclosure are apparent. We will test this proposition below when we turn to a consideration of asset prices of the contracting countries.

*The Motivations of Borrowers: Information Asymmetry with Costly Information Acquisition*

Since Grossman and Stiglitz’ seminal 1980 article on the effect of having information acquisition be costly, financial theory has devoted increasing attention towards the way in

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which information asymmetries impact asset price formation.\textsuperscript{41} Grossman and Stiglitz showed that when the cost of information acquisition is non-zero, markets will contain an equilibrium level of information asymmetry: the price system cannot be fully informative as if it were fully informative it would never pay to invest in financial information production. Recently, Veldkamp has expanded on the Grossman and Stiglitz model by introducing a market for information, wherein the price of information is endogenously determined by demand.\textsuperscript{42} Veldkamp’s key insight is that since information is a good whose production is characterized by high fixed costs and low marginal costs, the price of a piece of information will be a decreasing function of the number of people who choose to purchase that piece of information. As a result, “investors buy the same information that others are buying because that information is inexpensive.”\textsuperscript{43} Increased information production about a certain asset reduces uncertainty about that asset causing its price to go up. Veldkamp uses this model to explain ‘frenzies’ and ‘herds’ in asset prices – as investors purchase the same information since that information is least expensive.

The Grossman-Stiglitz model and its extensions have all focused on the decision of the investor: to purchase or not purchase information. However, it is equally revealing to consider the decision of the borrower when communication is costly: to pay, or not pay, to transmit information. If a country decides to contract with Havas, it implies that they want their asset prices to trade at a higher rate than they otherwise would. An implication of this is that the contracts are motivated by disequilibrium – some change in circumstances whereby it is now more valuable for a country to talk up its bond prices. Two possible sources of disequilibrium suggest themselves: 1.) that the country’s bond prices have decreased due to uncertainty, or 2.) that the country is preparing to issue a loan and thus the benefit of higher bond prices has increased. The idea that the contracts are motivated by a change in circumstances – or in anticipation of a loan, could well apply to many of the


contracts in our sample that are concluded on a single occasion. However, what would account for the multiple contracts between Havas and Bolivia and Havas and Chile?

Veldkamp’s insight into the fixed costs of information acquisition suggests a potential motivation: small borrowers pay regularly to disclose information because investor demand for information is insufficient to generate a supply of information. In short, that Bolivia and Chile are subsidizing the costs of collecting information about them as otherwise the cost and distance might mean that almost no information at all is produced about them. The complete lack of information can cause uncertainty about their debt and lead to their debt trading at lower prices than it otherwise would, and to the market in their shares being less liquid than it otherwise would. This seems like a not unreasonable hypothesis for Bolivia, as Bolivia had only two loans (total external debt of £2,965,350 in 1913), both of which traded on the ‘unofficial’ market in Paris and were not quoted in mainstream financial publications (e.g. the Investor’s Monthly Manual, or The Economist). However, it is questionable for Chile, which had an external debt of £34,728,800 in 1913.

Nor is it clear why Bolivia and Chile would contract repeatedly for publicity whereas Colombia and Peru (whose external debts were equivalent to Bolivia’s) or Uruguay (whose external debt approached that of Chile) would not.

Hypothesizing the Decision to Contract: Synthesis

Our review of possible explanatory hypotheses for why sovereigns were contracting with Havas has yielded several possibilities. First, it seems most probable that Havas was able to charge countries for inclusion in the news because inclusion is valuable and space is limited. We need not assume that Havas was debasing content in such a way as to alienate customers – although certainly the information transmitted was likely to be biased and uncritical. Second, it appears that the most probable reason for wanting to pay Havas for media coverage is to raise the price at which a country’s debt trades. This could work through misinformation, or by reducing investor uncertainty.

The desire to raise asset prices implies some sort of disequilibrium that has convinced the country of the need to raise asset prices now. This ‘disequilibrium’ could be a decision

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45 Ibid.
to issue a new loan (which would increase the incentive to have your debt trade at a high price) or it could be entering into a crisis, which has caused a fall in your asset prices due to uncertainty. It is helpful here to consider an example. We will examine Chile, as the case of Chile helps to illustrate the two different types of motivations for contracting that we are considering: first, in anticipation of issuing a loan, or second, because of a crisis that has resulted in investor uncertainty.

In 1906 Chile signed a 2-year contract with Havas for 600 pounds sterling annually to send for distribution in Europe 3000 words per year.46 The proximate cause of this contract appears to be the issue of a new 4½% loan for 3.7 million pounds, jointly undertaken by Deutsche Bank in Berlin and Speyer Brothers in London.47 However, in August 1906 Chile was hit with a devastating earthquake. Throughout the end of 1906 and into the beginning of 1907 this was compounded by the emerging financial crisis in the US. By the end of 1907 the Economist was characterizing the situation as “The Crisis in Chili.”48 It appears that in response to this crisis, Havas renegotiated its contract. Havas extracted from Chile a contract for 1200 pounds sterling per year for the transmission of 3000 words annually – and the duration of the contract was from November 1907 to 1910.49 The difference in price is instructive: whereas to purchase column inches to publicize good news prior to a loan issue would have cost Chile 1200 pounds sterling over two years, a disaster and a worsening economic situation was worth 2600 pounds sterling over two years and two months.50

Clearly, we would like to evaluate systematically the proposition that countries are contracting in order to raise their asset prices, and that they are doing so because either they are experiencing a crisis, or because they see some advantage in raising the price at which their debt is traded. In the next section we survey the available evidence so as to evaluate this hypothesis.

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46 5 AR 427-428 document 3.
48 See “The Crisis in Chili” The Economist, December 14, 1907, pp. 2171, and “The Crisis in Chili” The Economist, December 21, 1907, pp. 2246. It seems that at the time it was typical in British papers to spell ‘Chile’ as ‘Chili’ – an orthography we now reserve for the spicy pepper.
49 5 AR 428 document 5.
50 In retail price adjusted 2008 pounds this is equivalent to 96,700 for the loan issue, and 210,000 for reputation management following the earthquake and economic crisis.
Section III: The Evidence on the Reasons for Contracting

One way to determine if countries are contracting with Havas in order to get their debt to trade at a higher price is to examine if indeed their debt sold for a higher price after the contract with Havas. However, this test is complicated by the existence of a reason for wanting one’s debt to trade at a higher price – a disequilibrium. The existence of the disequilibrium confounds an investigation into the relationship between the country’s bond prices and having contracted as the disequilibrium itself may be exerting an effect on the countries’ bond prices. This is particularly true if the country is contracting with Havas because it is experiencing a crisis and in consequence yields on its bonds are abnormally high. Normal statistical procedures for coping with this problem of a ‘confounding’ variable are not available here – both due to the difficulty of reconstructing historical quantitative measures, and due to the more general difficulty of quantifying the reason why a country would feel obliged to contract for financial publicity.

However, this problem can be somewhat circumvented with a careful historical analysis of the conditions surrounding the creation of a contract with Havas. An historical analysis enables us to group the reasons why countries entered into a contract with Havas into a loose taxonomy: some countries are contracting because investor perceptions of their circumstances have recently deteriorated – they are in crisis, whereas others want to raise their bond prices in order to issue a loan or for another reason. If the reason is prospective – it does not stem from a current deterioration in bond prices – than the motivation for contracting should not bias our estimation of the effect of contracting. Therefore, if we exclude from our analysis the countries contracting because of a crisis, than using a simple event study methodology we should be able to determine if on average contracting is associated with increasing bond yields. Consequently, in this section I draw on contemporary newspaper accounts and secondary sources to examine the motives for contracting. First, we examine the countries contracting ‘in crisis.’

Contracting in crisis

On the basis of our qualitative analysis, we are able to identify four of the contracts in our sample as stemming from an observable crisis that was increasing uncertainty about
the prospects of the country in question. These four contracts were the 1895 contract with Turkey, the 1906 contract with Hungary, the 1907 contract with Chile, and the 1921 contract with Uruguay. The motivation to contract stemming from Chile’s 1906 earthquake has already been related above. We will now examine the crises afflicting the other contracting countries.

Uruguay’s difficulties are well surveyed by the *Economist*. In an article from June 1921, the journal notes that “as recently as last November – the financial situation of the country was described as ‘precarious’.” The *Economist* goes on to describe the $6,000,000 budget deficit, the abysmal state of trade and trade revenue, and the soaring unemployment rate. Clearly, there existed a widespread public perception that Uruguay’s financial situation was precarious. Against this backdrop, Uruguay concluded a contract with Havas – taking effect the first of January 1901 – whereby in exchange for 250 Uruguayan Gold Pesos per month, the Ministry of Foreign Affairs of Uruguay could transmit to London or Paris 100 words per month. Based on Uruguay’s 1921 exchange rate with the dollar, this constituted some $2,068 per year (or $20,500 in retail price adjusted 2008 dollars). The news sent to London or Paris was stipulated to be “information tending towards the progressive development of the country, that contributes to its greater prestige abroad.”

Hungary’s contract with Havas is the most overtly political arrangement. It was concluded at the close of 1906, in the midst of a Hungarian governmental crisis, in which Hungary voted in a ruling coalition with a strongly independent streak and who sought to distance Budapest from Vienna. The contract is made explicitly with Hungary – not Austria-Hungary – and is aimed at enhancing the state of the Hungarian government’s financial position. Indeed, the Hungarians are quite specific in this regard. In their contract of 9 November 1906, arranged to enter into force the first of January 1907 and to last until

52 Ibid. pp. 1271.
53 Uruguay’s historical exchange rate is taken from the Montevideo-Oxford Latin American Economic History Database, Uruguay, Nominal Exchange Rates, available at [http://oxiad.qeh.ox.ac.uk/results.php](http://oxiad.qeh.ox.ac.uk/results.php) [accessed 10 May 2012]. To put this price into perspective, it is roughly $17 per word.
54 5 AR 427-428 document 5 pp. 2.
1909, the Hungarians specify the information that they would like Havas to distribute as follows:

The service will consist of political, economic and financial news. The financial news cannot depart from the context of governmental news, relating uniquely to the Hungarian state. It cannot relate to private companies, or encroach onto the terrain of financial publicity.56

The injunction that the financial news must center on uniquely the Hungarian state is intended to make plain that the Hungarians do not propose to pay for the benefit of the Austrians. Indeed, this is made plainer in clause two, wherein Hungary commits to pay for the transmission of news abroad “as much as is necessary to put [us] on the same footing as Vienna, across the years 6000, 8000, 10000 or 14000 gold crowns per year.”57

In addition to these potentially large sums, intended to match the Austrians and settled at the end of each month, Havas convinced Hungary to pay more for the information service. Clause III of the agreement stipulates an indemnity for the cost of information transmission of 12,000 gold crowns annually and an additional annual “commission” of 20,000 gold crowns – both of which must be paid at the start of the year. This rather remarkable arrangement meant that at the beginning of the year Hungary agreed to send to Havas roughly £1328, with the possibility of paying them somewhere between a further £250 and £580 for the service throughout the year.58 Furthermore, the contract was for three years (1907, 1908, and 1909). In total, we can calculate that over this three-year period the Hungarians paid Havas somewhere between £4730 and £5730 (between £375,000 and £454,000 in 2008 terms).

The Turkish contract in our sample also appears to be political in origin. It was concluded in November 1895, and its most likely origin seems to stem from the threat of disintegration of the Ottoman Empire, which was brought into relief in mid-1895 as

56 5 AR 428 document 1, pp. 7.
57 5 AR 427-428, document 1, pp. 7.
58 Historical exchange rate calculations done using the figure given for January 1907 in Thomas Scheiber, “Austro-Hungarian Empire” in Monetary Time Series of Southeastern Europe from the 1870’s to 1914, Athens: Bank of Greece Economic Research Department – Special Studies Division, 2009, pp. 47, Table 1.
Macedonia fought for independence.\textsuperscript{59} The possibility of a regional war intensified as Greece and Bulgaria squared off to fight over control of the nascent breakaway Macedonian state, and the Turks mobilized to quell the insurrection. As a result of the political upheaval, Turkish bonds experienced a small sell-off, significant enough to be remarked on by the \textit{Economist}.\textsuperscript{60}

\textit{Testing the ‘contracting in crisis’ hypothesis: the evidence from bond yields}

For the four contracts concluded ‘in crisis’ we cannot determine if the contract exerted an effect on the country’s bond prices, as the effect of the contract is swamped by the motivation for contracting. However, if the countries really were contracting in order to raise their bond prices \textit{because their bond prices had declined due to a crisis} than we should be able to predict the timing of the contracts by declines in the countries’ bond yields. If the timing of bond price declines does not predict contracting, it suggests that the country is not really contracting in order to raise its bond prices. I test this using simple binary-dependent-variable regression models.

I assume that in each month in the year prior to the creation of the contract the country in question could have contracted. If they contracted with Havas I record a one, and if they did not contract a zero. I then test whether that country’s bond yields in the month prior to contracting predict entry into the contract. Yields were calculated monthly, using the last quoted price of the security in the \textit{Investor’s Monthly Manual} (IMM).\textsuperscript{61} For my bond yield variable, I used the lagged Abnormal Return of the bond, defined as the deviation of the bond’s return in each month from the mean return of that bond across the year.

The model we are estimating is: $\Pr(C_{it}=1|AR_{it}=ar_{it})$, where $C_{it}$ is a binary outcome variable which is 1 if country $i$ has a contract with Havas in period $t$, and $AR_{it}$ is the abnormal return on country $i$’s bond at period $t$. I estimate the model using OLS fixed

\textsuperscript{59} “The Situation In South-Eastern Europe.” \textit{The Economist} (London, England), Saturday, July 27, 1895; pg. 974; Issue 2709.
\textsuperscript{60} “Politics And The Stock Markets.” \textit{The Economist} (London, England), Saturday, July 27, 1895; pg. 975; Issue 2709.
\textsuperscript{61} \textit{Investor’s Monthly Manual} sample of years between 1888 and 1922. Available online at the \textit{London Stock Exchange} project of the Yale School of Management International Center for Finance, \url{http://dev-icf.som.yale.edu/imm-issues} [accessed 10 May 2012]. The IMM was published by the \textit{Economist} and widely used in the UK.
effects estimation, and with probit, tobit and cloglog\textsuperscript{62} estimators with standard errors clustered at the country level. The results are reported in Table 4.

All four specifications are significant, with the OLS fixed-effects model significant at the 95\% level and the three other specifications significant at the 99\% level. The coefficient in the OLS model suggests that if the lagged abnormal return of a security were to increase by .001 that country would be roughly 34\% more likely to contract with Havas. The interpretation is similar for the marginal effects computed in the Probit, Tobit and CLogLog models. In Probit, a .001 increase is associated with a 22\% increased probability of contracting with Havas, in Tobit an 18\% increased probability, and in CLogLog a 16\% increased probability. These marginal effects are all computed at the mean. Another way of putting this is that if the normal return on a country’s bond is 5\%, an increase to paying 5.1\% would increase that country’s probability of contracting with Havas by between 16\%-34\%. However, these point estimates should be viewed skeptically given the lack of covariates in the model.

It could be argued that by only considering bond prices prior to and including the date of the contract I generate a spurious correlation between having a high bond yield and entering into a contract. The reason for this might be that if the country is in crisis, and its bond yields are rising, than the last observed observation will be the highest, and if the last observation is always the one associated with contracting this will produce a spurious correlation. Consequently, Table 5 reports the same model as in Table 4, except this time I include monthly observations from the year prior to and the year subsequent to contracting for each country in my sample. All the results are still positive (suggesting higher yields predict contracting) and highly significant – with the exception of the OLS estimate which is just insignificant at the 10\% level. The significance of this second specification suggests that the significance of the association between high bond yields and entering into a contract with Havas was not an artifice of a trend in crisis countries’ bond yields.\textsuperscript{63} The findings in this section support our characterization of these particular contracts as

\textsuperscript{62} Complementary log-log models are used when the outcomes is rare i.e. there are few 1’s relative to the number of 0’s. See A. Colin Cameron and Pravin K. Trivedi, \textit{Microeconometrics: Methods and Applications}, Cambridge: Cambridge University Press, 2005, pp. 466-467.

\textsuperscript{63} I also estimate the model in Table 4 including a linear trend (not shown) and the results remain significant at the same levels.
stemming from ‘crises’ experienced by the contracting parties, and suggest that an attempt to counteract the recent rise in the country’s bond yields really was the reason for entering into the contract.

*Other reasons for contracting*

In this section, I try to explore the other reasons why countries were contracting with Havas in a bid to raise their asset prices. Given that these countries are not in crisis, we are focused on explanations that would account for why it might be more valuable for these countries to lower their bond yields. Once we have determined the circumstances, and can exclude clearly confounding factors, we can test whether for the countries for which we have data the contracts were successful in raising bond prices. Let us begin chronologically and alphabetically with Argentina.

Argentina brokered a contract with Havas to take effect January 1st 1901. The contract was signed at the end of December 1900 with the Ministry of Foreign Affairs of Argentina and comprised three services. First, Argentina could send 300 words a month of publicity to be distributed by Havas. Second, Havas would transmit for Argentina 250 words a month of official correspondence from Argentina to foreign governments or embassies in Europe. And third, Argentina could publish four articles a month in the *Correspondance Havas*.

The cost of the publicity services was set at 1000 Gold Pesos per month, corresponding to $961.50 at the historical nominal exchange rate (or $20,900 in 2008 retail price index adjusted US dollars). This meant that for the year, the contract totaled some $11,538.50, which is roughly $250,000 in 2008 retail price adjusted US dollars.

Why did Argentina need to contract for so much publicity at this juncture? In fact, Argentina was contracting in anticipation of issuing a loan that would have necessitated a significant amount of financing in Europe. In September of 1900, the *Economist* ran an article noting that Dr. Pellegrini – Argentina’s former president and a man of

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64 5 AR 428, document 2.
“preponderating influence in Argentina’s affairs, political and financial” had left to Europe in a manner quite “sudden and unexpected.”

By October of 1900, however, it was clear to the press of Europe why Pellegrini had come – he was planning to negotiate a loan that would have unified Argentina’s outstanding foreign debts. Negotiations for the loan were undertaken in London at the beginning of 1901. The corresponding commencement of Argentina’s contract with Havas was intended to communicate to investors – particularly francophone investors – the steady progress of this loan. In particular, the Argentine’s sought to keep international investors abreast of the incremental legislative progress towards ratification of the bill which would have allowed the Argentine loan unification scheme to proceed. In the event, the Unification scheme fell apart when President Roca withdrew the bill from consideration in response to rioting in Buenos Ayres at the prospect of the budget cuts that would have resulted from the loan. Thus, we can surmise, Argentina contracted with Havas in anticipation of the increased benefits to be had by raising its asset prices, as it anticipated issuing a new loan. However, the loan never materialized due to domestic constraints.

Not all of the contracts in our sample have such a complicated and colorful back-story. Colombia’s contract with Havas is transparently a push to attract foreign investment. It stipulates quite explicitly that “the Government of Colombia will pay to Agence Havas for a service of two-hundred words of information on general facts, such as the administrative functioning of the country, its international politics, economic situation, railroads, finances, industries....” This is suggestive of a simple contract, made to ensure that more attention would be focused on the financial position of Colombia. My research does not uncover a new loan issued by Colombia subsequent to its contract, however, reports in the Economist around the time of Colombia’s contracting suggest that Colombia was out of favor with the Corporation of Foreign Bondholders – a powerful lenders consortium – and was attempting to smooth relations with them. This might explain why Colombia would pay to raise its asset prices – as this might pacify Colombia’s creditors.

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67 “Argentina – Dr. Pellegrini’s Visit to Europe” *The Economist*, September 22, 1900, pp. 1335.
70 5 AR 428, document 2.
71 “Defaulting States In 1911” *The Economist* (London, England), Saturday, April 13, 1912; pg. 795; Issue 3581.
For Peru and Bolivia, the contracts were intended to highlight positive news about the countries prior to the issue of new loans. For Peru, the motivation seems to be the issue of gold certificates in 1917. For Bolivia, the contracts coincide with the issue of Bolivia’s first loan in 1910, and its second in 1913. Both loans were underwritten by the Credit Mobilier, and subscribed almost exclusively in France. At each issue, Bolivia paid in total 600 pounds sterling constituting .04% and .06% of the total issue.

For the countries surveyed here, the reasons for wishing to raise their bond prices do not suggest an obvious direct effect on the bond prices themselves. Most of the countries seem to be contracting with Havas in anticipation of issuing a new debt instrument. This does not imply any obvious effects on the countries bond prices. On the one hand, taking on more debt is likely to increase the country’s yields, but on the other, the influx of cash might make investors more optimistic about getting repaid. In the next section I examine the bond yields of contracting countries subsequent to their contract.

**Testing for Abnormal Positive Security Price Performance Subsequent to Contracting**

If countries are entering into contracts with Havas in order to raise the price at which their debt is traded, than absent a serious and negatively associated confounding variable (such as a crisis), we would expect that on average their asset prices should increase. If they do not, this would be a fairly strong indication that this is not the reason why countries are contracting with Havas – unless we wish to presume that Havas was repeatedly tricking sovereign borrowers.

In this section I test for abnormally negative returns on a country’s bonds subsequent to creating a contract with Havas. I test this using a simple event study methodology, following the exposition in Campbell, Lo and MacKinlay. This methodology tests the proposition that the Cumulative Average Abnormal Return subsequent to a country having contracted with Havas is equal to zero. The methodology of this event study is as follows. First, I calculated the Abnormal Return of a security using a constant-mean

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74 In 2008 pounds this comes to 45,900 in 1910 and 43,500 in 1913 adjusting by the retail price index.
return model. This means I calculated Abnormal Returns using the model: \( Y_{it} = Y_i + AR_{it} \), where \( Y_i \) is the average return of country \( i \)'s bond across the \( t \) periods prior to the event, and \( AR_{it} \) is the abnormal return of country \( i \) at time \( t \).\(^76\) The abnormal return is thus simply the residual return on a security after subtracting out the average return on that security.

The average return of a country’s bond is calculated using monthly data on bond yields in the year prior to the contract. The abnormal returns are calculated for the year subsequent to contracting. Thus the abnormal return is the deviance of a country's observed return in any given month subsequent to contracting from that country’s average return in the period prior to contracting. I collect data on bond yields from the *Investor’s Monthly Manual* (IMM).\(^77\) Due to limitations in the availability of data, I was only able to collect bond yield data surrounding the 1901 Argentina contract, the 1906 Chile contract, the 1912 Colombia contract, and the 1917 Peru contract.\(^78\)

If contracting has no effect on a country’s bond yields than the average abnormal return of a security after contracting should be zero. This can be tested using a simple \( t \)-test. Practitioners of event-study methodologies have warned about spurious inferences that can arise if securities are following a random walk and the analyst computes the cumulative abnormal return across long time periods subsequent to the event. If the security prices are following a random walk, significant deviation from the mean can occur stochastically.\(^79\) For this reason, I test for abnormal security price performance averaged across the year, 11 months, 9 months, 7 months, 5 months, and 3 months subsequent to the contract. Lower frequencies are not possible as there are insufficient observations. Table 6 summarizes the results of these tests. Tested at all sizes of the post-contract event window, the abnormal yield on countries’ bonds is significantly negative at the 95% level.


\(^78\) Bolivia’s bonds were traded on the French unofficial market and I hope to be able to reconstruct data on their prices at a later stage.

Some authors have argued that when testing for abnormal performance on bonds using monthly data it is advisable to use nonparametric tests, as assumptions about the distribution of returns might be unwarranted.\textsuperscript{80} For this reason, I also test for abnormal performance using a sign test, as recommended in Campbell, Lo and MacKinlay.\textsuperscript{81} The results are recorded in Table 7. Tested at all sizes of the event window the returns are disproportionately negative subsequent to contracting, and this result is significant at the 95\% level.

If we examine the results in Table 6, the negativity of the abnormal yield is slightly larger the closer we get to the contract – as measured by the mean value. In other words, subsequent to contracting with Havas, the yields on these countries’ bonds were significantly below the average of what they had been in the previous year. The point estimates imply that the yields were 25 to 28 basis points below where they had been in the previous year. The declining magnitude of the abnormal return might indicate that the effect of financial publicity is ‘wearing off’. The findings are consistent with our hypothesis that these countries have contracted with Havas in order to raise the price at which their securities are traded by disclosing information to the market. The incorporation of this information by investors would account for the increase in these countries’ security prices and the decline in their bond yields.

Conclusion

This exercise began by asking why the contracts between Havas and sovereign borrowers were created. The answer appears to lie at the intersection between Havas’ ability to demand that inclusion in their global coverage is paid for, and the benefits to be had by sovereign borrowers in inducing their bonds to trade at a slightly higher rate. When the benefits from higher bond prices were significant, sovereigns would attempt to sway the press, and if they fell under the sphere of influence of Havas they would consequently need to contract with Havas. The evidence suggests that contracting with Havas does stem from a concern for bond prices, and in the period after contracting with Havas countries’


bonds do trade at higher prices. It is difficult to interpret the evidence causally given the fragmentary nature of our evidence, but the strong associations between bond prices and contracting are suggestive. The existence of the contracts and their links to asset prices has ramifications on how we view international financial markets.

The existence of ‘informational’ transaction costs suggest that the different types of intermediation services on offer in late-19th century financial markets were broader than we have previously considered. While much progress has been made in understanding the role of intermediating financial institutions,82 the role of the media and other organizations specializing in the production of information has gone relatively unremarked. This is unfortunate, as recent attention to the failures of rating agencies have demonstrated the importance of information intermediaries in financial markets. International news collection and transmission in the 19th century was significantly different from what it is today, and the unexamined assumption that the institutional structures whereby investors became informed were neutral channels seems unwarranted given the findings of this paper.

This paper has focused exclusively on the business practices of Havas, but the existence of these arrangements, or similar ones, between borrowers and other media organizations can hardly be doubted. Nalbach suggests that the other international news providers could be equally untrustworthy in their coverage,83 and multiple authors have reflected on the agency problems with respect to newspaper coverage.84 The result is that we cannot be sure how significant these information costs were to borrowers, nor what costs they imposed on lenders. It would seem that focusing on the history of communications from the perspective of financial intermediation would be a fruitful avenue for further research into how the late-19th century international capital market worked.

84 See note 3.
## Table 1: List of Contracts

<table>
<thead>
<tr>
<th>Date</th>
<th>Country</th>
<th>Price/month local currency</th>
<th>Price/month GBP\textsuperscript{85}</th>
<th>Price/month in 2010 GBP\textsuperscript{86}</th>
<th>Anticipates New Loan?</th>
<th>Crisis?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1\textsuperscript{st} Jan. 1889</td>
<td>Serbia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} Nov. 1895</td>
<td>Ottoman</td>
<td>4,000 Napoléon Or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} Jan. 1901</td>
<td>Argentina</td>
<td>1000 Gold Pesos</td>
<td>£197</td>
<td>£16,700</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>22\textsuperscript{nd} Nov. 1901</td>
<td>Chile</td>
<td>1950 Gold Pesos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} April 1906</td>
<td>Chile</td>
<td></td>
<td>£50</td>
<td>£4,190</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>9\textsuperscript{th} Nov. 1906</td>
<td>Hungary</td>
<td>32,000+ Gold Crowns</td>
<td>£131.50-£159\textsuperscript{87}</td>
<td>£11,100-£13,300</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} Nov. 1907</td>
<td>Chile</td>
<td></td>
<td>£100</td>
<td>£8,250</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>16\textsuperscript{th} May 1910</td>
<td>Bolivia</td>
<td></td>
<td>£50</td>
<td>£3,980</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>31\textsuperscript{st} Dec. 1910</td>
<td>Bolivia</td>
<td></td>
<td>£25</td>
<td>£1,990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>Chile</td>
<td></td>
<td>£150</td>
<td>£11,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} April 1912</td>
<td>Colombia</td>
<td></td>
<td>£31</td>
<td>£2,390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} Jan. 1913</td>
<td>Bolivia</td>
<td></td>
<td>£25</td>
<td>£1,920</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>1913</td>
<td>Chile</td>
<td></td>
<td>£150</td>
<td>£11,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1\textsuperscript{st} Mar. 1914</td>
<td>Bolivia</td>
<td></td>
<td>£25</td>
<td>£1,870</td>
<td></td>
<td></td>
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<tr>
<td>13\textsuperscript{th} Aug. 1917</td>
<td>Peru</td>
<td>50 Gold pounds</td>
<td></td>
<td></td>
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<tr>
<td>8\textsuperscript{th} Oct. 1917</td>
<td>Bolivia</td>
<td></td>
<td>£88.90</td>
<td>£3,890</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921</td>
<td>Uruguay</td>
<td>250 Gold Pesos</td>
<td>£45</td>
<td>£1,560</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>


\textsuperscript{86} All conversions done using retail price index from Lawrence H. Officer and Samuel H. Williamson, "Purchasing Power of British Pounds from 1245 to Present,"
## Table 2: Contracts, Prices and Services

<table>
<thead>
<tr>
<th>Contract</th>
<th>price/month</th>
<th>words/month</th>
<th>articles/month</th>
<th>2010 Price/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901 Argentina</td>
<td>£197.00</td>
<td>300</td>
<td>4</td>
<td>£16,700</td>
</tr>
<tr>
<td>1906 Chile</td>
<td>£50.00</td>
<td>125</td>
<td>2</td>
<td>£4,190</td>
</tr>
<tr>
<td>1907 Chile</td>
<td>£100.00</td>
<td>250</td>
<td>2</td>
<td>£8,250</td>
</tr>
<tr>
<td>1910 Bolivia</td>
<td>£50.00</td>
<td>133.3333</td>
<td>2</td>
<td>£3,980</td>
</tr>
<tr>
<td>1910 Bolivia</td>
<td>£25.00</td>
<td>50</td>
<td>2</td>
<td>£1,990</td>
</tr>
<tr>
<td>1910 Chile</td>
<td>£150.00</td>
<td>333.3333</td>
<td>2</td>
<td>£11,900</td>
</tr>
<tr>
<td>1912 Colombia</td>
<td>£31.00</td>
<td>200</td>
<td>0</td>
<td>£2,390</td>
</tr>
<tr>
<td>1913 Bolivia</td>
<td>£25.00</td>
<td>50</td>
<td>2</td>
<td>£1,920</td>
</tr>
<tr>
<td>1913 Chile</td>
<td>£150.00</td>
<td>333.3333</td>
<td>0</td>
<td>£11,500</td>
</tr>
<tr>
<td>1914 Bolivia</td>
<td>£25.00</td>
<td>50</td>
<td>2</td>
<td>£1,870</td>
</tr>
<tr>
<td>1921 Uruguay</td>
<td>£45.00</td>
<td>100</td>
<td>0</td>
<td>£1,560</td>
</tr>
</tbody>
</table>
Figure 1: Determinants of Contract Price

Determinants of Contract Price

Price v. # Words

Price v. # Articles

- 1901 Argentina
- 1906 Chile
- 1907 Chile
- 1910 Bolivia1
- 1910 Bolivia2
- 1912 Colombia
- 1913 Bolivia
- 1913 Chile
- 1914 Bolivia
- 1921 Uruguay

- 1910 Bolivia1
- 1910 Bolivia2
- 1911 Bolivia
- 1912 Colombia
- 1913 Bolivia
- 1914 Bolivia

- 1901 Argentina

- 1906 Chile
- 1907 Chile
- 1910 Bolivia1
- 1910 Bolivia2
- 1912 Colombia
- 1913 Bolivia
- 1913 Chile
- 1914 Bolivia

- 1921 Uruguay

- 1910 Bolivia1
- 1910 Bolivia2

- 1901 Argentina

- 1906 Chile
- 1907 Chile
- 1910 Bolivia1
- 1910 Bolivia2
- 1912 Colombia
- 1913 Bolivia
- 1913 Chile
- 1914 Bolivia

- 1921 Uruguay

- 1910 Bolivia1
- 1910 Bolivia2

- price/month
- Fitted values

- price/month
- Fitted values
Table 3: Predicting Contract Prices by Contract Services

<table>
<thead>
<tr>
<th></th>
<th>(1) Price</th>
<th>(2) Current Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>words/month</td>
<td>0.510***</td>
<td>41.51***</td>
</tr>
<tr>
<td></td>
<td>(9.90)</td>
<td>(10.53)</td>
</tr>
<tr>
<td>articles/month</td>
<td>21.08***</td>
<td>1963.6***</td>
</tr>
<tr>
<td></td>
<td>(3.98)</td>
<td>(4.85)</td>
</tr>
<tr>
<td>Constant</td>
<td>-50.80**</td>
<td>-4641.2***</td>
</tr>
<tr>
<td></td>
<td>(-3.37)</td>
<td>(-4.03)</td>
</tr>
<tr>
<td>Observations</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.922</td>
<td>0.933</td>
</tr>
</tbody>
</table>

$t$ statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
### Table 4: Predicting Contracting Using Bond Yields From Time -12 months to date of contract: Countries in a Crisis

<table>
<thead>
<tr>
<th></th>
<th>(1) OLS</th>
<th>(2) Probit</th>
<th>(3) Logit</th>
<th>(4) CLogLog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagged Abnormal Return</td>
<td>34.17**</td>
<td>200.1***</td>
<td>332.1***</td>
<td>278.6***</td>
</tr>
<tr>
<td></td>
<td>(4.00)</td>
<td>(4.31)</td>
<td>(6.05)</td>
<td>(23.76)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.0833***</td>
<td>-1.597***</td>
<td>-2.789***</td>
<td>-2.823***</td>
</tr>
<tr>
<td></td>
<td>(156146.17)</td>
<td>(-12.41)</td>
<td>(-9.17)</td>
<td>(-8.76)</td>
</tr>
<tr>
<td>Observations</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.123</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$t$ statistics in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

### Table 5: Predicting Contracting Using Bond Yields From Time -12 months to +12 months: Countries in Crisis

<table>
<thead>
<tr>
<th></th>
<th>(1) OLS</th>
<th>(2) Probit</th>
<th>(3) Logit</th>
<th>(4) CLogLog</th>
</tr>
</thead>
<tbody>
<tr>
<td>main Lagged Abnormal Return</td>
<td>3.162</td>
<td>22.21***</td>
<td>43.91***</td>
<td>42.05***</td>
</tr>
<tr>
<td></td>
<td>(2.28)</td>
<td>(3.80)</td>
<td>(4.31)</td>
<td>(4.46)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.0363***</td>
<td>-1.776***</td>
<td>-3.220***</td>
<td>-3.238***</td>
</tr>
<tr>
<td></td>
<td>(11.57)</td>
<td>(-50.63)</td>
<td>(-43.66)</td>
<td>(-45.17)</td>
</tr>
<tr>
<td>Observations</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>-0.006</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$t$ statistics in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Table 6: T-tests of abnormal returns on securities subsequent to contracting

<table>
<thead>
<tr>
<th>Event Window</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>Std. Dev.</th>
<th>[95% Conf. Interval]</th>
<th>T-stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Window=12 months</td>
<td>48</td>
<td>-.0023</td>
<td>.0005</td>
<td>.0031</td>
<td>-.0032</td>
<td>-.0014</td>
</tr>
<tr>
<td>Event Window=11 months</td>
<td>44</td>
<td>-.0024</td>
<td>.0005</td>
<td>.0031</td>
<td>-.0033</td>
<td>-.0015</td>
</tr>
<tr>
<td>Event Window=9 months</td>
<td>36</td>
<td>-.0024</td>
<td>.0005</td>
<td>.0031</td>
<td>-.0034</td>
<td>-.0013</td>
</tr>
<tr>
<td>Event Window=7 months</td>
<td>28</td>
<td>-.0024</td>
<td>.0006</td>
<td>.0032</td>
<td>-.0037</td>
<td>-.0012</td>
</tr>
<tr>
<td>Event Window=5 months</td>
<td>20</td>
<td>-.0027</td>
<td>.0007</td>
<td>.0034</td>
<td>-.0043</td>
<td>-.0012</td>
</tr>
<tr>
<td>Event Window=3 months</td>
<td>12</td>
<td>-.0028</td>
<td>.0009</td>
<td>.0030</td>
<td>-.0047</td>
<td>-.0009</td>
</tr>
</tbody>
</table>
Table 7: Nonparametric Sign Test for abnormal returns on securities subsequent to contracting

<table>
<thead>
<tr>
<th>Event Window</th>
<th>Obs</th>
<th>Number Positive</th>
<th>Number Negative</th>
<th>P-value (two-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Window=12 months</td>
<td>48</td>
<td>12</td>
<td>36</td>
<td>.0007</td>
</tr>
<tr>
<td>Event Window=11 months</td>
<td>44</td>
<td>11</td>
<td>33</td>
<td>.0013</td>
</tr>
<tr>
<td>Event Window=9 months</td>
<td>36</td>
<td>9</td>
<td>27</td>
<td>.0039</td>
</tr>
<tr>
<td>Event Window=7 months</td>
<td>28</td>
<td>7</td>
<td>21</td>
<td>.0125</td>
</tr>
<tr>
<td>Event Window=5 months</td>
<td>20</td>
<td>4</td>
<td>16</td>
<td>.0118</td>
</tr>
<tr>
<td>Event Window=3 months</td>
<td>12</td>
<td>2</td>
<td>10</td>
<td>.0386</td>
</tr>
</tbody>
</table>