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Legal Air Cover

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Abstract*

The economic harm being caused by the novel coronavirus may soon result in multiple sovereign debtors moving into default territory. But the existing playbook for dealing with multi-sovereign emerging market debt crises is blank. The only debt crisis scenario we know is protracted country-by-country and contract-by-contract negotiated workouts. As of this writing, expert groups are working on the design of a mechanism to run multiple sovereign debt workouts simultaneously. Those designs, however, will take time to configure and get international buy-in. This paper sets forth some options to provide temporary legal protection to the debtor countries in the meantime; while they are in need of diverting resources toward Covid amelioration. This is the notion of "legal air cover". The options we propose involve ex post state intervention in debt contracts. They are extreme and may come with risks. But we show that in the case of Greece, when intervention such as we envision was necessary, there were no negative spillovers on periphery Eurozone debt markets associated with the Greek ex post modification of contract terms.

Keywords: Sovereign default; Incomplete contracts; Debt restructuring

JEL Codes: F34; F51

* "Air cover" was the phrase used in World War II for allied fighter escorts for the bomber raids over Germany. For comments and permission to borrow liberally from their work, thanks to Lee Buchheit and Mark Weidemaier. Thanks also to workshop participants at the law schools of UCLA, UC Berkeley, U. Chicago and Harvard. Thanks to Xuewen Fu and Sehan Choi for superb research assistance.

“It is not speed that kills, but the sudden stop.”
*Banker’s adage*¹

I. What if we have another Sudden Stop?

Economists call these “sudden stops”.² Capital flows to a debtor country cease, more or less simultaneously, leaving the country unable to refinance maturing loans or to borrow for budgetary purposes. If this happens to one country, it can result in serious financial, social and political dislocations for that country. If a sudden stop occurs simultaneously across an entire region or, even worse, across the entire emerging market sovereign asset class, it can trigger an international financial and humanitarian crisis.

Such an event occurred last March as the Covid-19 pandemic first took hold across a wide range of nations.³ And the global economy looked to be on the brink of a multi-sovereign default scenario such that had not been seen since the Latin American debt crisis of the 1980s. By June 2020, these concerns looked to be materializing. The pandemic had worsened, the global economy had slowed even further, default risk in emerging market countries reached record highs (see Figure 1, that provides a snap shot), and more than a hundred countries had asked the International Monetary Fund for emergency assistance.

Given that all of these countries had been hit by the same shock, a devastating pandemic not of their making that needed an immediate response, the theoretical answer to the crisis was simple. If the creditors holding the trillions of dollars of claims could be coordinated, they would presumably agree as one to give all of these sovereign debtors a temporary break on their debt obligations. Both creditors and debtors, after all, would benefit from the sovereigns using their scarce resources to fight the pandemic and get their economies back on track.

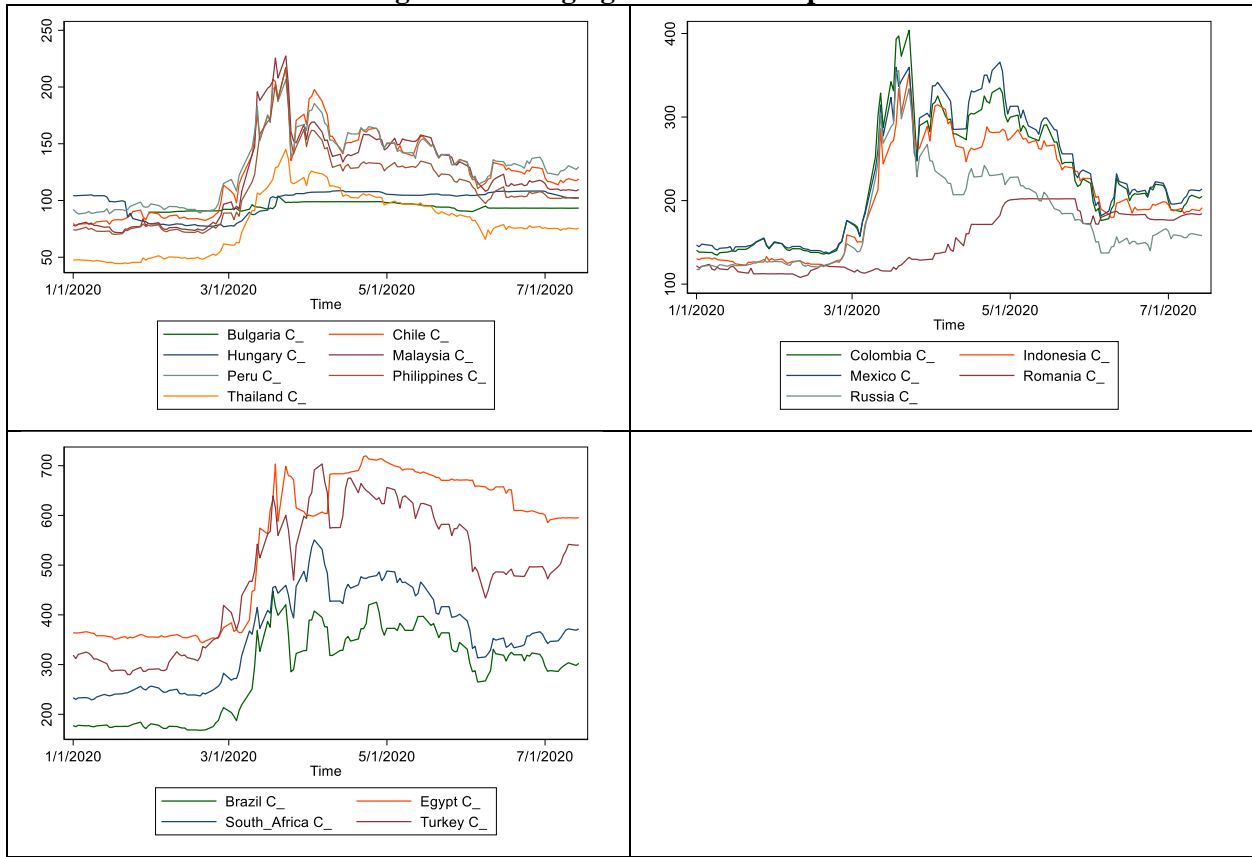
In legal terms, what was needed was a stay, such that resources that would otherwise be used to pay debt obligations could be diverted to health care costs without having to fight a plethora of creditor lawsuits. However, no mechanism exists to provide this type of a multi-country stay.

¹ The source of this quote is the article that brought this concept to the economics literature, whose focus was the 1995 peso crisis in Mexico. Rüdiger Dornbush, Ilan Goldfajn & Rodrigo O. Valdes, *Currency Crises and Collapses*, 2 BROOKINGS PAPERS ON ECONOMIC ACTIVITY 219 (1995).

² E.g., Guillermo A. Calvo, *Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops*, 1 J. APPLIED ECON. 35 (1998)

³ Scott Davis, *Emerging-Market Economies Face Covid-19 and a “Sudden Stop” in Capital Flows*, DALLAS FED NEWSLETTER (April 14, 2020), <https://www.dallasfed.org/research/economics/2020/0414>

Figure 1: Emerging Market CDS Spreads



The international financial architecture has been modified considerably in recent decades to deal with sovereign debt crises, but the types of crises that the current architecture contemplates are ones that impact individual countries.⁴ And the mechanisms in place contemplate negotiated solutions where the supermajority of holders of each set of contract instruments works out deals with the sovereign in question.

In the wake of the sudden stop in March 2020, officials at the IMF and the World Bank, with the support of the G-20 Finance Ministers, did attempt a fix. The solution was for the governments of the G-20 nations to agree to give the seventy poorest nations in the world a debt holiday for the rest of 2020 and hope – via exhortation – that the private sector would voluntarily follow suit in providing equivalent relief. As of this

⁴ Much of the work in reforming the global financial architecture has been in the way of inserting so-called Collective Action Clauses in sovereign bonds. However, the recent case of Argentina has shown that even in the best case scenario, where the debt that needs to be restructured has those mechanisms, individualized bondholder negotiations will likely be required. See, e.g., Anna Szymanski, *A Game of Inches*, REUTERS BREAKINGVIEWS (June 22, 2020).

writing in August 2020, we can safely say that the attempt to exhort voluntary participation by the private sector was a failure. No private sector relief was provided.⁵

As it turned out, the March 2020 sudden stop did not produce a global crash. The huge infusions of money by western governments, pumped into their capital markets, depressed interest rates and drove investors to search for higher yields in emerging markets. Capital began to flow back to the emerging markets, and that too in large amounts, resulting in an immediate drop in sovereign CDS spreads in many emerging market countries, with the exception of large vulnerable countries such as Brazil, Egypt, South Africa and Turkey (see Figure 1). Immediate catastrophe was avoided but the newly deployed capital was exposed to far greater risk.

For how long can this go on? Covid-19 has not gone away; its impact on the emerging market (EM) world has only worsened in the ensuing months. As of this writing in October 2020, over a dozen nations look to be on the brink of public debt crises.⁶

It is quite possible that another sudden stop is in the offing. Six months after the sudden stop in March 2020, we still do not have any mechanism in place to mitigate the costs of the defaults that would inevitably follow.

The motivation for this paper is our concern that another sudden stop could soon be coming. It could leave a dozen or more countries simultaneously in debt trouble. Under the existing playbook, each of those countries would have to approach its creditors -- commercial and bilateral -- for a bespoke debt restructuring. The current system is not designed to accommodate that. Even one-off debt crises like the

⁵ See Ross Lancaster, *DSSI Extension Looms Amid Private Sector Absence*, GLOBAL CAPITAL (Aug. 4, 2020), at <https://www.globalcapital.com/article/b1msn33bvy5655/dssi-extension-looms-amid-private-sector-absence>

⁶ As per the countries in the ratings (those with current or recent market access), at least five sovereigns are in full default (Argentina, Ecuador, Lebanon, Belize and Venezuela), either being unable to pay or having negotiated deferments/reductions in their obligations. At least another five are on the brink (Laos, Zambia, Mozambique, Suriname and Congo) according to ratings, and more look to be highly vulnerable if one looks to credit default swap prices (Turkey, Egypt and South Africa, for example). Fitch also reports, for just the first half of 2020 that 33 sovereigns have been downgraded and 40 have been placed on the negative outlook list. Those are higher numbers that Fitch has ever reported. See Yen Nee Lee, *Fitch Has Downgraded a Record Number of Sovereigns Due to the Coronavirus; It is Not Done Yet*, CNBC (July 3, 2020); see also Antony Squazzin, *Next Africa: Zambia Could Default and Others Follow*, BLOOMBERG (Sept. 25, 2020) (observing that Zambia, Chad, Angola and Kenya look to be in financial trouble and in the vicinity of default); Jonathan Wheatley, *Emerging Economies Tap Debt Markets But Risks Pile Up Ahead*, FIN. TIMES (Sept. 28, 2020) (“... a capital flows tracker by Capital Economics suggests that emerging markets suffered net capital outflows of \$30bn in August [2020], their biggest outflows since the \$55bn the consultancy registered in March at the height of the market panic.”).

one Argentina faces now quickly got bogged down. What would happen if institutional investors that are heavily exposed to EM sovereign debt faced losses on a dozen or more countries simultaneously? Could they realistically be expected to provide debt relief on a scale that could pose an existential threat to the lending institutions themselves?⁷

A mechanism for running multiple sovereign debt workouts simultaneously -- something that hasn't been done since the Latin American debt crisis of the 1980s and early 90s -- is beyond the scope of this paper.⁸ What we examine below are options to provide temporary legal protection to the debtor countries while they are diverting their financial resources toward Covid-19 amelioration. This is the notion of "legal air cover". This is not to say that some of the options we list below could not be utilized to engineer full scale sovereign debt restructurings; they could be. But that is not our focus.

Below, in Section II, we set out four options that vary in terms of effectiveness and likelihood of success. The first, the most obvious, is to use the "reverse acceleration" mechanism built into existing contracts. Unfortunately, that will at best produce partial relief and will not work quickly. So, we move to more creative solutions. The key feature that the next three options share is that they can be put in place quickly, without the need for lengthy legislative wrangling or contract-by-contract and country-by-country negotiations. Each option is limited in scope. They do not set up sovereign debt restructuring mechanisms, although the air cover they provide may well make it easier for an insolvent country to negotiate new debt terms with its creditors. They buy time during which debt sustainability analyses and negotiations with creditors can be conducted, without fear that the situation will devolve into a rush to the courthouse. This will be useful regardless of whether the situation is a liquidity crisis or a solvency one. These options, however, do come with risks.

The most significant risk is that these options entails is that each of them envisions a degree of ex post state intervention in the debt contracts. Under normal circumstances, retroactive modifications of contract terms are disfavored in every modern legal system. If parties cannot depend on their contractual terms being enforced on a continuing basis, the value of contractual commitment diminishes and by implication the cost of borrowing may increase. State interference with contract terms therefore has to be confined to exceptional circumstances where one might say that the parties themselves – had they been able to negotiate

⁷ For example, Ashmore, one of the major investment funds in emerging market sovereign bonds has taken a severe hit as a result of the debt problems being faced by Lebanon, Argentina and Ecuador. See Tom Arnold, *Ashmore Fund Exposed to Lebanon, Argentina, Suffers \$1 bn Net Outflow Since August*, CNBC.com (Mar. 13, 2020).

⁸ The "Latin American debt crisis" extended well beyond Latin America into parts of Asia, Africa and Europe.

a contract provision ex ante -- would want to make modifications to the contract. And given that they were not able to, might welcome interference that facilitates ex post contractual changes by the state – for example, by solving a coordination problem that the parties are unable to solve themselves.

Both history and theory tell us that ex post intervention in contracts by the state can — if done in a fashion that makes it clear that they will not be repeated but for in exceptional circumstances — be welfare enhancing. In contexts where contracts are incomplete because the contingencies could not be adequately contracted for ahead of time (e.g., a pandemic), it can be socially optimal for the state to step in to fill the contractual gaps.⁹ Nineteenth century interventions in the US in the agricultural credit market, where the contracts did not adequately deal with what would happen in the event of natural calamities, are such an example.¹⁰ The US government’s abrogation of gold clauses in the 1930s, in the context of the Great Depression is another.¹¹ Research shows that there was no negative market reaction in either of these instances.¹²

In Section III, we analyze the most famous modern instance of retroactive modification of sovereign bond contracts so as to deal with an extreme crisis. That is, the legislative action taken by the Greek government in 2012 to retroactively insert “collective action clauses” in all of its local-law governed sovereign bonds (over 200 billion euros worth) so as to enable an orderly debt restructuring. At the time, as with the aforementioned abrogation of gold clauses in the United States in 1933, there was concern that such an action would reduce faith in the value of contracts across the European Union and, therefore, increase the

⁹ See Patrick Bolton & Howard Rosenthal, *Political Intervention in Debt Contracts*, 110 J. POL. ECON. 1103 (2002).

¹⁰ *Id.*

¹¹ See Sebastian Edwards, Francis Longstaff & Alvaro Garcia Marin, *The US Debt Restructuring of 1933: Consequences and Lessons*, NBER Working Paper 21694 (2015); Randall Kroszner, *Is it Better to Forgive Than to Receive? An Empirical Analysis of the Impact of Debt Repudiation* (University of Chicago GSB Working Paper, 2003).

¹² This is not to suggest that the market reaction to such interventions will always be positive. Quite the contrary. One such example is the Austrian legislation utilizing a retrofit in 2015 to deal with a crisis with its sub sovereign bonds. There, yields increased. See Otto Randl & Josef Zechner, *Sovereign Reputation and Yield Spreads*, 19 GERMAN ECON. REV. 260 (2019). Other examples of governments using retrofit legislative changes to enable debt restructurings include the US federal government passing the PROMESA legislation in 2016 and Barbados implementing Greek-style legislation in 2019. See Anusha Chari, Ryan Leary & Toan Phan, *The Costs of (Sub)Sovereign Default Risk: Evidence From Puerto Rico*, NBER Working Paper No. 24108 (2017 draft) (discussing the rise in yields for Puerto Rican bonds subject to PROMESA; but not considering the reputational effects on US federal debt from the passage of PROMESA).

costs of borrowing for every sovereign within the region.¹³ Cumberland Advisors' David Kotok wrote in his blog:

No sovereign debt contract is now immune from the same action. All sovereign debt contracts will carry a risk premium. Buyers of European sovereign debt now act at their own peril.

Unsurprisingly, multiple challenges were brought against the Greek sovereign across a range of fora – the Greek local courts, arbitration tribunals, foreign sovereign courts, and European courts – with expropriation-type claims being made in each case.¹⁴ As of this writing, all of these claims have been rejected; the most recent rejection coming but a few months ago. Following the footsteps of the analyses of the market reaction to the gold clause cases, we examine what the market reaction was to the outcome of the key legal decisions in the Greek case. The data shows no evidence of a systematic increase in borrowing costs for European sovereigns as a result of the various tribunals upholding the Greek ex post modification of contract terms. The reason, we conjecture, is that the market had confidence that such interventions would only be taken in the direst circumstances, when the action was necessary to protect the system from crashing.

II. *The Options to Provide Air Cover*

The options discussed below are aimed at a single goal: providing temporary air cover in the event of a sudden stop while the authorities figure out a solution to a multiple sovereign defaults scenario.¹⁵ Given the kind of multi-sovereign crisis scenario that we imagine, we should expect the overall debt stock that needs to be restructured to include a wide variety of types of instruments and lenders. That wide variety of types of debt (trade credits, syndicated loans, bonds, guarantees, etc.) and lenders (commercial creditors, Paris Club bilateral creditors, non-Paris club bilateral creditors), each with varying contract terms and political

¹³ See, *Greece, Tragedy and Poetry*, CUMBERLAND ADVISORS BLOG (March 10, 2012) <https://www.cumber.com/greece-tragedy-poetry/>; ; see also *Greece Kills the Rule of Law*, SEEKING ALPHA (March 15, 2012), <https://seekingalpha.com/article/435881-greece-kills-the-rule-of-law>; Arturo C. Porzecanski, *Behind the Greek Default and Restructuring of 2012*, in SOVEREIGN DEBT AND DEBT RESTRUCTURING (Eugenio C. Bruno ed. 2013) (“The introduction of CACs in sovereign bonds is no novelty, but to our knowledge it has never been done retroactively—a clear violation of the “sanctity” of contracts.”); Lachlan Burn, *Bondholder Resolutions in the Courtroom*, in, COLLECTIVE ACTION CLAUSES AND THE RESTRUCTURING OF SOVEREIGN DEBT 73-84 (Patrick S. Kenadjian, Klaus-Albert Bauer & Andreas Cahn, eds. 2013), 73-84 (2013) (Institute for Law and Finance, Frankfurt); Klaus-Albert Bauer, *The Euro Area’s Collective Action Clauses: Some Questions and Answers*, in, *id.* at 3-14.

¹⁴ See Patrick Wautelet, *The Greek Restructuring and Property Rights: A Greek Tragedy For Investors?* in LIBERAE COGITATIONES LIBER AMICORUM MARC BOSSUYT (André Alen et al. eds. 2019).

¹⁵ Our understanding is that expert groups at the IMF and World Bank were constituted in the wake of the March 2020 sudden stop and are working on this question.

sensitivities, presents a particularly intractable restructuring problem in a context where there are neither the resources nor the time to conduct individualized debt renegotiations.

A solution is needed that provides an immediate answer to the sudden stop in capital flows: a sudden stop to litigation and asset seizures on all these obligations at once, while the international financial authorities come up with a solution to the bigger problem (or until there is a vaccine that ameliorates the crisis). The stay on creditor litigation is particularly important, so that the sovereigns in crisis can continue to borrow anew to fund healthcare expenditures and provide for basic needs of their citizens while the global economy is at a standstill. This is akin to the debtor-in-possession regime under US corporate bankruptcy.

In proposing options, we are not writing on a clean slate. The options we describe draw from prior sovereign crises and the literature on how air cover was provided there, albeit in the context of individual sovereign crises.¹⁶

We begin with the obvious option; the existing bond contracts. That's where we would look in an individual country restructuring context. However, as we explain, that option is unlikely to work. Hence, we move to more creative solutions.

A. Option 1: Reverse Acceleration

The vast majority of foreign currency/foreign law sovereign bonds outstanding today have a built-in mechanism to respond to a shock where a majority of creditors and the debtor agree that it is in their mutual interest to impose a stay on creditor litigation. The mechanism is the “reverse acceleration” provision.

¹⁶ In the wake of what look to have been incorrect funding decisions by the Official Sector in Greece in 2010-13, considerable intellectual energy was expended some years ago in designing “reprofiling” mechanisms. The goal was to be able to buy time for the Official Sector to make better decisions in the future regarding whether a sovereign’s crisis was the product of a solvency problem or a liquidity one since that determination was crucial to deciding on what type of relief to provide. The IMF’s 2014 mea culpa report explains:

[I]n circumstances where a member has lost market access and debt is considered sustainable, but not with high probability, the Fund would be able to provide exceptional access on the basis of a debt operation that involves an extension of maturities (normally without any reduction of principal or interest). Such a “reprofiling” operation, coupled with the implementation of a credible adjustment program, would be designed to improve the prospect of securing sustainability and regaining market access, without having to meet the criterion of restoring debt sustainability with high probability.

International Monetary Fund, *The Fund’s Lending Framework and Sovereign Debt – Preliminary Considerations* (June 2014). On the question of how to protect a reprofiling endeavor from holdout litigation, see Lee C. Buchheit, Mitu Gulati & Ignacio Tirado, *Reprofiling Sovereign Debt*, 30 J. INT’L BANKING L. 19 (2015).

These clauses allow for a simple majority of creditors (in principal amount) to reverse attempts by a minority of creditors to accelerate the debt.¹⁷ Acceleration itself requires that an Event of Default has occurred and that 25% of the creditors (in principal amount) have asked for acceleration.¹⁸

There are four problems with this mechanism if one is looking for an immediate stay on creditor action in a multi-sovereign default scenario.

- Reverse acceleration clauses operate on an individual bond-by-bond basis. That means that a majority of creditors has to be coordinated in every individual bond that a country has outstanding. History, and the recent restructurings of Ecuador and Argentina, tells us that this coordination task can be onerous even for a single country.¹⁹
- Most reverse acceleration clauses require that the underlying Event of Default that triggered the acceleration in the first place be cured before the reversal can occur. Assuming that the Event of Default was the failure to make payments to creditors, the cure is to make those payments. But during the Covid-19 crisis that can't be done because the money needs to go to healthcare expenditures to fight the pandemic.
- Reverse acceleration only applies to accelerations; it cannot stop creditor action on payments that were due and not made (such as if the principal amount has come due).
- Many of a sovereign debtor's obligations – such as its syndicated loans or guarantees – may not even contain reverse acceleration clauses.

¹⁷ On rare occasion, the requirement is 66.67%.

¹⁸ For a discussion of using these clauses in the context of an individual country's crisis, see Lee C. Buchheit & Mitu Gulati, *The Coming Need for a Standstill in Venezuela*, FT ALPHAVILLE (Oct 10, 2017), <https://ftalphaville.ft.com/2017/10/10/2194628/buchheit-and-gulati-the-coming-need-for-a-standstill-in-venezuela/>

¹⁹ The text is referring to the numerous delays and battles during the recent restructurings for Ecuador and Argentina. There, the clauses in question were so-called Collective Action Clauses that apply to the modification of "reserved matters", such as the payment terms of the bonds. And the coordination and voting mechanisms for that matter are much better defined and familiar to the various players than reverse acceleration clauses. To our knowledge, reverse acceleration clauses have never been used in practice, which means that no one knows what pitfalls lie in wait.

Bottom line, it is unlikely that the existing contract mechanism can produce an immediate and effective stay on litigation in a generalized sudden stop scenario. We turn, therefore, to three other mechanisms. None is an easy lift.

B. Option 2: UN Security Council Immunity Shield²⁰

Most of the sovereign debt restructurings of the past 40 years have involved essentially a single type of debt instrument (for example, bank loans or publicly-issued bonds) or a limited number of such instruments. One exception was the restructuring of the Saddam-era debt of the Republic of Iraq that began in 2004. The United Nations Security Council imposed economic sanctions on Iraq after Saddam Hussein's invasion of Kuwait in 1990. Saddam's response was to cease payments on most categories of Iraq's debt. The debt stock grew inexorably thereafter with the accumulation of interest arrears.

By the time Saddam was ousted in the spring of 2003 by a coalition led by the United States and the United Kingdom, the total amount of unpaid claims against Iraq exceeded \$140 billion.²¹ Most of the debts were owed to bilateral (governmental) creditors. Approximately \$48 billion was due to members of the Paris Club and another \$71 billion to more than 60 non-Paris Club bilateral lenders. In addition, \$21 billion of the Saddam-era debt stock was owed to a widely mixed group of commercial creditors including commercial banks, insurance companies, hedge funds, trade creditors of every imaginable stripe, construction companies and individuals.

The Iraq debt restructuring was both harsh on the creditors and successful. The terms called for a write-off of 80% of outstanding principal and accrued interest with a significant stretch-out of the repayment period for the balance. In net present value terms, Iraq inflicted an 89.75% loss on holders of Saddam-era claims.²² By the time Iraq's debt restructuring was winding down in 2008, the Iraqi authorities had settled 13,164

²⁰ This discussion is taken from Lee C. Buchheit & Mitu Gulati, *Sovereign Debt Restructuring and U.S. Executive Power*, 14 CAP. MKTS. L. J. 114 (2019). For a summary discussion, see Lee C. Buchheit, Guillaume Chabert, Chanda DeLong & Jeromin Zettelmeyer, *How to Restructure Sovereign Debt: Lessons From Four Decades*, Peterson Institute of International Economics Working Paper # 19-8, p.23 (2019).

²¹ Joanna Chung & Stephen Fidler, *Why Iraqi Debt is no Longer a Write Off*, FIN. TIMES, July 16, 2006.

²² See Ali Allawi, *Why Iraq's Debt Deal Makes Sense*, EUROMONEY (Sept. 2005) at 213.

separate claims tendered by 576 commercial creditors from 50 countries²³ -- a commercial creditor participation rate exceeding 96% (by value of claims).²⁴

Iraq is an oil-rich country. It sits on the third largest oil reserves in the world and derives virtually all of its foreign currency earnings from the sale of oil. Nevertheless, it was able to impose a severe debt restructuring on a disparate group of creditors without facing a significant holdout creditor problem. How?

Iraq benefited from a legal advantage that no other debtor country had previously enjoyed -- legal immunity for its principal external assets from creditor judicial remedies.

Iraq conducted its debt restructuring under the cover of a U.N. Security Council resolution -- Resolution 1483 of May 22, 2003 -- that effectively immunized Iraqi assets from seizure by Saddam-era creditors to satisfy their claims against Iraq.²⁵

After noting “the desirability of prompt completion of the restructuring of Iraq’s debt”, Resolution 1483 went on to immunize Iraq’s sales of petroleum and related products, as well as the cash proceeds from the sale of Iraqi oil, from “any form of attachment, garnishment, or execution.” Resolution 1483 was passed by the Security Council under Chapter VII of the U.N. Charter. It was thus legally binding on all members of the United Nations. All members were enjoined to enact into their domestic laws the legal immunities for Iraqi assets set out in Resolution 1483.

The implication of Resolution 1483 for the creditors was clear. Although holders of Saddam-era claims against Iraq retained their legal *rights* under their respective contracts, their legal *remedies* had been significantly curtailed by the operation of Resolution 1483. Creditors were free to stay out of the debt restructuring, but they could not count on their ability to seize Iraqi assets to satisfy any court judgments they might obtain until the Security Council resolution was either lifted or it expired. The objective of the Resolution 1483 legal immunities was not just to encourage Iraq and its creditors to reach a consensual resolution of Saddam-era claims, the objective was to encourage such a debt restructuring in order to

²³ Iraq Announces Successful Conclusion of Additional Commercial Debt Settlement, Sept. 10, 2008, at <http://www.eyidro.com/doc/Iraq>.

²⁴ Iraq Announces Conclusion of Commercial Debt Settlement, July 18, 2006, at <http://www.eyidro.com/doc/Iraq>.

²⁵ United Nations Security Council Resolution Number 1483, U.N. DocS/RES/1483, Section 22, May 22, 2003.

safeguard Iraq's economic and political recovery by neutralizing the threat posed by legacy (Saddam-era) creditors.²⁶

By its terms, the immunities conveyed by Resolution 1483 were originally scheduled to expire on December 31, 2007. The Security Council subsequently extended the immunities through June 30, 2011, at which point the restructuring of Iraq's Saddam-era debt to commercial parties was substantially complete.

Among the attractive aspects of the UN Security Council resolution is that it creates worldwide immunity for the assets of the sovereigns in peril and it does so with speed. Only the members of the security council have to agree; and that is a small group – the five permanent members and ten non-permanent ones. Of course, this is possible only if there is agreement from the leadership in these countries; something that is far from certain in the current context of international tensions. In 2003, agreement was obtained largely through the diplomatic efforts of George Bush's administration.²⁷ A new US administration in 2021, in cooperation with other security council members, might be able to do the same.

C. Option 3: The US President's Executive Order

The UN Security Council's Immunity strategy was initially set to expire in 2007, and received one extension until 2011. Getting repeated agreement among all of the members of the Security Council for a global immunity shield, however, is non-trivial. In the Iraqi case, when the extension of the global shield expired in 2011, the US was still able to extend its effectiveness acting on its own. That precedent – that was effective in nullifying litigation against Iraq's oil assets in the US (the primary location where creditors would have wanted to bring such as action) – generates Option 3.

The US implemented the Resolution 1483 immunities through an Executive Order (EO 13303) signed by President George W. Bush on May 22, 2003.²⁸ That Executive Order was renewed annually thereafter by

²⁶ See Rex J. Zedalis, *Iraqi Oil and Revenues from Its Sale: A Review of How Existing Security Council Resolutions Affected the Past and May Shape the Future*, 18 EUROPEAN J. INT'L L. 499, 521 (2007):

[S]ubjecting the nascent Iraqi democracy to precisely the same level of susceptibility to legal action as faced by all other sovereign states would seriously imperil its ability to meet the basic needs of its citizenry and, thus, frustrate the chances of democracy firmly taking hold and flourishing.

²⁷ For a detailed analysis that includes interviews with key players, see Simon Hinrichsen, *Tracing Iraqi Sovereign Debt Through Defaults and Restructuring* (2019 draft), at <https://www.lse.ac.uk/Economic-History/Assets/Documents/WorkingPapers/Economic-History/2019/WP304.pdf>

²⁸ The preamble to Executive Order 13303 declared that the threat posed by the potential exercise of legal remedies against Iraqi assets by Saddam-era creditors constituted an "unusual and extraordinary threat to the national security

both Presidents Bush and Obama. As noted above, the initial Executive Orders were put in place so as to follow the dictates of the UN Security Council. However, that dictate ended in 2011. Legal immunities for Iraqi assets held in the US, however, did not end until May 27, 2014. There was a period of three years (2011-14) when an effective immunity strategy was in place through the actions of a single country: the US. Further, if one digs deeper into the strategy used with Iraq, one realizes that a crucial element of the immunity strategy – the immunization of Iraqi Central Bank Assets -- was the product of solo action by the US itself right from the start in 2004.

When President Bush first renewed EO 13303 on November 29, 2004, he added to the items covered by Security Council Resolution 1483 (Iraqi oil, the proceeds from the sale of that oil, and the bank account in New York into which Iraq's financial assets were deposited), any assets held in the United States by the Central Bank of Iraq ("CBI").²⁹ The addition of CBI to the renewed Executive Order is significant for two reasons. It immunized from creditor remedies assets held in the United States above and beyond those covered by Resolution 1483 of the U.N. Security Council. In addition, the renewed EO covered assets of an Iraqi state-owned entity, its central bank, not just assets of the foreign sovereign itself.

The immunities contained in Resolution 1483 eventually expired on June 30, 2011. President Obama nonetheless elected to renew President Bush's Executive Order immunizing Iraqi (and Iraq Central Bank) assets held in the United States. He did so on an annual basis three times after the original U.N. Security Council immunities expired.³⁰ It was not until May 2014 that the U.S. Executive Order legal immunities for Iraqi assets were ended in the United States.³¹

President Obama's action therefore represented the immunization of assets held in the United States by a foreign sovereign, and a state-owned entity, by Presidential Executive Order (with no involvement of the

and foreign policy of the United States." Declaring this a national emergency, President Bush prohibited "any attachment, judgment, decree, lien, execution, garnishment, or other judicial process" against the protected Iraqi assets, all of which "shall be deemed null and void." *See* The President of the United States, Executive Order 13303 - Protecting the Development Fund for Iraq and Certain Other Property in Which Iraq Has an Interest, 68 F.R. 31931, May 22, 2003.

²⁹ The President of the United States, Executive Order 13364 -- Modifying the Protection Granted to the Development Fund for Iraq and Certain Property in Which Iraq Has an Interest and Protecting the Central Bank of Iraq, 69 F.R. 70177, November 29, 2004.

³⁰ On May 17, 2011 (76 F.R. 29141), May 18, 2012 (77 F.R. 30183) and May 17, 2013 (78 F.R. 30195).

³¹ The President of the United States, Executive Order 13668 -- Ending Immunities Granted to the Development Fund for Iraq and Certain Other Iraqi Property and Interests in Property Pursuant to Executive Order 13303, as Amended, 79 F.R. 31019, May 27, 2014.

U.S. Congress), *without* a covering mandate of the U.N. Security Council, shielding those assets from creditor legal remedies in the U.S. courts, in order to (1) facilitate a restructuring of debts owed to commercial and bilateral creditors, and (2) shield the Iraq economic recovery program from disruption by legacy creditors, in a situation that was characterized by the President as posing a national security and foreign policy threat to the United States.

As later described by the U.S. Congressional Research Service:

The Iraq case thus illustrates that the United States and the international community are willing to shield a debtor from its creditors on an ad-hoc basis, without a formal international bankruptcy regime. *This can be accomplished multilaterally through U.N. Security Council Resolutions or bilaterally, on a case-by-case basis, through executive orders.* Since these measures were not taken in other recent financial crisis-afflicted countries, such as Argentina or Brazil, it appears that policymakers are only willing to use such measures selectively, and for countries that exhibit a perceived threat to U.S. and international security.³²

A current example of a US President utilizing his executive power to confer immunity of key assets of a sovereign debtor in default is Venezuela. Here, the US authorities have issued temporary protective orders immunizing the prize Venezuelan asset on US soil; ownership interests in its Texas-based oil refinery, Cigto. History provides additional examples, where US executive authority has been used well beyond the temporary immunization of assets from seizure.

The immunization of Iranian assets in the US, in the wake of the settlement of the hostage crisis between Iran and the US in 1980, is such a case. There, the government ordered the negation of attachment orders and removal of all pending claims in US courts against the Iranian sovereign in US courts by an international tribunal at the Hague (despite explicit contractual provisions allowing those claims to be brought in US courts).³³ The actions of the US government were challenged in court, but the US Supreme Court ruled in favor of the executive.³⁴

³² Congressional Research Service, *Iraq's Debt Relief Procedure and Potential Implications for International Debt Relief* (Dec. 6, 2006) at CRS-13. (emphasis added).

³³ See Buchheit & Gulati, *supra* note 20; see also Warren Christopher & Richard M. Mosk, *The Iranian Hostage Crisis and the Iran-U.S. Claims Tribunal: Implications for International Dispute Resolution and Diplomacy*, 7 PEPPERDINE DISPUTE RESOLUTION J. 165 (2007).

³⁴ *Dames & Moore v. Regan*, 453 U.S. 654, 663-64, 675 (1981). In preparation for the action in question, President Carter asked the Office of Legal Counsel (“OLC”) of the U.S. Department of Justice whether the Executive Branch had the power to suspend pending litigation between U.S. nationals and Iranian public sector defendants.

In a June 25, 1980 Memorandum Opinion for the Attorney General, the OLC pointed to Section 203(a)(1)(B) of the International Emergency Economic Powers Act (“IEEPA”) as the relevant statutory text. That provision gives the President, upon a declaration of national emergency, broad powers with respect to “any property in which any foreign

Other examples, arguably even more intrusive into individual rights, are the numerous blanket settlements of the claims of US nationals against foreign governments that have been entered into by various US governments over the years.³⁵ The bottom line is that the US executive has broad authority to take actions of the type described above in matters relating to foreign relations, particularly where the actions in question are aimed at dealing with a national emergency.³⁶

A blanket imposition of temporary sovereign immunity for all emerging market sovereign debtors being pursued in the US courts in the context of efforts to protect against the worsening of a global pandemic crisis strikes us as satisfying the conditions for such emergency action.

The upside of the US President's Executive Order is that it can be done instantaneously. It only works, however, if the US administration is one that is concerned about global welfare and the negative effects on the US of a severe downturn in the emerging market world. And even assuming that, the order only protects emerging market sovereigns from legal actions brought in the US. That is considerable protection for the small set of countries where the majority of their foreign currency transactions are with the US. However, that is but a subset of the emerging market world.

As for the other major financial jurisdiction, the UK, our understanding from talking to legal experts is that a US-style Presidential Executive Order is not a likely option. However, in contrast to the US, the UK has

country or a national thereof has an interest". The OLC's opinion admitted to some difficulty in accepting the proposition that IEEPA "delegated to the President extraordinary authority to suspend for the time being the operation of a co-equal branch of government [the Judicial Branch] in certain class of cases." Nevertheless, the OLC concluded:

We are of opinion that the President's power to regulate or prohibit the exercise of rights, powers, or privileges with respect to foreign property, must be read to include a power to regulate or prohibit the exercise of rights, powers, or privileges through the prosecution or adjudication of claims with respect to foreign property in court – a power that he may exercise in addition to his power to prevent the transfer of, or the creation of interests in, foreign property.

See Opinions of the Office of Legal Counsel, vol. 4A at 236, 239-41 (1980), *Presidential Power to Regulate Domestic Litigation Involving Iranian Assets*. *See also* Buchheit & Gulati, *supra* note 20.

³⁵ *See* Adam S. Zimmerman, *Presidential Settlements*, 163 U. PA. L. REV. 1393 (2015); *see also* Dames & Moore, 453 U.S. at 678 (noting the numerous such settlements).

³⁶ A question to ask is whether a potential health and financial crisis in distant emerging market nations can plausibly be a threat to US national security and, therefore, justify a Presidential Executive Order. If these debt crises present the risk of morphing into a global financial crisis that could hit the US economy, and if an insufficient response to contain the pandemic increases the risk of it spreading back to the US, there should be adequate justification.

shown the ability and willingness to pass protective legislation to help poorer nations against litigation by so-called vulture funds.³⁷

D. Option 4: The Necessity Defense

Options 2 and 3 would be effective. However, they depend on political will and an inclination on the part of the powerful nations (particularly the US) to assist the broader global community. Absent that willingness, or while that willingness is being generated, more temporary solutions may be required.

One possible avenue is to appeal to the obscure and rarely granted doctrine of economic necessity in international law.³⁸ Under Article 25 of the International Law Commission's ("ILC") draft Articles on Responsibility of States for Internationally Wrongful Acts, a state may invoke necessity to excuse its non-performance of an "international obligation" if non-performance is the only way to address "a grave and imminent peril," as long as non-performance does not seriously impair an essential interest of the "State or States towards which the obligation exists."³⁹

The scope of the doctrine is narrow. It may only be invoked as a justification to breach obligations if there is "grave and imminent peril" for the citizens of the country in need and a serious interest of the other side is not "seriously impair[ed]". The ILC's draft Articles go on to explain that even if the foregoing conditions are satisfied, the state may not invoke necessity to excuse the violation of an international obligation that "excludes the possibility of invoking necessity."⁴⁰ The defense is also unavailable if the state in question is even partially responsible for causing the problematic state of affairs.⁴¹

³⁷ The context for this legislation was the concern that, following the grant of debt relief by the Official Sector to a number of extremely poor and highly indebted nations (HIPIC countries), distressed debt specialists would use the opportunity to try and obtain full recovery on their debts. See International Monetary Fund, *The International Architecture for Resolving Sovereign Debt Involving Private-Sector Creditors: Recent Developments, Challenges and Reform Options 27-28* (Sept. 23, 2020).

³⁸ For a prior discussion of this option, in response to the March 2020 sudden stop, see Patrick Bolton et al., *Born Out of Necessity: A Debt Standstill for Covid-19*, CEPR Policy Insight No. 103 (2020). The discussion that follows, draws from Mark Weidemaier & Mitu Gulati, *Necessity and the Covid-19 Pandemic*, 15 CAP. MKTS. L. J. 277 (2020).

³⁹ International Law Commission, *Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Article 25. Necessity*. 80 November 2001, Supplement No.10 (A/56/10), chp.IV.E.1.

⁴⁰ *Id.*

⁴¹ The defense is also a temporary one; it ceases to operate once the state of necessity has passed. ILC Articles, Article 27. *Consequences of Invoking a Circumstance Precluding Wrongfulness*.

Almost every sovereign debt crisis in our lifetimes has been caused in part by local mismanagement. Given that, the necessity doctrine should almost never be applicable.⁴² But that is, in a sense, the virtue of the doctrine – it is only applicable in the rarest of circumstances when the country in question is in dire need, is not at fault in causing the problem, and the counterparty would not be unduly harmed by the contract violation.

As we see it, the concern of any court faced with the question of whether to apply this doctrine will be verification. That is, that tribunals will be concerned about not being able to distinguish between true cases of necessity and fake allegations and the result will be errors and opportunism. The result though, to reiterate, will be that this doctrine will only get applied in the rare circumstances where conditions in a debtor state are so obviously bad that failure to ameliorate them will cause a humanitarian disaster and it is clear that those bad conditions were caused by some exogenous force.⁴³

The destruction caused by the Covid-19 pandemic, however, seems to satisfy the above conditions. It is hard to suggest that any emerging market nation was at fault in any way for causing the pandemic. One might argue at the margins about whether states took the right steps to deal with the pandemic and some have probably taken the wrong steps. But even the stupidest decisions were presumably made in good faith, with governments trying to balance economics and healthcare.

The key to a local court in either the US or the UK applying this doctrine, we suspect, will be whether the Official Sector, along with the governments of those jurisdictions, certify that these are conditions that warrant the applicability of the doctrine.⁴⁴ Absent such a certification, getting a local court to take the radical step of incorporating this doctrine is a tough ask.

The defense was recently the subject of litigation in the US, for the first time, in the *Casa Express Corp. v. Republic of Venezuela* case.⁴⁵ The case was decided against Venezuela on other grounds (primarily that there was no end in sight for the temporary relief that Venezuela was asking for). Important, for our

⁴² This has mostly been the reaction of tribunals when this defense has been raised in the context of sovereign defaults. See *France v. Kingdom of the Serbs, Croats, and Slovenes*, Judgment, PCIJ Series A no 14, ICGJ 260 (PCJI 1929), 12 July 1929, League of Nations Permanent Court of International Justice (historical), *PCIJ*, Series A- Nos 20/21, 1-89, at 38-42; Rev'd [2005] *CMS Gas Transmission Company v. Argentina*, ICSID Case No. ARB/01/8, Award, 12 May 2005, 44 I.L.M. 1205.

⁴³ Alan O. Sykes, *Economic "Necessity" in International Law*, 109 AM. J. INT'L L. 296, 306 (2015).

⁴⁴ We suggest this in Bolton et al., *supra* note 38.

⁴⁵ Case 1:18-cv-11940-AT (SDNY 2020).

purposes, however, is that the court did not reject the possible applicability of the necessity defense in a US domestic court in a situation such as that posed by Covid-19.⁴⁶ If the sovereign debtor is having to choose between paying international creditors or paying for a vaccine, the case for a necessity defense strikes us as plausible. International law scholar Alan Sykes writes:

Imagine a developing country facing a deadly tropical disease, and suppose that a costly cure has just been discovered. The government may then have an extremely valuable use for funds that it did not have before. Accordingly, to the list of economic exigencies plausibly justifying measures to conserve government funds, we might add certain scenarios in which the government experiences a new and pressing need for funds to address some unanticipated domestic emergency—a public health crisis, a natural disaster, and the like.⁴⁷

The last sentence of the quote raises an interesting question. What if the pandemic continues for some significant period of time? At some point, it will have lasted long enough that countries will have engaged in new borrowing; borrowing for which the argument that the pandemic was “unanticipated” cannot be made. The question then is whether the necessity defense would continue to apply. We think so, since there is nothing in the doctrine itself that says that it only applies to unforeseen contingencies. Further, the fact that one can foresee the possibility does not mean that one has enough information to be able to write a contract provision that covers it. In economic terms, the contract could still be incomplete.

Before moving to the empirical analysis, we pause to flag three unspoken premises of the foregoing analysis.

The first is the assumption that there is a need for air cover. A skeptic might reasonably wonder whether there will be any value to providing legal air cover by the time the next Covid-19 induced sudden stop hits. Put differently, will the economic situation have deteriorated so much that the only viable solution will be that of a full-scale restructuring?

⁴⁶ Judge Torres wrote:

Even assuming [the defense of economic necessity is] viable, and would apply to litigation of financial obligations that are expressly subject to New York state law, *they would not justify staying this litigation*. To be sure, the dire political, economic, and humanitarian situation in Venezuela may affect Defendant’s ability to satisfy a judgment. OFAC may wish to take that into account in deciding whether to issue a license permitting Plaintiffs to pursue Defendant’s property, and it may be a good reason for Defendant’s creditors to come to the negotiating table to discuss restructuring. *But at this stage in these cases, conditions on the ground in Venezuela do not require the Court to postpone the determination of the parties’ rights and obligations.*

Casa Express Corp. v. Bolivarian Republic of Venezuela, 18 Civ. 11940 (AT); 19 Civ. 3123 (AT) (SDNY, Sept. 30, 2020) (emphasis added).

⁴⁷ Sykes, *supra* note 43 at 314.

We think it too early to tell. However, assuming that turns out to be the case, we have two answers. First, debt restructurings take time to be worked out. Among other things, the debtor and its creditors need to figure out how much the debtor can pay, while also putting itself on a path to debt sustainability and a return to market access. And air cover will be needed during that period when the IMF or some other credible institution is making sustainability estimations. Second, solutions 2 and 3 (the UN Security Council Resolution and US Executive Order) discussed above, are ones that can be utilized for full scale restructurings. That was what they were used for in the Iraq case (where the immunity blanket was not lifted until almost all of the debt had been restructured). It also bears reiterating that the solutions above may need to be used as complements. It may be, for example, that the necessity doctrine will have to be invoked initially to buy time until solutions 2 or 3 can be put in place. Going back to the Iraq case, the UN Security Council Resolution global shield was put in place first and was then subsequently followed with a lesser shield in just the US.

Second, is our presumption that if creditors are stymied in the legal enforcement of their claims for an indefinite period, they will be more likely to join a debt restructuring.

But this is not a self-evident proposition. True, it happened in Iraq. But seven percent of Argentina's creditors after its 2001 default were prepared to wait fifteen years for a payout. Indeed, might we begin to see a new class of hibernation investor, perfectly prepared to slumber for as long as the legal constraint on enforcement lasts? Hedge funds would put these investments into side pockets attractive only to investors with a tolerance for long duration commitments. Currently, investors in hedge funds tend to want fast returns, but that could change if the returns to waiting are high enough.

The third unspoken premise of the foregoing is that the prospect of muting the legal rights and remedies of creditors will be a determinative motivation for sovereign debtors.

But a well-tutored sovereign borrower will know that the Argentine holdout creditors from 2001 only succeeded in bringing the country to the negotiating table through the *pari passu* maneuver.⁴⁸ Traditional legal remedies like attachment all misfired. Assuming that a well-tutored sovereign debt restructurer will

⁴⁸ For a discussion of the *pari passu* drama and how Argentina was brought to its knees, see e.g., Kathy Gilsinan, *65 Words Just Caused Argentina's \$29 Billion Default*, THE ATLANTIC (July 21, 2014).

not make that *pari passu* mistake again, is it likely that some sovereign debtors will take a "sue and be damned" approach to their legacy creditors?⁴⁹

III. Potential Market Penalty: A Greek Case Study

A concern regarding the options we discuss is that they could reduce the value of contractual commitments and hence have negative spillovers on the global debt market. The argument is simple: If investors find that their contractual rights are being disrespected, they will attach less value to them. Research also tells though that in situations where stronger creditor rights produce coordination problems, a weakening of those rights – under certain conditions -- can increase the value of investments.⁵⁰

In this section, we bring new evidence to bear on this issue by examining recent evidence on the sovereign debt market impact of the retroactive modification of local law Greek sovereign bonds by the Greek legislature (with the approval of the European authorities and the IMF) to make them easier to restructure.

This Greek “retrofit” was one of the most significant interferences with contractual rights ever in the history of the sovereign debt markets, and resulted in a brutal restructuring for creditors (aggregate NPV haircuts for investors in the range of 55-65%⁵¹). Given that the decision to take this radical step was a European decision, the question we explore is whether investors in the bonds of other European governments that shared vulnerability to a similar use of the retrofit technique (i.e., bonds under local law) began discounting the value of their debt instruments following the Greek “retrofit”, and following subsequent court decisions that upheld the retroactive modification of the local law Greek sovereign bonds by the Greek legislature.

We focus on the pricing of debt of other Eurozone peripheral borrowers following the Greek retrofit. The reason being that we are interested in understanding whether the precedent set by the Greek decision would

⁴⁹ For the sovereign that takes the foregoing path, the trick will be to figure out a structure that will allow such a sovereign to continue to borrow in the international capital markets during a period of default on legacy debts without running the risk of legacy creditors attaching the proceeds (assuming again that the *pari passu* risk can be avoided).

⁵⁰ E.g., Elena Carletti et al., *The Price of Law: The Case of the Eurozone Collective Action Clauses*, REV. FIN. STUD. (forthcoming 2020); Kay Chung & Michael Papaioannou, *Do Enhanced Collective Action Clauses Affect Sovereign Borrowing Costs?*, IMF Working Paper # 162 (2020); Aitor Erce, Mattia Picarelli & Xu Jiang, *The Benefits of Reducing Hold-Out Risk: Evidence From the Euro CAC Experiment: 2013-2018*, 14 CAP. MKTS L. J. 155 (2019).

⁵¹ Jeromin Zettelmeyer, Christoph Trebesch & Mitu Gulati, *The Greek Restructuring: An Autopsy*, 28 ECON. POL’Y 513 (2013).

have negative spillover effects on neighboring countries that were perceived to be at risk of financial distress. We are not exploring the immediate effect on Greece itself following the retrofit, because it is not possible to separate the direct effect of the retrofit itself from the underlying economic that caused the intervention.

Following Randall Kroszner's 1998 paper on the repudiation of the Gold Indexation Clause we test two opposing hypotheses.⁵² The first hypothesis is that the Greek retrofit precedent undermined sovereign debt markets of the Eurozone's periphery member-countries by paving the way for possibly other similar retroactive modifications of the debts of these countries. Expecting a higher likelihood of some form of disfigurement following the Greek retrofit, investors in these countries' bonds would demand a higher yield, as the many critics of Angela Merkel's and Nicolas Sarkozy's Deauville initiative on 19 October 2010 calling for a sovereign debt restructuring process had surmised. The opposing hypothesis is that the Greek precedent could pave the way for other similar debt restructurings in extreme debt overhang situations when restructuring provides needed relief and is preferable to a costly default or deflation. Under this hypothesis bond yields would narrow or remain unchanged.

Although predicted by the Deauville initiative critics and other commentators, we find no evidence of a discount being applied to the bonds of the so-called "peripheral" Euro area nations.⁵³

This finding is consistent with prior research on events such as the abrogation of the gold clauses. Our findings suggest that, if carefully done, ex post intervention in debt contracts in debt overhang situations far from undermining debt markets can sustain them by facilitating debt restructuring when it is needed.

In what follows, we begin by looking at the market effect of the passage of the Greek Bondholder Act of 2012 (that implemented the retrofit) and then study the market impact of the most prominent court rulings on the multiple challenges that investors brought against the Greek government's actions in Greek local courts, foreign sovereign courts, European courts and arbitration tribunals.

⁵² Randall Kroszner, *Is it Better to Forgive Than Receive? Repudiation of the Gold Indexation Clause in Long-Term Debt During the Great Depression*, CRSP Working Paper 481 (1998).

⁵³ For examples of angry commentary following the Greek restructuring, see e.g., Gemma Variale, *Why the Greek Bondholder Law is "Too Awful to Think About"*, INT'L FIN. L. REV. (Mar. 2012); James Mackintosh, *A Greek Bond Deal that Fall Foul of Fair*, FIN. TIMES (Mar. 17, 2012); Richard M. Salsman, *Greece's Disgraceful Debt Default – and Calls to "Euthanize" Bondholders*, FORBES (Mar. 20, 2012).

In all cases the legal claims of bondholders were rejected. Given the extreme nature of the actions that the Greek government took, this outcome was by no means assured, especially since many of the challenges were brought in non-Greek courts. Inasmuch as these rulings were a surprise for the market, they allow us to conduct multiple event studies that examine the European sovereign debt market reactions to these decisions. Drawing from the legal literature on this litigation, we focus on the following four key events.⁵⁴

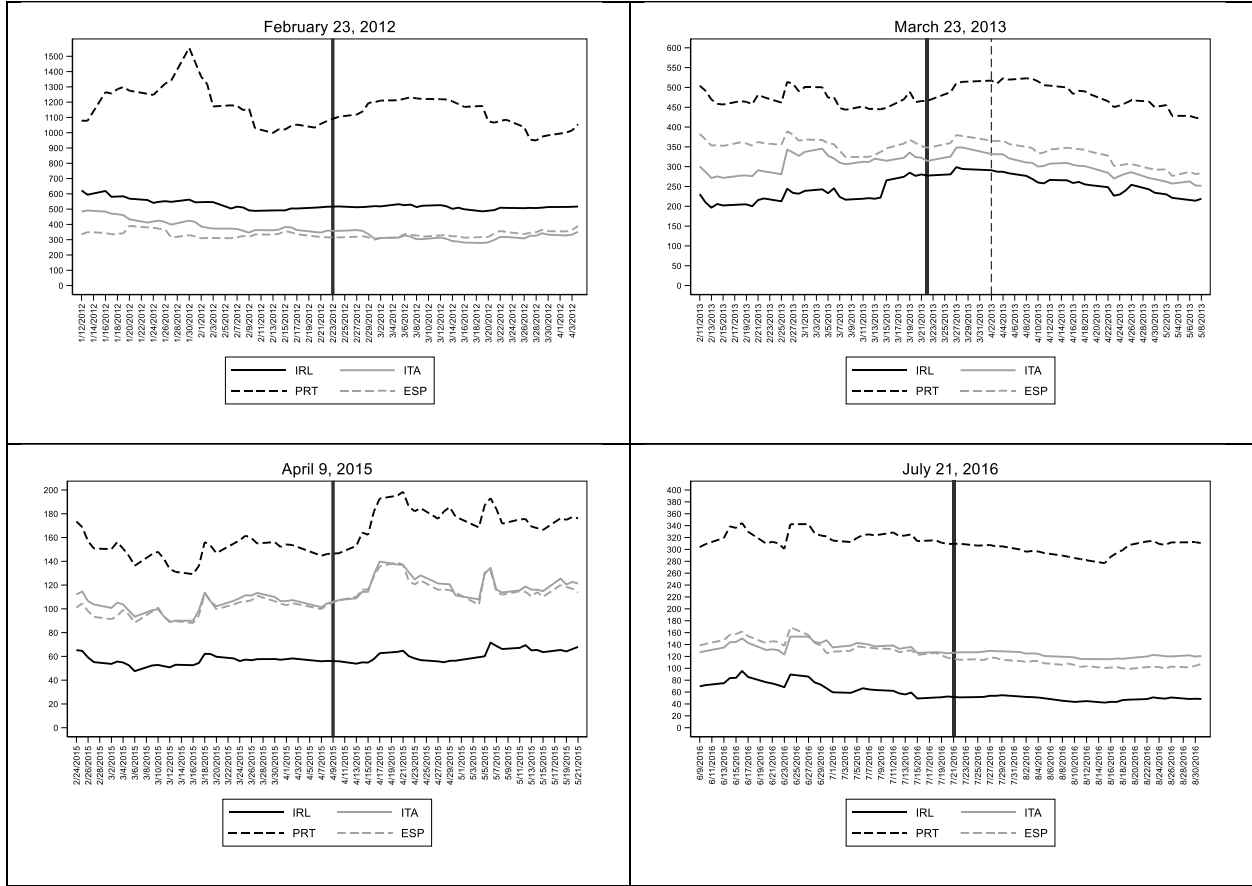
- I. February 23, 2012: Date of the legislative action (the Greek Bondholder Act) taken by the Greek government to retroactively insert “collective action clauses” in local-law governed sovereign bonds.
- II. March 23, 2013: Date of the Greek Council of State decision of affirming the legality of the Greek Bondholder Act of February, 2012 and rejecting investor challenges on expropriating/takings grounds.⁵⁵
- III. April 9, 2015: Date of the ruling of the tribunal formed by the International Centre for the Settlement of Investment Disputes (ICSID) on the arbitration cases brought by Postova banka and Istrokapital SE against Greece.
- IV. July 21, 2016: Date of the ruling of the European Court of Human Rights in the case of *Mamatas and others v. Greece*, again rejecting investor challenges on expropriation/takings grounds.

As a first step, we plot the spreads of Irish, Italian, Portuguese, and Spanish 10-year government bonds around the dates described above. Figure 2 shows the spread for a 60 trading day window centered on each of the foregoing episodes. Each episode is marked by a solid vertical line; in the top right panel we also mark with a dashed line March 31, which is the day the court decision was issued. The figure does not show any obvious jump in spreads around the events that we study.

⁵⁴ The key cases are identified in a number of articles analyzing the aftermath of the Greek retrofit. *E.g.*, Sebastian Grund, *Restructuring Sovereign Debt Under Local Law*, 12 CAP MKTS L. J. 253 (2017); Astrid Iverson, *The Future of Involuntary Sovereign Debt Restructurings: Mamatas and Others v. Greece and the Protection of Holdings of Sovereign Bonds Under the ECHR*, 14 CAP. MKTS L. J. 34 (2019); Yannis Manuelides, *Using the Local-Law Advantage in Today's Eurozone*, 14 CAP. MKTS L. J. 469 (2019); Alexandre Belle, *Mamatas and Others v. Greece, How the European Court of Human Rights Could Change Sovereign Debt Restructuring*, in NEW VOICES AND NEW PERSPECTIVE IN INTERNATIONAL ECONOMIC LAW 153 (2020). We also experimented with 9 less important events (see Appendix A for a full list of events) and obtained results which are in line with those described in the paper.

⁵⁵ Note that while the court indicated its decision on Saturday March 23rd, 2013, the decision was officially published on Sunday March 31st, 2013. We focus on March 23rd because there was no new information on the 31st.

Figure 2: Spreads of Irish, Italian, Portuguese, and Spanish 10-year Government Bonds



Next, we conduct a formal event study by focusing on a 33 trading day window around the episodes listed above (30 trading days before the episode and two trading days after the episode) and testing whether the change in spread around the episode was higher than the change in spread in the month that preceded the episode.⁵⁶ Formally, we estimate the following model separately for each of the four peripheral countries:

$$S_t - S_{t-1} = \alpha + \sum_{i=1}^5 \lambda_i L_i + \theta E + \sum_{i=1}^2 \phi_i F_i + \varepsilon_t$$

Where S_t is the spread on day t , L_i is a dummy variable that takes value 1 i days before the event, E is a dummy variable that takes value one on the day of the event, and F_i is a dummy variable that takes value

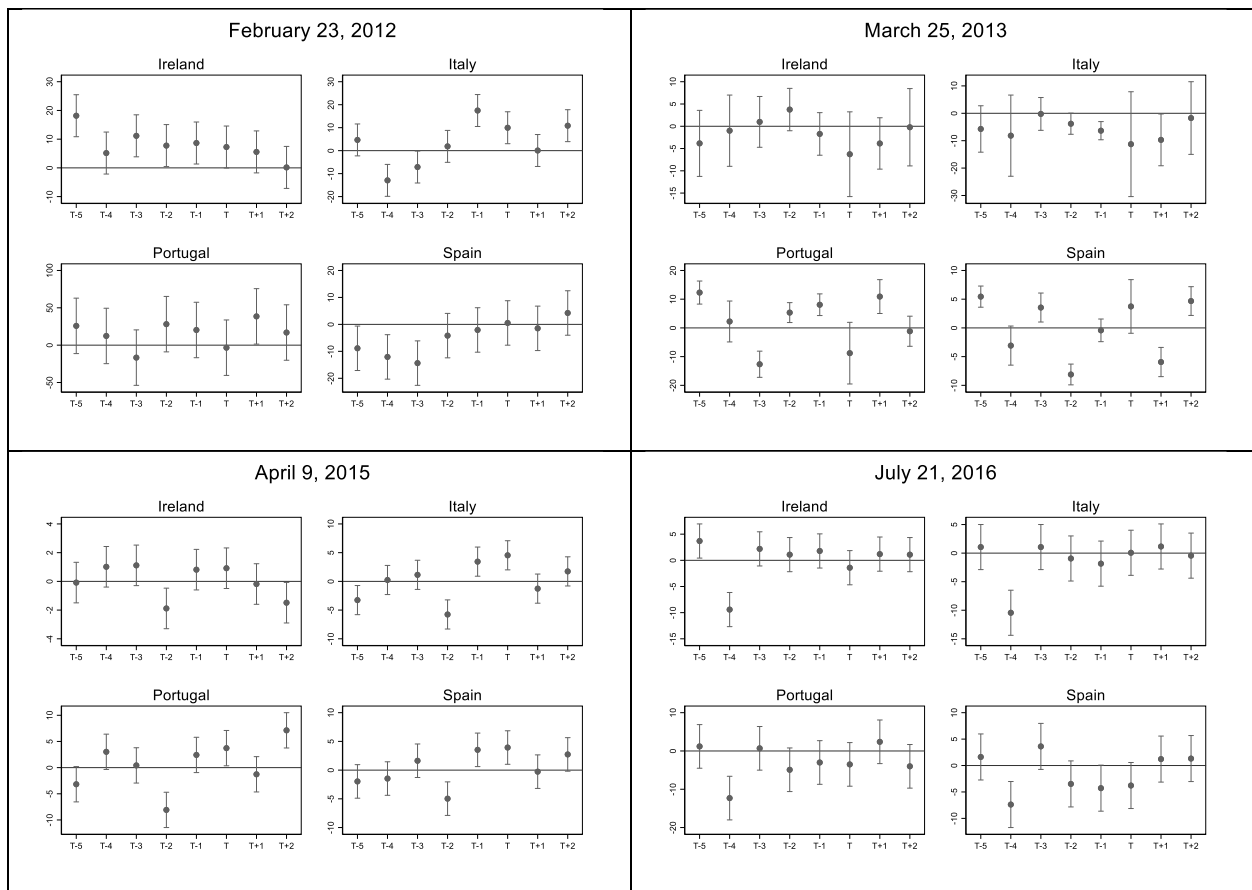
⁵⁶ We focus on the change in spreads, because spreads are often non-stationary.

one i days after the event. The parameters λ_i , θ , and ϕ_i show whether the daily change in spreads around the episode was significantly different from the pre-episode period.

Figure 3 reports the results of this exercise ($T - 5$ to $T - 1$ correspond to λ_i , T to θ , and $T + 1$ and $T + 2$ to ϕ_i) with both point estimates and 95% confidence bands.

While the coefficients are sometimes statistically significant, there is no clear pattern. Sometimes spreads increase, sometimes they decrease around the episode. However, the change is never large with no spike in spreads around the announcement dates (something that we already saw in Figure 2). Moreover, the difference in daily changes in spreads before and after the announcement dates is always small, ranging between -20 and 20 basis points in February 2012 and often between -5 and 5 basis points in the other episodes that we consider.

Figure 3: Change in sovereign spreads around the episode

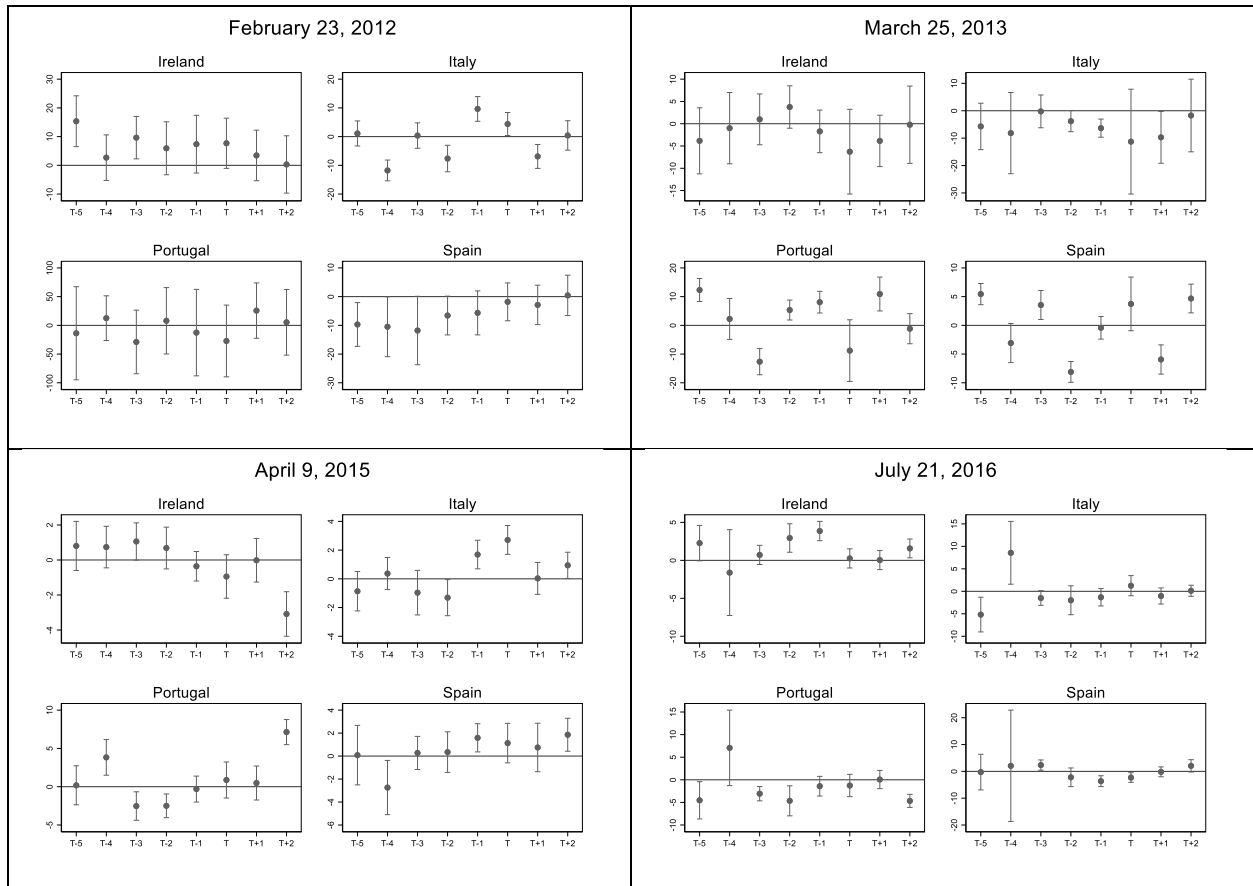


In Figure 4 we report the results of an exercise similar to that of Figure 3, but where we also control for the first two principal components of the spreads of the other countries plus Belgium and France. Specifically, Figure 4 is based on the following model:

$$S_t - S_{t-1} = \alpha + \rho_1 PC_1 + \rho_2 PC_2 + \sum_{i=1}^5 \lambda_i L_i + \theta E + \sum_{i=1}^2 \phi_i F_i + \varepsilon_t,$$

where, PC_1 and PC_2 are the first two principal components of the change in spreads of Belgium, France, and the three excluded countries (for instance, when we run the regression for Ireland, we compute the first two principal components of the change in spreads of Belgium, France, Italy, Portugal, and Spain).

Figure 4: Change in sovereign spreads around the episode, controlling for the first two principal components of the other countries plus Belgium and France



There are pros and cons in augmenting the model with PC_1 and PC_2 . The advantage is that this allows us to control for market conditions at the time, and hence provides a cleaner estimate of the parameters of interest. The drawback is that these controls could absorb the effect that we are trying to estimate. It is thus

reassuring that including these controls does not alter our baseline results: the events that we study do not seem to have any economically significant effect on Irish, Italian, Portuguese, and Spanish spreads.

Thus far, we focused on prices on the secondary market. A different way of coming at our inquiry is to look at the primary market. Specifically, at the ability of vulnerable Euro area countries to issue local-law government debt in the wake of the above-mentioned events.

For illustrative purposes, we look at the debt issuance patterns for Italy, a large (albeit vulnerable issuer) that as a historical matter has tapped both local and foreign markets. In particular, we looked at issuances of Italian 10-year Treasury bonds in the three months around the episodes we study. Table 1 suggest that these episodes are not associated with large changes in the issued amount, in yield and issuance, and bid-to-cover ratio.⁵⁷ We also note that Italy did not issue large amounts of foreign law bonds around the episodes that we study. In fact, they hardly issued any.

Table 1: Issuances of Italian Bonds (10-year BTP)

	Issuance (millions of euro)	Yield	Bid-to-cover Ratio
January, 2012	2,750	6.98%	1.36
February, 2012	2,200	6.08%	1.42
March, 2012	4,688	5.5%	1.40
February, 2013	3,500	4.17%	1.32
March, 2013	5,200	4.83%	1.65
April, 2013	3,096	4.66%	1.33
March, 2015	5,850	1.36%	1.53
April, 2015	2,875	1.34%	1.45
May, 2015	2,000	1.40%	1.59
June, 2016	2,875	1.83%	1.44
July, 2016	3,331	2.35%	1.35
August, 2016	2,855	1.83%	1.42

Source: Own calculations based on data from the Italian Treasury

⁵⁷ Over 1999-2014, the average bid-to-cover ratio for Italian 10-year treasury bonds was 1.59 with a standard deviation of 0.35, giving a 95% confidence interval of 0.89-2.29. See R. Beetsma, M. Giuliadori, J. Hanson & F. de Jong, *Bid-to-cover Ratio and Yield Changes Around Public Debt Auctions in the Euro Area*, ECB working paper N0. 2056 (2017). (<https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2056.en.pdf>)

One important consideration for our analysis is the policy stance of the European Central Bank, as its quantitative easing clearly affected Eurozone debt prices. Most of the episodes we consider took place after Mario Draghi's famous speech of July 2012 when the pressure on debt markets was somewhat alleviated by the commitment of the European Central Bank to do "whatever it takes" to save the Euro.

One of the episodes we study took place before Draghi's speech and, although the speech had a calming effect on the spreads of peripheral countries, it did not eliminate country risk. The spreads of peripheral countries after July 2012 bear witness to this. They were still above 200 basis points in 2013 and in most cases above 100 basis points in 2015 and 2016 (Figure 2). We also note that there were several events which did affect peripheral spreads even after Draghi's speech. For instance, the Italian spread jumped by more than 100 points in May 29, 2018 after revelations about the content of the government program agreed to by the Northern League and 5 Star coalition. These events further underscore that Draghi's speech did not fully eliminate country risk.

Even if spreads are influenced by central bank policy, and consequently it is not possible to perfectly isolate the spillover effects of the Greek retrofit, our finding that peripheral debt markets were not significantly negatively impacted do allay concerns that access to debt markets might be compromised following an intervention in debt contracts. For all practical purposes, it is not necessary to exactly isolate each effect. What matters is the ultimate effect on debt markets, and that effect will always be dependent on IMF and monetary policy. If, as is likely to be the case, authorities are more willing to offer support following a 'bail-in', then the prospect of such support should be included in the analysis of the overall effects of a retrofit.

We do not mean the foregoing to suggest that the Greek retrofit was wholeheartedly embraced by investors. In the period between March 2012 and September 2020, Greece itself, when it has had to go back to the debt markets in the wake of the 2012 restructuring, has only been able to issue foreign-law bonds. The same is true of Cyprus, another vulnerable Euro area nation. The point though is that neither the choice of the European authorities and the Greek legislature to use the retrofit strategy to deal with the crisis, nor the choice of the various adjudicatory bodies to uphold the legality of the retrofit, caused an increase in borrowing costs for vulnerable European countries.⁵⁸

⁵⁸ This is different from the phenomenon of local-law sovereign bonds carrying a risk premium as compared to foreign-law bonds of the same sovereign in the run up to a restructuring. That phenomenon follows from the fact that the latter are structurally senior to the former and, therefore, will likely be restructured more significantly. See Marcos Chamon, Julian Schumacher & Christoph Trebesch, *Foreign-Law Bonds: Can They Reduce Sovereign Borrowing Costs*, 114 J. INT'L ECON. 164 (2018).

Another interesting case study relates to the recent Debt Service Suspension Initiative (DSSI) promoted by the G20. Research by David Mihalyi, Valentin Lang, and Andrea Presbitero shows that countries eligible for debt relief experienced a larger decline in borrowing costs compared to ineligible countries, and that this decline is larger for countries that received more debt relief. As the authors point out, these results are not in line with view that “such debt relief could generate stigma and signal debt sustainability concerns.”⁵⁹

IV. Conclusion

Truly global crises with dozens of sovereign debtors defaulting at the same time are extremely rare events. Therefore, it is unsurprising that we have no mechanism to deal with such a circumstance in an orderly and speedy fashion. However, in the current context, the costs of not having a mechanism in place to deal with such an event are potentially catastrophic. Our paper puts forward, at best, some band-aids. But the need for a more comprehensive global mechanism has never been more urgent.

⁵⁹ David Mihalyi, Valentin Lang, and Andrea Presbitero, *Debt Relief, Liquidity Provision, and Sovereign Bond Spreads*, mimeo, The Johns Hopkins University, SAIS.

Appendix A: Additional Events

We also studied the behavior of peripheral spreads around the following events and, as with the events discussed in the paper, we did not find any evidence of a sudden increase of peripheral yields. In these robustness checks, we focused on the following dates. Note in particular the effects around the Austrian Supreme Court decisions, a foreign court where holders of Greek debt arguably had higher hopes of prevailing than in local Greek courts.

Date	Event
February 20, 2012	The Second Economic Adjustment Program for Greece, colloquially referred to as the 2nd Greek bailout, is finalized. The Troika asked Greece to ensure that private bondholders would agree to the restructuring.
May 20, 2014	Ruling by Austrian Supreme Court on case brought by holders of Greek sovereign bonds. The Austrian Supreme Court ruled that the Greek Bondholder Act was foreign legislation and thus had sovereign immunity from foreign court rulings. The decision had a caveat that in issuing its bonds, Greece could be considered a commercial actor, but that the plaintiff would have to prove Austrian jurisdiction over this case. Plaintiff ended up failing in this regard, and thus was not rewarded damages.
July 30, 2015	The Austrian Supreme Court rules on another case regarding Greek bonds. The court sided with the plaintiff's argument that the Greek Bond Act was not to be considered under sovereign immunity but rather was a commercial act. However, jurisdiction was once again the key issue and the court ruled that the plaintiffs could not establish jurisdiction for the court to rule on the matter.
October 7, 2015	Judgement delivered by the General Court of the European Union in the case of Accorinti and Others vs. ECB. Accorinti and Others alleged that the ECB had wielded its relative position with the Greek government during its debt restructuring to allow it to avoid the same losses that private bond holders would eventually suffer, in direct violation of international law. The General Court ruled in favor of the ECB, dismissing the suit and ordering the claimants to pay the costs.
November 25, 2015	Another case brought before the Austrian Supreme Court. The Supreme Court ruled again that while Greece could be considered a commercial actor at the time of issuance, jurisdiction under the Brussels I Regulation would have to be proven, specifically regarding the "place of performance" for the Supreme Court to be able to render a ruling.
March 8, 2016	In a case brought by several German bond holders against Greece's debt restructuring in 2012, the Federal Court of Justice of Germany ruled against the plaintiffs, writing that as a sovereign actor and having utilized powers unique to one such position in its enactment of the Greek Bondholder Act, the court could not render and enforce its judgement on internal sovereign affairs of Greece.
April 15, 2016	The German Court of Appeals Oldenburg rules that the commercial nature of bond issuance could not be annulled by virtue of retroactive legislation. However, the ruling is not in favor of the plaintiffs, as the plaintiffs, not having received the bonds directly from the Greek government but rather through proxy, were not the consumers in this situation.
July 7, 2016	The German Court of Appeals Schleswig rules that a sovereign power, no matter its actions, will always remain a sovereign entity. Thus, the court could not rule in a case regarding legislation passed by another power.
May 6, 2020	The plaintiffs from the previous Federal Court of Justice case filed a constitutional complaint with the Federal Constitutional Court in response to the Federal Court of Justice's decision to drop the case on the grounds of sovereign immunity without consulting the Federal Constitutional Court. The Federal Constitutional Court rejected this complaint, concurring with the Court of Justice in their interpretation of sovereign vs non-sovereign acts, and affirming that the Court of Justice did not create any new international law or rule but applied an already existing one.