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Maduro Bonds

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Abstract

For multiple decades, activists have sought to institute an international legal regime that limits the ability of despotic governments to borrow money and then shift those obligations onto more democratic successor governments. Our goal in this article is to raise the possibility of an alternate legal path to raising the costs of borrowing for despotic regimes. All countries have systems of domestic laws that regulate agency relationships and try to deter corruption; otherwise the domestic economy would not function. Despotic governments, we conjecture, are especially likely to engage in transactions that are legally problematic. The reason being that despotic governments, by definition, lack the support of the populace; meaning that there is a high likelihood that actions that they take on behalf of the populace can be challenged as unrepresentative and contrary to the interests of the true principals. The foregoing conditions, if one translates them into the context of an ordinary principal-agent relationship, would constitute a voidable transaction in most modern legal systems. That means that if opposition parties in countries with despotic governments today were to monitor and make public the potential problems with debt issuances by their despotic rulers under their own local laws, it would raise the cost of capital for those despots. To support our argument, we use both the concrete example of the debt issuance shenanigans of the Maduro government in Venezuela and a more general analysis of the relationship between corruption, democracy and a nation's borrowing costs.

I.   Introduction

One of the most debated questions in the literature sovereign debt is the question of whether, when a despotic ruler is overthrown by his oppressed people, the successor government -- assuming it is democratic and representative -- inherits those prior debts (Penet 2018; King 2016; Lienau 2014).   The general rule of governmental succession in international law is strict. Governments inherit the debts of their predecessors, regardless of political differences between the governments (Buchheit et al. 2007). Donald Trump's government inherits the debts of Barack Obama's government, no matter how odious the former thinks the latter might have been. Further, because international law conceptualizes states as infinitely lived creature without the possibility of bankruptcy, the despotic ruler's debt stock can potentially last into infinity.[1] The current Russian and Chinese governments, for example, are still on the hook for the unpaid debts of their imperial predecessors from the early 1900s.

As a matter of theory, there are moral and economic arguments for why there should be rules restricting the obligations of successor good governments to pay the debts of prior bad ones. The primary one being that choking off a despot's ability to access the markets should reduce the incentives to be a despotic ruler in the first place (Kremer & Jayachandran 2006; Bonilla 2011). Put differently, the ability of the despotic ruler to externalize the costs of his despotism to future governments and populations, creates inefficiencies. There are counter arguments too – mostly focused on the difficulty of implementing such a regime under international law – the key difficulty being the difficulty in defining what it means to be a despotic government (Choi & Posner 2007; Stephan 2007; Buchheit et al., 2007). As a formal legal matter, international law can only get changed if there is widespread agreement among the countries that make up the global community (Choi & Gulati 2016). In such a case, either an international treaty could be formulated or a court could declare that a new doctrine of customary international law had arisen. However, there are enough governments in place who have either engaged in odious lending or are concerned that they might be called odious themselves that efforts to put in place an Odious Debt doctrine in international law have rarely been able to get more than a handful of governments to sign up to their cause (Michalowski 2009a; Nehru & Thomas 2008).

Our goal in this article is to raise the possibility of an alternate legal path to raising the costs of borrowing for despotic regimes. Specifically, an option that can be implemented now, without any need to define what it means to be a despotic government or to reform the international law rules of state succession. We propose that civil society institutions – the ones generally most willing to exert effort to deter despotic governmental behavior – make use of domestic laws that are likely already in place in almost every legal jurisdiction that could potentially constrain the actions of misbehaving and corrupt agents. All governments in the modern age, even the most despotic, are purporting to act as agents for their people. Unlike the monarchs of generations past, few leaders are claiming that their authority comes from up above (see also Michalowski 2009b; Buchheit et al. 2007).

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[1] We are overstating the matter since debts where the creditors do not periodically take actions to remind the debtor that a debt is owed eventually get time barred by statues of limitations in the relevant local legal jurisdictions where the creditor might wish to sue. In theory, creditors can keep their claims alive infinitely by periodically filing the relevant legal documents. But that takes effort and resources and, as debts remain unpaid for long periods of time (such as the Imperial Chinese debt and the Russian Tsarist), creditors eventually stop exerting those efforts.

To illustrate our argument, we begin with a concrete and current example. That is, the Venezuelan government under President Nicolás Maduro that, while purporting to be democratic, has been widely condemned in the international community as illegitimate (Casey & Davis 2018). We ask, in the context of the Maduro regime, whether its borrowing might be subject to legal challenge under subsequent, and presumably better, governments. If the markets perceive there to be significant enough risk of future repudiation, that will increase the cost of borrowing for the current government. The actions of civil society in identifying and loudly pointing out the potential violations of Venezuelan domestic laws in some of the borrowing that Mr. Maduro's government has done have arguably already raised the borrowing costs of the Maduro government (Gulati & Panizza 2018).

The premise of our argument is the following: All countries, despotic or not, have systems of domestic laws that regulate agency relationships and try to deter corruption; otherwise the domestic economy would not function. Despotic governments, we conjecture, are highly likely to engage in transactions that are legally problematic – that is, that have failed to obtain proper authorizations, or where funds have been improperly spent, or where there has been some other form of corruption. The reason being that despotic governments, by definition, lack the support of the populace; meaning that there is a high likelihood that actions that they take on behalf of the populace (e.g., borrowing to buy arms that are then used to put down popular protests) can be challenged as unrepresentative and contrary to the interests of the true principals. Further, to the extent the despot is hanging on to power by the fact that they are making side payments to those who control key organs of the government (e.g., the military and the judiciary), there is bound to be a significant amount of corruption in most major government transactions. The foregoing conditions, if one translates them into the context of an ordinary principal-agent relationship, where the purported agent (the despot) is colluding with a third party (international banks, the military, the judiciary, etc.) to cheat the principal (the people), would constitute a voidable transaction in most modern legal systems. That in turn means that if opposition parties in countries with despotic governments today were to monitor and make public the potential problems with debt issuances by their despotic rulers, it would raise the cost of capital for those despots.

The remainder of the paper proceeds as follows. Section II provides a concrete illustration of our point. We describe how the efforts of civil society to point out suspicious looking aspects of a particularly sleazy bond issue by the Maduro government both resulted in a significant increase in the market's perception of the risk of a particular bond issue and, we suspect, killed the willingness of investors to engage in other similar transactions. Those transactions, had they happened, would have helped enhance the ability of the Maduro government to survive. In Section III, we point to a number of other legal issues that could be raised by civil society if the Maduro government attempts to do new bond issuances. Section IV broadens the discussion by examining the plausibility of our core premise – that despotic governments are more likely than their "good guy" counterparts to engage in corrupt behavior and that lack of democracy increases the pricing penalties associated with the presence of political corruption. That, in turn, would make the government's debt more vulnerable to future repudiation under domestic laws of either the debtor country or the country whose laws are designated as governing the debt contracts. Section V concludes with a proposal for how to systematize this endeavor.

II. Hunger Bonds and the Hausmann Effect

As noted at the start, academics have been arguing for multiple decades as to whether international law needs an exception to the strict rule of governmental/state succession under which the debts of despotic regime do not need to be paid by the good guys when they finally overthrow the despot (Buchheit 2007; King 2017). The problem, as history teaches us, is the difficulty of defining ex ante who is a despot and who is a good guy. And, as a result, we suspect, the endeavor of creating a new legal doctrine – which periodically rears its head every time some new despot is removed and civil society organizations want to enable the successor government to thrive without being burdened by the debts that the despot left behind – has consistently hit a brick wall (Gelpern 2005).[2]

But, on May 26, 2017, Ricardo Hausmann, a professor at the Harvard Kennedy School, may have produced a chink in the armor. On that day, Professor Hausmann published an Op Ed at the website Project Syndicate (Hausmann 2017). which argued that investing in Venezuelan bonds was causing immense harm to the Venezuelan people, because it was helping finance a despotic regime that was privileging the repayment of bondholders over the welfare of people.[3] He also, the same day, went on Bloomberg Television to talk about his idea. Hausmann's target in the May 2017 piece was JP Morgan's emerging markets index (the EMBI+) (Crooks 2017). He was advocating that JP Morgan remove Venezuela from the EMBI+ so as to make Venezuelan bonds less attractive to the markets and particularly fund managers who measure their performance as a function of how they do vis-à-vis the index.

Unbeknownst to Hausmann, two days prior, on May 23, 2017, the asset management arm of Goldman Sachs (GSAM) had purchased $2.8 billion in bonds of the Venezuelan state-owned oil company, PDVSA. GSAM paid 31 cents on the dollar, for a total disbursement of about $865 million. Almost simultaneously, Venezuela's international reserves increased by about $750 million (for more detail, see Gulati & Panizza 2018a).

Adding two plus two, a series of press articles conjectured that GSAM's bond purchase looked to be providing direct funding to the Venezuelan government, flying in the face of Hausmann's plea for the government to be starved of capital. Adding fuel to the fire, GSAM appeared to have purchased its bonds at a price that was 25 percent below what other similarly situated PDVSA bonds were trading at. The Wall Street Journal broke the story on May 30th – their story was quickly followed over the next two days by articles in Bloomberg, the Financial Times and very soon almost every other major financial network was discussing it (Vyas, Kurmanaev & Wernau 2017; Tanzi & Zerpa 2017; Wigglesworth & Long 2017). The bonds got dubbed "Hunger Bonds" (the title of Hausmann's piece) for the hardship they were causing to the Venezuelan people by diverting the government's foreign exchange reserves to debt service payments.

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[2] We have written about the specific topic of the Hunger Bonds in more detail elsewhere and the discussion in this section utilizes that that work (Gulati & Panizza 2018a & b).

[3] This was but one of many pieces that Hausmann has written over the past few years criticizing the actions of the Maduro government, including "The Venality of Evil" and "D-day Venezuela" in 2018. See Hausmann (2018a & b).

Those news stories were then tweeted out by Ricardo Hausmann and US Senator Marco Rubio, both of whose followers number in the hundreds of thousands. Rubio's tweet, echoing Hausmann's Project Syndicate piece said "Today we learn that @GoldmanSachs just gave the Maduro regime in #Venezuela a $2.8 billion lifeline." Hausmann also went on CNN; this time explicitly talking about the Hunger Bond and what he saw as "morally indefensible" behavior by GSAM.[4] By then protests had broken out outside GSAM's office in New York, with many protesters using "hunger bonds" on their placards, photographs of which got quickly circulated in the news media. The term Hunger Bond became indelibly associated with the single issuance that GSAM had purchased on May 25, 2017.

This was the tip of the iceberg. Two things happened next.

First, investors began asking their lawyers about whether there was something legally problematic about the Hunger Bonds, such that it might impair future recoveries on the bond. And the lawyers replied that there might indeed be a problem. It was not an issue that had ever come up in a sovereign debt restructuring – but this transaction looked egregious enough that it could be the basis for a refusal to pay by some future government.

The issue is what is called the Original Issue Discount (or "OID") problem. The OID issue is that the face amount of GSAM's purchase of the Hunger Bonds was artificially inflated (and the interest rate artificially deflated). In ordinary conditions, with a solvent debt, it would not matter that the face value was artificially inflated or deflated as long as the interest rate balanced things out appropriately. But, for a debtor on the brink of insolvency, this does matter. The reason is that it is the face value of the claim rather than the unaccrued interest that typically determines what the size of one's claim is when the debtor goes into a debt workout situation. So, the creditors who show up when the debtor is on the brink of insolvency are in effect artificially diluting the claims of other creditors by inflating the face amounts of their claims. It is worth reiterating here that this is not an issue that – as best we are aware – has come up in any prior sovereign restructuring. But, thanks to the attention that the media focused on the Hunger Bonds, a potential legal issue got unearthed.[5] GSAM, of course, insists that its purchase of the

[4] The CNN Money clip is available at https://money.cnn.com/video/news/economy/2017/05/31/venezuela-goldman-sachs.cnnmoney/index.html

[5] Cramer et al. (2018), write:

> OID is considered interest under New York law. Courts have held that if debt is accelerated, any unearned interest on that debt, including stated principal masquerading as interest, does not need to be repaid at the time of acceleration. Because of the stark difference between the amount paid and the face value of the bond, a court would recognize that the face value of many of these instruments is not merely principal as it claims to be, but a highly inflated interest rate posing as principal. New York courts value substance over form.22 As such, the court looking at these transactions would not allow clever misrepresentation to obscure the true circumstances of the transaction and would recognize the inflated principal as OID.

Drawing from Cramer et al. (2018, the relevant cases here are: LTV Corp. v. Valley Fid. Bank & Trust Co. (In re Chateaugay Corp.), 961 F.2d 378, 380-81 (2d Cir. 1992); Aardwoolf Corp. v. Nelson Capital Corp., 861 F.2d 46 (2d Cir. 1988) (in the event of an acceleration, the courts will only allow payment of the unpaid balance of the principal and the matured interest up to the time of payment, and will exclude unearned interest); Atlas Fin. Corp. v. Ezrine, 345 N.Y.S.2d 36, 38 (App. Div. 1973) (describing the "equitable principle that the unearned part of the interest must be deducted [from the amount due] upon acceleration"); Berman v. Schwartz, 298 N.Y.S2d 185 (NY Sup. Ct. 1968) (holding that the mere fact that

Hunger Bonds was a legitimate and arms-length secondary market transaction – and if that is proved to be the case, the OID issue would disappear. But the fact that the Venezuelan Central Bank's foreign currency reserves rose suspiciously around the time of the GSAM purchase, and by a roughly similar dollar amount, at least creates some smoke (for more detail, see Gulati & Panizza 2018a).

Second, institutional investors became scared that protesters would show up at their offices if they were seen as supporting the GSAM purchase, so they avoided it. Simultaneously, a number of big broker-dealers such as Credit Suisse, announced that they would not be making a market for this bond (Wigglesworth & Platt 2017). And, Hausmann's original target, the JPMorgan index managers, while not doing what he had asked, excluded this particular bond from the EMBI+ index (for more detail, drawn from interviews with market participants, see Gulati & Panizza 2018a)

The end result: In the first week after the Hausmann Op Ed the liquidity of the Hunger Bond was killed and its price dropped by more than 16 percent while the price of comparable PDVSA bonds barely moved. In the world of international debt finance, which is generally presumed to be relatively efficient in terms of similar instruments trading at similar prices, that's a stunning price differential. To provide a concrete contrast, big differences in the contract terms that can have a crucial impact on an investor's recovery – such as the voting threshold required to alter the payment terms on the bond (e.g., the difference between 100% and 75%) – generally don't generate a price differential between otherwise identical bonds of more than a few basis points. Here, the price differential that was initiated by Professor Hausmann's article was almost 50 times that much (in previous work we call this the "Hausmann Effect"). Over a year later, in August 2018, the Hunger bond is still being treated as a pariah by the market – trading at a yield of roughly 100 basis points below an essentially equivalent bonds. To illustrate, Figure 1 below shows the penalty that the Hunger Bond suffered, as compared to a very similar other Venezuelan bond, during the week after news of the suspicious aspects of the GSAM transaction got released. Figure 2 shows the same relationship, except over a longer time period.

Most important perhaps, for over a year there were no other transactions similar to the GSAM purchase that were carried out, even though we have heard from market sources that multiple such deals were in the works. We know the foregoing as a result of an extensive set of conversations we had with investors in both Europe and the US about this precise matter during the period February 2018-May 2018 (for details, see Gulati & Panizza 2018). GSAM itself publicly expresses regret about having come anywhere near the Hunger Bond deal (Bartenstein 2018).

Somehow, Professor Hausmann, with his 900 word Op Ed and a combination of US Senator Marco Rubio's tweet, protests by civil society and a large number of news articles, managed to do what a century of academic and policy advocacy had failed to. That is, increase the cost of capital for an arguably illegitimate government. What we don't know, however, is what the key ingredients of this dynamic were and whether it can be replicated. And a transaction that took place roughly a year later should give us reason for caution.

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the total interest is computed in advance and added in equal proportions to and included in the face amount of the notes as a form of prepaid interest does not change the equitable principle that the unearned part of the interest must be excluded).

In August 2018, over a year after the Hunger Bonds event occurred, the Venezuelan government may have done something very similar to what it did with the GSAM transaction by using deeply discounted bonds to pay off an arbitration claim against it that had been brought by a Canadian mining company, Gold Reserve. The Wall Street Journal, again, was the first to flag this (Wernau & Scurria 2018) – but this time there was no Hausmann article, Rubio tweet, and follow up from other news agencies. Part of the reason for this lack of follow up, we suspect, is that the details of the transaction are not clear; we cannot even tell what the specific bonds are that were given to Gold Reserve.

III.   Some Possible Legal Challenges to Future Maduro Bonds[6]

As noted, Venezuela, as of this writing, in mid 2018, is in default on almost all of its external debt. For several years now, despite having the largest oil reserves in the world, its sovereign debt has been the lowest rated debt in the JPMorgan Emerging Market Index. It has upwards of $150 billion in foreign currency denominated debt obligations that it appears to have no ability to pay (its foreign currency reserves have dwindled to under a few billion). Essentially, its sole source of foreign currency earnings is its oil industry and a combination of government mismanagement of the oil industry and reduced international oil prices have landed the government in financial quicksand.[7]

For the Venezuelan government to be able to continue to transact in the international markets – something it needs to do since it is a single asset economy -- without being under constant fear or creditor lawsuits and asset seizure, Mr. Maduro has to restructure Venezuela's debt sooner rather than later. And indeed, he announced in November 2017 that that was precisely what his government intended to do (Platt & Schipani 2017). That, in turn, since there is no money, means issuing the creditors with new debt instruments with lower promised amounts. Assuming for purposes of analysis, that creditors could be persuaded to agree to a reduction of their claims, the first legal fly in the buttermilk has to do with the events of mid 2017. That was when President Maduro engineered the creation of a new legislative body (the Constituent Assembly) to approve his agenda items because the existing legislative body (the National Assembly) was controlled by the opposition parties and was not doing his bidding, have provided us with a key event to illustrate the argument we are making.

The specific question on the table is whether the Maduro administration can now push through debt deals, with the approval of its new Constituent Assembly, that the old National Assembly would not have approved. Let us imagine, for purposes of illustration (and we are assuming that a method of getting around the US sanctions is devised), a deal in which holders of Venezuelan bonds are offered a swap. In exchange for granting the Maduro administration short-

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[6] In this section, we draw in part from two pieces done for the Financial Times by one of us. *See* Gulati (2017) and Buchheit & Gulati (2017).

[7] The Financial Times has a podcast/interview with Ricardo Hausman that discusses how Venezuela landed in its current predicament. The podcast is available at https://ftalphaville.ft.com/2017/09/08/2193473/podcast-ricardo-hausmann-on-the-tragedy-in-venezuela/ and a transcript is available at https://ftalphaville-cdn.ft.com/wp-content/uploads/2017/10/03013045/Ricardo-Hausmann-transcipt-1.pdf

term debt relief, investors will get a new set of bonds (Maduro bonds), with more favorable terms for later payment. There would be a number of legal issues this deal might face.

a. Misbehaving Agent

Imagine a garden variety loan to a corporation. Would a court help the creditor get repaid if it turned out that she had made the loan through an agent who she knew was not authorized to conduct such transactions for the company? Or, if she transacted with a company representative who she knew planned to steal the funds? Basic agency law in the United States says no, and New York law governs almost all of the outstanding Venezuela debt instruments (Buchheit et al. 2007).

Along those lines, a post-Maduro government could argue that the Maduro bonds were not properly authorized by a representative body, claiming that authorization by the pro-Maduro Constituent Assembly was obviously inadequate, and that investors should have known that.

Relevant to the judge hearing the case might be the statements made by US officials in response to the election of the Constituent Assembly. President Trump said: "Maduro is not just a bad leader, he is a dictator." (Mazzei 2017). Similar statements about Maduro's illegitimacy are readily available from other senior US officials in the Trump administration, in addition to from senior figures in the governments of the UK, Argentina, Paraguay, Brazil and so on.

Put all that together and a judge could find that the holders of Maduro bonds must have known that they were transacting with an unrepresentative or illegitimate agent of the people.

And things could get worse. Agency law goes beyond merely voiding the contract between the principal and the third party; a third party who suborns a betrayal of trust by the agent may be answerable in tort to the principal.

The negotiations between Spain and the US after the Spanish-American war of 1898 provide an analogy. Spain, having lost and ceded Cuba to the US, argued that Spanish debts backed by Cuban revenue streams were now those of the US – citing the rule that along with a transfer of sovereignty came the transfer of sovereign obligations. The Americans rejected this claim on three grounds:

First, the loans had not been contracted for the benefit of Cuba; indeed, a portion of the proceeds had been spent to suppress rebellions on the island. Second, the Cuban people had not consented to the debts; they had been imposed by Spain. Third, the creditors knew that the pledges of Cuban revenues had been given in the context of efforts to suppress the freedom struggle. Creditors therefore, to quote a leading treatise of the time, "took the obvious chances of their investment on so precarious a security"(for more detail, see Buchheit et al. 2007).

The foregoing argument is strong on the facts – the agents here are obviously misbehaving and everyone knows it. The weakness is in the law. While courts readily accept the argument that a CEO is an agent of the company with legal obligations that third parties should know about, they have not yet embraced this view of the relationship between a government and its people in that fashion, except at a metaphorical level. That said, portions of international law in the post-World War II era – starting with the Nuremberg trials, and particularly in the area of human rights

-- has been moving in this direction (E.g., Criddle & Fox-Decent 2016; Fox-Decent 2011). Plus, the political philosophy of every major modern democracy is based on the model of the government being the agent of the populace.

   b. Unauthorized Transaction

An alternate approach might argue that the Maduro bonds are void because they were issued in violation of Venezuelan local law; specifically, the need for National Assembly approval that is specified in current law. Unlike the agency argument that has good facts, but could use stronger law, this second argument is strong on the law but might need better facts.

   US law dating back to the 19th century says that municipal obligations issue in violation of law are void. The courts will not even allow investors to collect based on equitable principles.[8]

   The facts, however, may be weak. The Maduro bonds will presumably be issued in compliance with <u>future</u> Venezuelan law as such law shall have been promulgated by the Constituent Assembly. It is the Constituent Assembly itself and all of its works that the post-Maduro government must argue are unauthorized, invalid, and illegitimate. And the longer the Constituent Assembly stays in power and makes the laws of the country, the more it begins to look like the real legislature.

   The issue, we suspect, will come down to a question of whether new Republic of Venezuela bonds are duly "authorized" by the Republic. Although most existing Republic of Venezuela debt instruments choose New York law as the governing law of the instruments, the bonds also contain this additional sentence:

> Authorization and execution of this security by the issuer, however, shall be governed by the laws of the Republic of Venezuela.

   This sentence places the monkey squarely on the backs of the Venezuelan lawyers to opine whether a new Republic debt instrument has been authorized as a matter of Venezuelan law. To use the favorite phrase of the legal profession, the matter will not be free from doubt.

   Under the existing Venezuelan Constitution, as we understand it, a valid Republic debt obligation requires the prior approval of the Venezuelan legislature -- the National Assembly. The opposition parties have held a majority of seats in the National Assembly since the end of 2015. The National Assembly has not given its consent to legislation approving national indebtedness since that time. This has set the stage for a three-way constitutional quarrel. President Maduro has been ruling pursuant to Emergency Decrees since September 2016. These Decrees purport to override the need for any authorizations or approvals from other branches of government. The Venezuelan Supreme Court (now packed with pro-Maduro judges) has endorsed the constitutionality of the Emergency Decrees. And, as noted, Mr. Maduro has also put in place a more pliable body that he has claimed is the more representative body and, therefore, the appropriate legislative body. For its part, the National Assembly has announced that any financing transaction entered into without National Assembly blessing shall be an absolute "nullity."

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[8] *See* Lichfield v. Ballou, 114 U.S. 190 (1885); Buchanan v. Litchfield, 102 U.S. 278 (1880).

One can sympathize with the plight of a U.S. federal judge confronted, as she may be, with battling banjo Venezuelan legal opinions about the validity of new Republic debt instruments under Venezuelan law. The most likely fact pattern for such a case would be the issuance of new debt instruments by the current administration, followed by a change of regime, followed by a refusal of the new administration to recognize the validity of those instruments. If the instruments are governed by New York law and the action to enforce the instruments is brought in a U.S. court, it will ultimately fall to a U.S. federal judge to decide between competing legal opinions about the state of Venezuelan law at the time the instruments were issued.

The arguments will spin out as follows: The holders of the new bonds will argue that the Venezuelan Supreme Court -- the final arbiter of constitutional law questions in Venezuela -- confirmed the authorization and validity of the instruments at the time they were issued. That, the bondholders will suggest, should end the matter. The successor administration, seeking to repudiate the bonds, will argue that the Venezuelan Supreme Court has effectively become an organ of the Executive Branch. Statements, including statements by the U.S. Government, to the effect that the Constituent Assembly is illegitimate may also be enlisted in support of the proposition that an illegitimate political body cannot authorize otherwise unconstitutional executive actions.

Bottom line: If investors considering whether to purchase of Maduro administration debt instruments ask their lawyers about whether there is a significant chance that successor governments might have defenses against paying them, the answer will be yes. And, as we saw with the Hunger Bonds, opposition leaders and civil society organizations could, by the sheer din of their objections, cause attention to focus on these matters.

IV.   Democracy, Corruption, and Sovereign Spreads

In this section, we move beyond the specific case of Venezuela – which seems to bear out our premise that despotic governments will engage in the type of illegal actions that will result in legal infirmities that later governments can utilize against creditors. The broader question is whether the positive relationship between despotism and corruption shows up more generally; i.e., wherever one finds despots in power. There are no publicly available measures of country despotism or governmental violations of internal laws in raising capital. Hence, we use as our proxies for those two variables the available measures for how democratic the country is (the least democratic being assumed to be closest to being despotic) and public corruption.

Boiled down then, our idea that legal infirmities can potentially be used as a tool to limit access to credit to despotic governments is based on three assumptions: (i) that despotic regimes are more likely to be corrupt; (ii) that there is a price penalty associated with a corrupt behavior (because it produces risks of future repudiation for those in the transaction); and (iii) that this price penalty associated with corruption is higher for despotic regimes (because the risks are higher here).

To test these assumptions we gathered data on sovereign spreads and for two indicators measuring control of corruption and the level of democracy. Our data cover 23 emerging market

countries for the period 1994-2017.[9] Sovereign spreads, which we collect at quarterly frequency, range between 11 and 7,100 with an average of 474 and a standard deviation of 687 (Table 1).

We measure democracy with the "Level of Democracy" variable from the Quality of Government Database.[10] This variables ranges between 0 and 10 (with higher values indicating more democratic countries) and is computed as an average of the Freedom House indexes of civil liberties and political rights (this is the same measure of democracy used by Fortunato & Panizza 2011). In our sample, this variable ranges between 0.75 and 10, with an average of 7.3 and a standard deviation of 2.4.

Finally, we measure corruption utilizing the International Country Risk Guide index of control of corruption. ICRG focuses on political corruption and describes its indicator as an "assessment of corruption within the political system" with a special focus on patronage, nepotism, secret party funding, and ties between politics and business.[11] In our sample, the indicator of corruption ranges between 1 (maximum amount of corruption) and 5 (minimum amount of corruption). The mean value is 2.5, with a standard deviation of 0.8.

As a first step, we show that there is a correlation between control of corruption and the level of democracy. The correlation between these two variables is 0.44 and statistically significant at the 1 per cent confidence level. Figure 3 plots cross country averages for the period 2010-15 and shows the fit of a simple statistical model in which control of corruption is regressed over democracy. While the relationship between the two variables is positive and statistically significant, there are many countries that are far from the regression line. For instance, China is less corrupt than what predicted by its level of democracy and the Dominican Republic and Venezuela are more corrupt than what predicted by their level of democracy.

After having established the presence of a correlation between corruption and the level of democracy, we check the correlation between each of these variables and sovereign spreads. The first two columns of Table 2 show the results of simple univariate models in which sovereign spreads are regressed on corruption and democracy. They show that there is a negative correlation between control of corruption and spreads (i.e., less corrupt countries have lower spreads), but no statistically significant relationship between the level of democracy and sovereign spreads. These results are robust to including both variables in the same regressions (column 3).

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[9] Argentina, Brazil, Bulgaria, Chile, China, Colombia, Dominican Republic, Ecuador, Egypt, Hungary, India, Malaysia, Mexico, Pakistan, Panama, Peru, Poland, Russia, Slovakia, South Africa, Turkey, Uruguay, and Venezuela. Spread data are available at quarterly frequency and the panel is unbalanced. In 1994, we only have data for five countries; from 1998, we have data for 15 countries, from 2001 20 countries, and 23 countries from 2013.

[10] The data are available at https://qog.pol.gu.se/data

[11] According to ICRG, this type of corruption is particularly risky for foreign investors because it can: "… lead to popular discontent, unrealistic and inefficient controls on the state economy, and encourage the development of the black market. The greatest risk in such corruption is that at some time it will become so overweening, or some major scandal will be suddenly revealed, as to provoke a popular backlash, resulting in a fall overthrow of the government, a major reorganizing or restructuring of the country's political institutions, or, at worst, a breakdown in law and order, rendering the country ungovernable" (PRS, p. 5).

There are three problems with the regressions of columns 1-3. First, they do not control for a series of country-specific time invariant unobservable factors that could be jointly correlated with sovereign spreads and each of democracy and control of corruption. Second, they do not control for time-variant fundamentals which could be jointly correlated with sovereign spreads and each of corruption and democracy. Third, they do not recognize that sovereign spreads are closely correlated with credit ratings and that rating agencies take into account institutional variables such as the level of democracy and corruption when they issue their rating opinion (Panizza 2017).

To control for these elements we augment the specification of column 3 with a set of country and time fixed effects and we also control for credit ratings.[12] Inasmuch as ratings control for all fundamentals, this specification measures if corruption and democracy are correlated with spreads even after we control for the fundamentals normally considered by credit rating agencies. Column 4 of Table 2 shows that, as expected, higher ratings are correlated with lower spreads. Perhaps more surprising, we find that our result of a negative and statistically significant correlation between corruption and sovereign spread is robust to controlling for country fixed effects and credit rating. In this case, we also find that democracy is negatively correlated with sovereign spreads (more democracy, lower spreads). This is a strong result as control of corruption and democratic institutions are a slow moving variables (and hence correlated with the country fixed effects) and the effect of corruption and democracy should already be captured, at least in part, by the rating score (Panizza, 2017, shows that there is a positive correlation between credit ratings and control of corruption).

Next, we test our hypothesis that corruption is especially damaging in less democratic countries by interacting democracy with control of corruption. Specifically, we estimate the following model:

$$SPREAD_{c,t} = \alpha_c + \tau_t + \delta\left(DEM_{c,t} - \overline{DEM}\right) + \kappa\left(CORR_{c,t} - \overline{CORR}\right) + \\ + \chi\left[\left(DEM_{c,t} - \overline{DEM}\right) \times \left(CORR_{c,t} - \overline{CORR}\right)\right] + \varepsilon_{c,t}$$

In this set up, δ measures the correlation between democracy and spreads when control of corruption is at its cross country average (if we had not demeaned the variables, δ would have measured the correlation between democracy and spreads when control of corruption is equal to zero), κ measures the correlation between control of corruption and spreads when democracy is at its cross-country average, and χ measures how the correlation between control of corruption and sovereigns spreads varies with the level of democracy.[13] This is our key parameter of interest. If corruption is particularly damaging for democratic regimes, we expect χ to be positive and statistically significant, that is we expect that reducing corruption is more strongly correlated (in absolute value) with sovereign spreads in country-years characterized by low levels of democracy. If our hypothesis holds, instead, control of corruption should be less important in democracies.

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[12] Whenever available we use Standard and Poor's sovereign ratings. When S&P ratings are not available we use Moody's rating. We convert letter ratings into a numerical scale using the same methodology described in Panizza (2016).

[13] Alternatively, how the correlation between democracy and sovereign spreads varies with control of corruption.

Column 5 of Table 2 reports the results and shows that while neither corruption nor democracy are statistically significant when evaluated at the mean value of the other variable, the interactive coefficient (i.e., the parameter χ) is positive and statistically significant. This finding is consistent with our hypothesis that the correlation between corruption and sovereign spreads is particularly strong in non-democratic countries. And that is especially so when one isolates that subset of least democratic countries; that is the ones that are likely to be closest to being despotic.

In column 6, we control for country fundamentals by including sovereign ratings in the regression. We now find that both democracy and control of corruption are significantly correlated with sovereign spreads when evaluated at the mean value of the other variable; and even more interesting, we find that the interaction between corruption and democracy remains positive and statistically significant. Figure 4 uses the model of column 6 to plot the correlation between spreads and corruption at different levels of democracy. It shows that the correlation is negative and statistically significant up to the point in which our measure of democracy is about 7.5 (this was the level of democracy in Mexico over 2010-15), it then remains negative but not statistically significant. Figure 5 uses the estimates of Table 5 to plot the correlation between spreads and democracy conditional on the level of corruption. It shows that democracy is strongly correlated with sovereign spreads in countries characterized by high levels of corruption, but that democracy is no longer statistically significant when the index of control of corruption is above 2.5 (the level of corruption in India, Malaysia, Slovakia, and Turkey over 2010-15).

To further explore the role of corruption in countries in despotic regimes with low levels of democracy, we estimate the baseline model of column 4 by limiting the sample countries with an index of democracy below 3. Whether these are true despotic regimes or not is in the eyes of the beholder, but they are the countries in the bottom 10 percent of our distribution of the democracy index. It should be noted that this subsample does not include countries like North Korea because North Korea does not issue bonds in the international market and therefore there are no data on spreads or sovereign rating. However, the subsample does include Venezuela starting in 2017.

When we restrict the sample to non-democratic countries we find a strong negative correlation between control of corruption and spread even after controlling for sovereign ratings. Specifically, column 7 of Table 2 shows that a one point improvement in the control of corruption indicator is associated with a 540 basis point reduction in sovereign spreads. While we do not want to make too much of this results which is based on a small sample of countries and it is likely to suffer from endogeneity bias, the effect is very large. It is also worth noting, that for this sample of countries, sovereign ratings do not seem to matter and control of corruption is the only variable that has a statistically significant effect on spreads (note that sovereign ratings have the usual negative effect on spreads if we do not control for the level of corruption and democracy). This result is in stark contrast with what we find in Column 8 of Table 2 where we limit the sample to fully democratic countries (i.e., countries in which the index of democracy is greater than 9). In this case, we find that corruption is not statistically significant while credit ratings are highly significant, with a one notch improvement in sovereign rating being associated with a 40 basis point reduction in sovereign spreads.

V.   Conclusion

We think that the foregoing suggests a new possibility towards establishing a tool that can limit access to credit by despotic regimes that goes beyond arguing for a doctrine of odious debts. What the Hunger Bonds story in particular suggests, we think, is that effectively crowdsourced disapproval of a despotic regime can raise the cost of capital for the regime. To make this crowdsourced disapproval work more systematically, perhaps a public ranking of bonds which lists potential ethical and legal problems of individual bonds would lead to price penalties for bonds with legal infirmities and increase the borrowing costs for regimes that, besides being despotic, adopt murky debt management practices. In the presence of this type of public information, few investors could claim to have bought a bond on the secondary market without knowing the illegal origin of the bond. This would depress the price of the bond in the secondary market and, hence, also increase the cost of funds in the primary market. Such a system could also help the opposition parties in countries with potentially despotic regimes announce their future plans regarding likely future investigation or even repudiation of those bonds. Indeed, to our surprise, an August 2018 Wall Street Journal article doing a "one year later" update on the Hunger Bonds story from May 2017 reported that there might well be developing a market for such information among institutional investors. Apparently, a number of these firms -- who, as part of their consideration of Environmental, Social and Governance factors, are looking to the degree of authoritarianism of a government (Wirz 2018).

While modest, this proposal has the advantage of not requiring any legal innovation or international consensus building because it is based on existing law and legal principles. It is readily implementable and, we believe, would be a step in the right direction. At worst, it would create incentives (for all countries) to adopt more transparent sovereign debt management practices.

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	Obs	Mean	Std. Dev.	Min	Max
Spread (bps)	1,805	474	687	11	7,116
Democracy	1,761	7.3	2.4	0.8	10
Control of Corruption	1,761	2.5	0.8	1	5

Table 2: Spreads, Democracy, and Corruption

This table reports a set of regressions where the dependent variable is the sovereign spread (measured in basis points) and the explanatory variables are the ICRG measure of control of corruption, the Quality of Government index of democracy, numerically coded sovereign ratings, and the interaction between democracy and control of corruption. The data are quarterly and cover up to 23 countries over 1994-2017. Columns 4-6 include country and quarter-year fixed effects. Columns 7 and 8 include quarter-year fixed effects.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Control of Corruption	-79.51*** (17.81)		-86.84*** (18.76)	-47.72** (24.10)	6.515 (29.64)	-52.10** (24.88)	-541.42*** (157.15)	9.47 (10.69)
Democracy		-7.193 (4.994)	5.372 (4.931)	-41.12** (16.63)	-9.362 (19.37)	-33.77** (16.87)	293.51 (196.29)	57.03 (28.69)
Dem × Corr					17.93** (7.041)	13.70** (6.839)		
Rating				-197.4*** (20.27)		-197.1*** (20.30)	-6.86 (45.13)	-40.20*** (2.46)
Constant	674.5*** (52.05)	528.7*** (40.19)	653.4*** (54.87)					
Observations	1,761	1,761	1,761	1,724	1,761	1,724	109	409
Country FE	No	No	No	Yes	Yes	Yes	No	No
Quarter-Year FE	No	No	No	Yes	Yes	Yes	Yes	Yes
Sample	All	All	All	All	All	All	DEM<3	DEM>9

Robust standard errors in parenthesis, * statistically significant at 10% confidence level, ** statistically significant at 5% confidence level, and *** statistically significant at 1% confidence level.

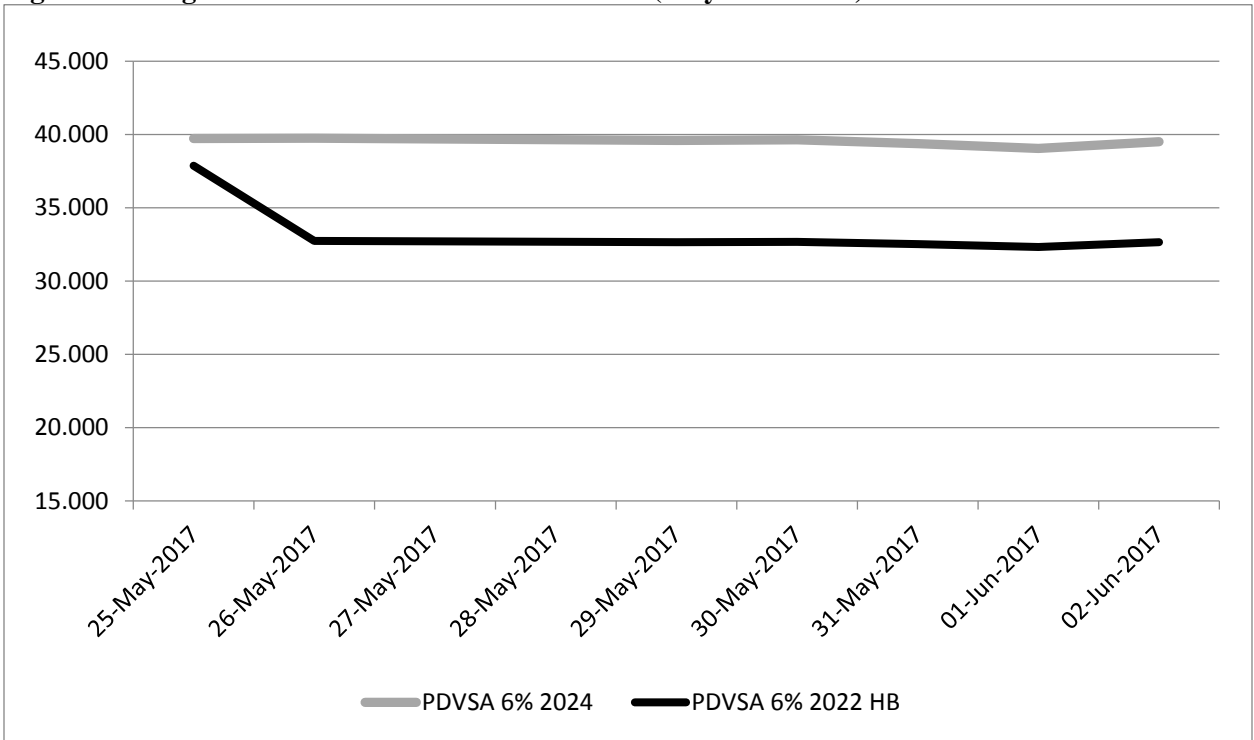**Figure 1: Hunger Bond and PDVSA 2024 6% bond (May-June 2017)**

Figure 2: Hunger Bond and PDVSA 2024 6% bond (October 2017-August 2018)

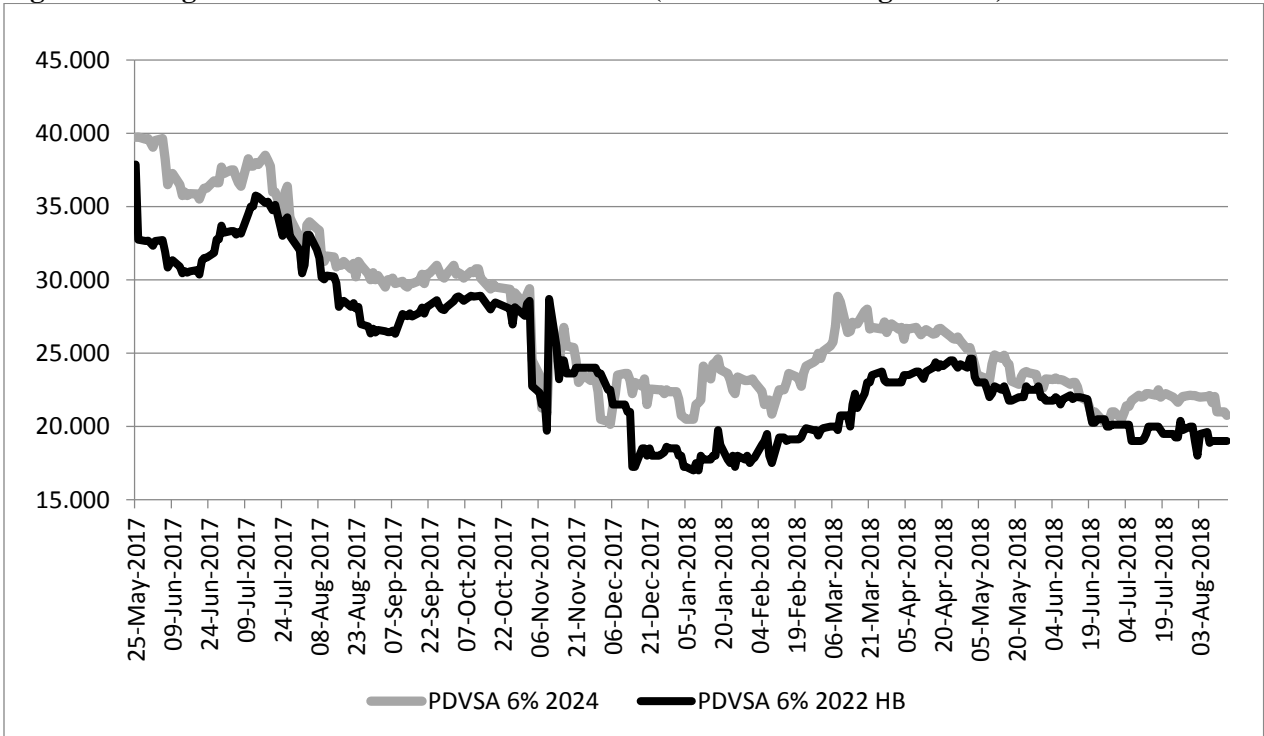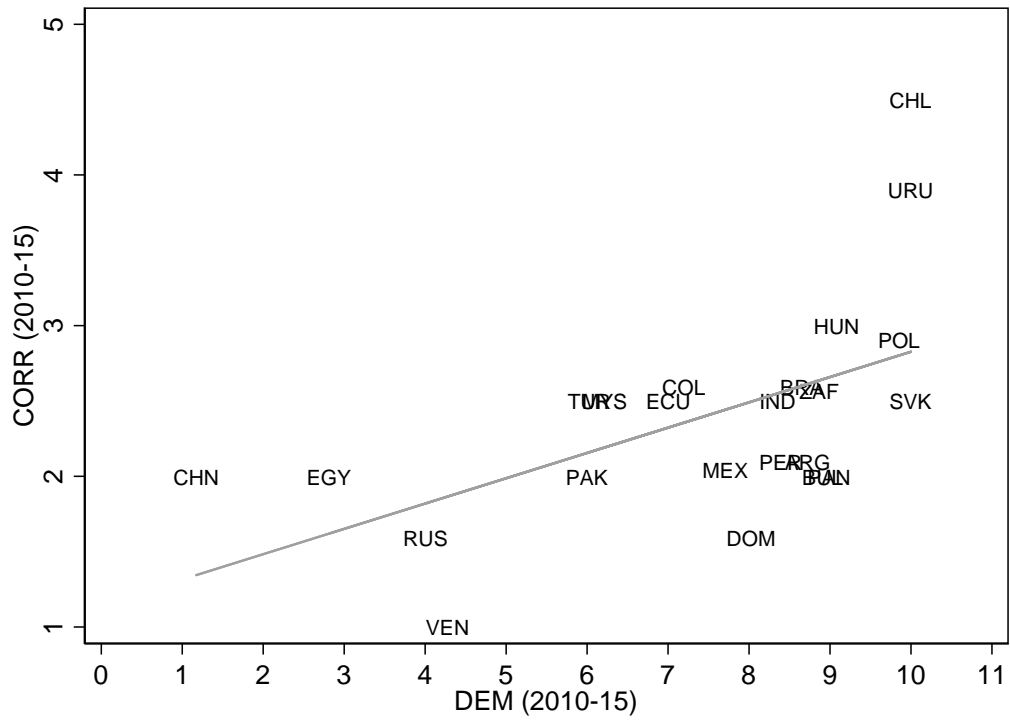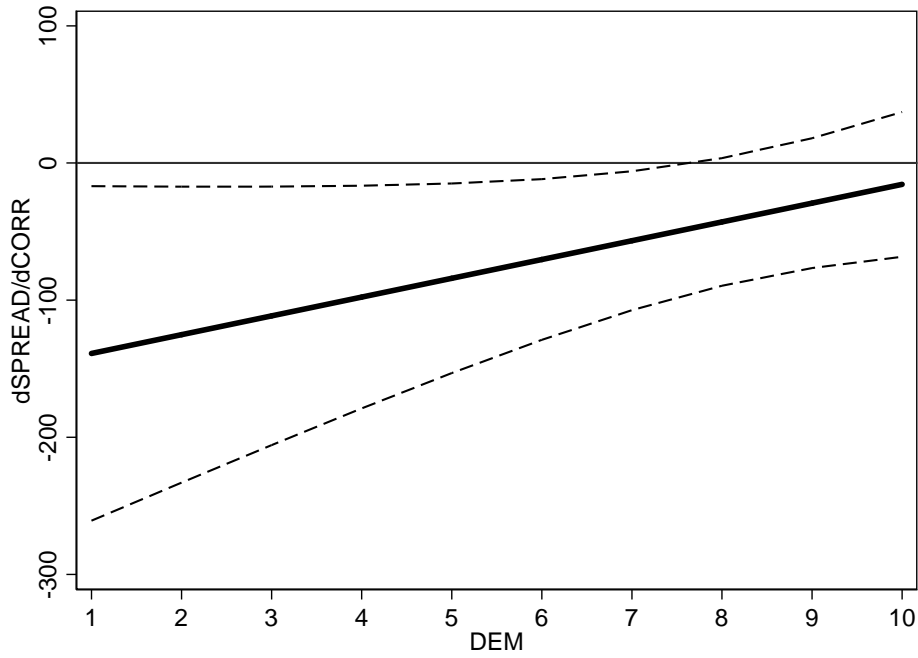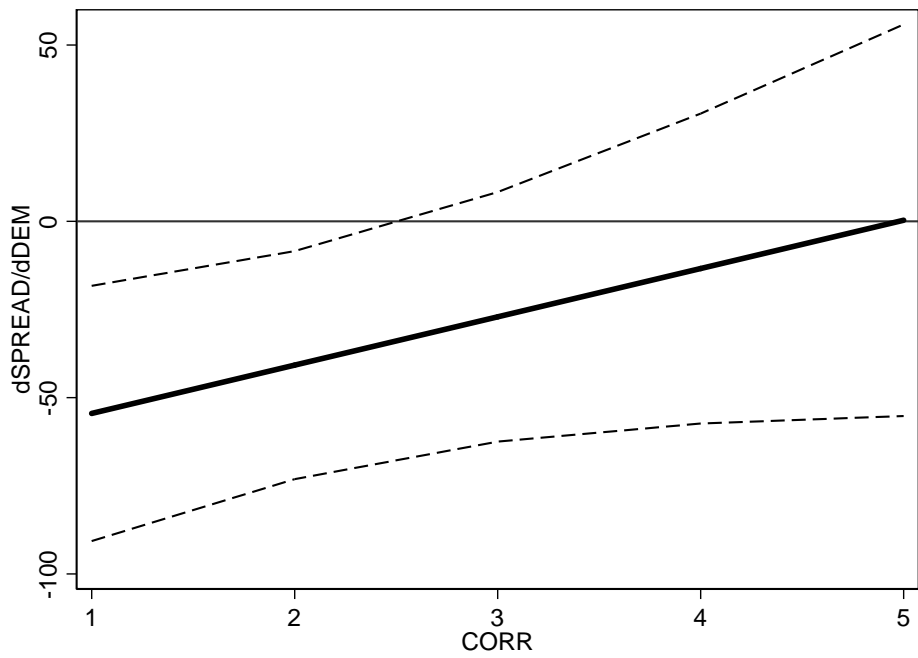**Figure 3: Correlation between democracy and control of corruption (2010-15)**

The line plots the result of the regression CORR=1.14+0.16xDEM. The t statistics on the coefficient of the democracy variable is 3.05 (p-value<0.01). The regression's R^2 is 0.31 (23 observations)

Figure 4: Marginal effect of corruption at different levels of democracy

Based on the estimates of table 2, Column 6. The dotted lines plot a 95% confidence interval

Figure 5: Marginal effect of democracy at different levels of corruption

Based on the estimates of table 2, Column 6. The dotted lines plot a 95% confidence interval