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Debt Restructuring in the Euro Area: How Can Sovereign Debt Be Restructured more Effectively?

by Christoph Große Steffen and Julian Schumacher

The International Monetary Fund (IMF) stated in spring of this year that a more timely restructuring of Greece’s sovereign debt would have been beneficial. But what are the available options for early debt restructuring? The report argues that current reforms in the Euro area, in particular, introducing collective action clauses, are unlikely to be sufficient in their present form. Alternatively, a statutory solution in the form of an international or European insolvency regime for sovereign states is difficult to implement politically. Therefore, the contractual approach to debt restructuring should be facilitated by redesigning future contracts for bonds in the euro area. Specifically, more powerful collective action clauses should be included in bond contracts and the ratable payment provision of all creditors should be reformed in order to limit the impact of legal disputes in the event of a debt restructuring. This approach would simplify future debt restructuring operations and make the no-bailout rule more credible, thus re-activating the disciplinary effect of interest rates on governments.

Public debt levels in the euro area have increased enormously from 2007 to 2013 and are projected to stay at elevated levels over the coming years (see Figure 1). The rise in public debt is primarily due to two factors. First, the number of bank bail-outs during the financial crisis led to an increase in public sector liabilities. Second, economic stimulus packages and the use of automatic stabilizers in the course of the Great Recession were contributing to high and persistent public deficits. Furthermore, debt levels were already elevated in Greece and Italy before the crisis.

As a result, four member countries of the Monetary Union ran into financial difficulties: within one year from May 2010 to May 2011, Greece, Ireland, and Portugal lost access to the international capital market and had to be supported by lines of credit from European partner countries and the International Monetary Fund; Cyprus followed in May 2013. The European Monetary Union was completely unprepared to cope with the national debt crises. In particular, it had no arranged framework to deal with the insolvency of a member state. Restructuring the debts of the affected crisis countries was therefore a high-risk strategy. The danger was that the euro would break up as a currency union due to cross-border contagion effects. For a long time, the European partners’ only means of preventing this was short-term liquidity assistance. While this was buying necessary time, this strategy would sooner or later result in costly transfer payments in the event of unsustainable debt levels. As a result, there is a particularly serious moral hazard in the euro area because the crisis countries

1 The present article is part of a series of DIW Wochenbericht reports dealing with the elements of a strategy to institutionally restructure the Monetary Union. See F. Fichtner, M. Fratzscher, M. Podstawski, and D. Ulbricht, “Making the Euro Area Fit for the Future,” DIW Economic Bulletin, no. 24 (2014).

have an incentive to shelve efforts for more budgetary discipline to better buffer adverse shocks while more solvent countries engage in international financial aid packages to shield themselves from adverse spillovers.

**Statutory Insolvency Regime for States Implies Economic Trade-offs**

One alternative to the bailout policies implemented in the crisis would be a European debt restructuring framework, that is, an explicit legal regulation in the event of a sovereign default that bails in sovereign creditors. While such institutional frameworks have been called for after each sovereign debt crisis over the past three decades, its implementation has so far failed due to political resistance—particularly owing to the economic trade-offs associated with an insolvency framework of this kind. The pros and cons to this approach cannot easily be assessed in practice. The reason for this lies in the specific nature of sovereign debt which can be difficult to legally assert in the event of payment default.

Therefore, the repayment of debts and interest of a sovereign state might be prone to opportunistic behavior in the form of a state repudiating a large part of its debt by means of a debt haircut. In practice, however, the loss of reputation, negative trade effects, the high costs of legal disputes, and the impact on the financial system usually prevent strategic payment defaults. These disciplining factors make it possible for the country to accumulate debt at comparatively low-interest payments despite the legal uncertainty for investors. An insolvency regime might therefore lead to higher financing costs in the euro area. A future restructuring regulation should consider both effects: the costly restructuring of sovereign debt or unpleasant bailout policies conditional on a future crisis and the interest rates countries face when the institutional setting changes.

There is a disparity in the euro area at present: the ex post costs accompanying a debt restructuring outweigh the positive disciplining ex ante effects of these costs. In particular, financial sector linkages in advanced and financially developed economies as in the euro area lead to

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1. Calculated assuming a recovery rate of 50 percent. Sources: Bloomberg; calculations by DIW Berlin.
2. Calculated assuming a recovery rate of 50 percent. Sources: Bloomberg; calculations by DIW Berlin.
very high overall economic costs. Certainly, these costs ensure that the probability of default is lower from the creditor’s viewpoint, which is why a state can accrue debt at lower interest rates. However, this incentive problem leads to the problem of overborrowing in the euro area—and since the welfare losses incurred in the event of a disorderly debt restructuring ought to outweigh the advantages of favorable interest rates by far, an insolvency regulation for the euro area would be particularly advantageous.\(^8\)

Attempts to make debt restructuring easier in the future do not seem to have brought about a noticeable rise in national financing costs; on the contrary, the probability of a default occurring is currently once more at an all-time low (see Figure 2). This is primarily because of the implicit bailout guarantee of the ECB, whereby the euro as a currency and the Monetary Union are to be retained in their current form. Certainly, the explicit pricing of a debt restructuring scenario would better reflect the actual risks in the European sovereign debt market with heterogeneous debt levels. In the short term, however, a return of financial market turbulence cannot be completely ruled out in the euro area in response to a premature introduction of an insolvency statute for states. In particular, the resulting higher perceived risks from government bonds from the crisis countries could lead to a renewed rise in risk premiums that render current debt levels unsustainable.\(^9\)

**Rescue Policy for Euro Countries Has Time-Inconsistency Problem**

The rescue policy for the euro countries also has an additional problem which is evident in the case of Greece: funds made available by international backers in 2010/11 were used to pay off Greek bonds with short maturities in full such that these holders did not contribute to the debt restructuring of 2012.\(^{10}\) As a result, funds from the European Financial Stability Facility (EFSF) were effectively used as a bailout. As the legal successor of the EFSF, the European Stability Mechanism (ESM) will therefore take on the loans, which according to its own statutes it ought never to have spent because it is only entitled to ease liquidity bottlenecks and which fundamentally presuppose sustainable debt levels. This problem persists and is coupled to any form of assistance given in the event of liquidity bottlenecks which later turn out to be cases of insolvency. Effective bail-in elements are lacking at present—that is, mechanisms that would shift liability back to the creditors—meaning the ESM will always agree in hindsight to a bailout due to the time-inconsistency problem (see Box 1).\(^{11}\) This has two substantial disadvantages. First, the insufficient control function of the financial markets will continue to undermine decisions made by national governments in the euro area relating to indebtedness. Second, this compounds coordination problems for creditors because, given the prospect of loans being fully repaid, there are incentives for spurning an offer of debt rescheduling.

**Coordination Problems among Creditors and Holdouts Increase Costs of Debt Restructuring**

There are two cases in which coordination problems may occur for creditors.\(^{12}\) In the first case, a group cannot agree on a reasonable restructuring offer for an illiquid or insolvent government. In the second, a small group refuses a restructuring offer (holdout creditors), and insists on being paid the original nominal value instead, with the expectation of improved solvency due to the debt reduction. This free riding behavior can then lead to the remaining creditors, for whom the deal would have been favorable, no longer agreeing to it.\(^{13}\) Agreement is then prevented in certain circumstances, or certainly made more difficult or delayed.\(^{14}\)

As a result, coordination problems between creditors force up the costs of debt restructuring and therefore

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9 In this context, reference should be made to a meeting on October 19, 2010 between Merkel and Sarkozy in Deauville, France, where they agreed there must be bail-in elements for private creditors in connection with ESM financial aid. It is, however, contentious as to whether the simultaneously turbulent financial markets were actually caused by this statement; see A. Mody, “The ghost of Deauville,” voxeu.org/article/ghost-deauville, (2014).
14 Famous cases include NML vs. Argentina, in which the 2005 debt restructuring had to be postponed by several months due to seizures by holdout creditors; another example is in Peru where the Brady debt restructuring in the 1990s was initially attacked by US banks and later by the Elliott hedge fund.
have a negative effect on the euro area as a whole by amplifying potential spillover effects. There are, however, at least two options to defuse these coordination problems. First, this could be achieved by adding debt restructuring clauses to contractual documentation when issuing new sovereign bonds, making it easier for creditors to coordinate in the event of insolvency.

Second, statutory elements could be set up to prevent holdout strategies. Additional elements that could reduce the coordination problem include minimum participation constraints (in which a debt restructuring can only be implemented if a large majority of creditors participates) as well as exit consents (in which the non-reserved matters are changed), see Bi et al., “The problem that wasn’t.”

According to the payout matrix (see Table), it is evident that there are two Nash equilibria. If the creditors choose a credit extension and therefore make concessions to the creditor country, they receive 80, while the debtor country receives 50, i.e., the difference between the total value and the creditor payment. The total value of 130 is maintained in the rollover scenario. However, if creditors decide against a credit extension, it makes sense for the ESM to agree to a bailout. In the case of a seizure, the creditor receives 100 since the ESM underwrites full payment. The debtor receives the remaining 30, less 5 for the macroeconomic adjustment program which it has to retain in the event of financial aid. If the creditors decide in favor of a seizure and the ESM does not provide a bailout, then the creditor only receives the available securities of 40. The debtor country is subject to a disorderly sovereign default and is punished by high economic costs and contagion effects due to the payout of 0.

From the ESM’s perspective, it would now be optimal to coordinate the Nash equilibrium in the top left. However, this is not possible, assuming that creditors are able to choose their strategy first (first-mover advantage) and decide not to extend the loans. In this case, the ESM strategy of not offering bailouts is implausible and therefore time inconsistent. Since it only has the choice between payouts of 0 (no action) and 25 (bailout), it will opt for the bailout, although this is not its preferred equilibrium. If the creditor has all the information about the game, there is only one dominant strategy: in the event of a liquidity crisis, the creditor will never extend the loan and the ESM will always agree to a bailout.

**Current Collective Action Clauses Inadequate**

Investor coordination problems have occurred much more frequently in sovereign debt restructurings since the early 1990s. While the aggregated participation rate in restructuring measures remains high, holdout creditors have increasingly legally contested debt restructuring.

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**Box 1**

**ESM Liquidity Assistance and the Problem of Time Inconsistency**

The time-inconsistency problem of the European Stability Mechanism (ESM) can be illustrated using a simple game-theory example. Suppose a member of the Monetary Union gets into financial difficulties but remains solvent. The actual value of all assets is 130. However, due to the illiquidity of the country, the assets only have a market value of 100. In the game scenario, it is now a question of splitting the value of the assets between the creditors on the one hand, and the debtor government and the ESM on the other. Suitable courses of action are: creditors can either extend their loans or seize the outstanding amount. In turn, the ESM can issue a rescue loan (bailout) or do nothing.

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**Table**

<table>
<thead>
<tr>
<th>Payout Matrix</th>
<th>ESM/Debtor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No action</td>
</tr>
<tr>
<td>Creditor</td>
<td></td>
</tr>
<tr>
<td>Credit extension</td>
<td>(80,50)</td>
</tr>
<tr>
<td>Seizure</td>
<td>(40/0)</td>
</tr>
</tbody>
</table>

Source: M. Miller and I. Zhang, “Sovereign liquidity crises.”

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1 The example shown here is taken from an analysis by Miller and Zhang, “Sovereign liquidity crises,” and applied to the case of the ESM.

15 Additional elements that could reduce the coordination problem include minimum participation constraints (in which a debt restructuring can only be implemented if a large majority of creditors participates) as well as exit consents (in which the non-reserved matters are changed), see Bi et al., “The problem that wasn’t.”


17 Moody’s, “The Role of Holdout Creditors and CACs in Sovereign Debt Restructurings,” Special Comment (2013).
ings. The Greek government is fighting lawsuits despite the fact that the 2012 debt restructuring involved the vast majority of creditors.

In order to simplify future debt restructurings, in March 2011, the European Council stated its intention to include Collective Action Clauses (CACs) in all contractual documentation for new bonds (see Box 2). This was later included in the ESM treaty and implemented from the start of 2013 for all new bond issues in the euro area. Previously, European sovereign bonds did not usually include CACs. Emerging countries, on the other hand, have increasingly been using these clauses for at least the past decade. However, the clauses often only encompass investors in individual bonds. This can lead to holdout creditors blocking a debt restructuring despite the presence of CACs. To circumvent this problem, the new Euro-CACs propose two voting options which can be presented to the creditors: apart from a traditional bond-specific vote, in which 75 percent of creditors must vote on each bond, it is also possible to implement an aggregated vote on multiple bonds. If this option is chosen, changes to the reserved matters of a bond become binding for all investors if two majorities are reached: three-quarters of the aggregated nominal value of all outstanding bonds and two-thirds of the nominal value of individual bonds.

If a two-thirds majority is not reached for the second group, however, the bond will not be completely restructured even if a three-quarters aggregate majority is reached. Bond-specific participation rates of less than two-thirds are not unusual, particularly for large restructurings with many separate securities (see Figure 3), even though all debt restructurings in the past 15 years have achieved aggregated agreement rates of over 75 percent.

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**Box 2**

**Key Elements in Bond Documentation**

**Collective Action Clauses (CACs)**

Bonds containing CACs permit, at the request of the issuer, changing certain reserved matters with a qualified majority of investors for the entire body of creditors, including those who do not agree to the change. The reserved matters usually include terms of payment, such as the nominal value and interest of a bond, and also other fundamental points concerning the value of the bond, including date and place of payment, and place of jurisdiction. A typical CAC could, for example, allow a reduction of the nominal value for all creditors if at least 75 percent of a quorum of 50 percent of all investors agrees.

**Equal Treatment Clauses (Pari Passu)**

Pari passu (“equal footing”) clauses promise an “equal” treatment of the various creditor classes within a defined group of debt types. In a much-publicized order in the case of NML Capital vs. Republic of Argentina, a US court decided, however, that such clauses also imply pro-rata payments to all creditor classes. Thus, holdout creditors would receive the full value of their claims, as long as investors who participate in a restructuring get the full value of their new, reduced claims. However, the exact wording of the clause varies considerably between countries and consulting law firms. Not all formulations impose an obligation to make pro-rata payments.

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19. Slovakian and Cypriot banks have initiated legal proceedings against Greece at the World Bank arbitration court (International Centre for the Settlement of Investment Disputes, ICSID) see Poštová banka, a.s. and Istrokapital SE v. Hellenic Republic, ICSID Case No. ARB/13/8. The case was accepted by the ICISD for consultation. At present, it is still hearing evidence. A group of small investors brought an action before both German and Greek courts; these have so far been rejected in the first instance, however.


21. With exception of the bonds issued under English law.

22. For example, consider a country that wants to restructure three bonds with the same nominal value and a CAC majority of 75 percent, and that achieves a 95-percent majority on two bonds and a 70-percent majority on the third bond. Without aggregation, only the two first bonds can be fully restructured. 30 percent of the third bond would remain unstructured despite an aggregated participation rate of 86.7 percent.
DEBT RESTRUCTURING IN THE EURO AREA: HOW CAN SOVEREIGN DEBT BE RESTRUCTURED MORE EFFECTIVELY?

Even though the costs of introducing CACs might initially seem low (see Figures 4 and 5), they can lead to higher interest costs under certain circumstances. For bonds issued under domestic laws, governments could change the conditions retrospectively through legislation even without CACs. Given the problems mentioned above and the potential costs, the question arises as to why the member states of the euro area have embarked on this reform in the first place. Some observers have argued that they mostly serve symbolic value and signal that future restructurings should continue to be organized ad hoc—not in the form of an institutional framework.

Opportunities within an Institutionally Restructured Euro Area

Since contractual changes for sovereign bonds to date have not been able to solve all coordination problems among creditors, additional precaution needs to be taken to make debt restructuring legally possible—that is to say, an insolvency regime should be introduced.

Numerous proposed designs for such a regime in the euro area have already been developed. Recent suggestions include the PADRE plan, the VIPS proposal, and a proposal for a European Crisis Resolution Mechanism. There are also discussions about introducing additional instruments that go beyond restructuring clauses and explicitly include converting fixed claims.


While bonds issued under Greek law (with aggregated CACs) achieved a participation rate of 100 percent, the participation rate for bonds issued under foreign law was significantly lower at 71 percent. Many Argentine bonds could also only be rescheduled at least 75 percent in 2005.

remaining time to maturity of outstanding sovereign bonds from euro countries is, on average, almost seven years, and significantly longer in some countries: for instance, Greece, Ireland, Italy, and Spain currently have outstanding bonds with a time to maturity of at least 25 years.


25 Greece was able to retrospectively add CACs to its bonds using this method, see J. Zettelmeyer et al., “The Greek debt restructuring.” This might also have implications on the borrowing costs in times of crisis, see M. Chamon, J. Schumacher, and C. Trebesch, “Foreign Law Bonds: Can They Reduce Sovereign Borrowing Costs?” (computer printout, Humboldt Universität zu Berlin).


27 For an overview of the history of ideas, see Rogoff and Zettelmeyer, “Bankruptcy procedures for sovereigns.”


23 Average terms: ESCB, Eurostat, and national data; longest terms: Bloomberg.
DEBT RESTRUCTURING IN THE EURO AREA: HOW CAN SOVEREIGN DEBT BE RESTRUCTURED MORE EFFECTIVELY?

Figure 4

Returns on Bonds with and without CACs

In percentage points

Spain

6.0

5.5

5.0

4.5

4.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

Without CAC: 6% due January, 2029 (ES0000011868)
With CAC: 5.15% due October, 2028 (ES00000124CS)

Italy

5.0

4.5

4.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

Without CAC: 4.75% due August, 2023 (IT0004356843)
With CAC: 4.5% due May, 2023 (IT0004898034)

Portugal

8

7

6

5

4

3

2

1

0

Without CAC: 4.95% due February, 2024 (PTOTEAOE0015)
With CAC: 4.5% due January, 2023 (PTOTEAEO0021)

Sources: Bloomberg; calculations by DIW Berlin.

Figure 5

Interest Premium for Bonds with Restructuring Clauses

In percentage points

0.3

0.2

0.1

0.0

Portugal

0.1

0.2

0.3

Spain

Italy

Sources: Bloomberg; calculations by DIW Berlin.

Interest premiums on bonds with CACs are low in the euro area.

into liable capital.\textsuperscript{31} Automatically extending maturities might also be considered.\textsuperscript{32}

The current political and thematic debate on this issue has not yet been concluded. While the financial industry highlights the success of the contractual approach and expresses concerns about statutory restructuring regimes,\textsuperscript{33} others have stressed the need for more institutional solutions particularly for the euro area.\textsuperscript{34} A practicable compromise could be a reform proposal by the Committee for International Economic Policy and Reform (CIEPR), which would allow effective debt restructuring with minimum intervention.\textsuperscript{35} The proposal is based on the idea of extending ESM regulations so as to give countries wide-ranging legal immunity. This would enable them to overcome the holdout problem in a restructuring. As a pre-condition, the ESM would attach different financing conditions depending on the


\textsuperscript{34} Christophe Paulus, A Debt Restructuring Mechanism for Sovereigns: Do we need a legal procedure? (Munich: 2010).

debt level of the crisis country. In particular, a highly indebted member country with a sovereign debt to GDP ratio of more than 90 to 100 percent could only gain access to ESM funds if it imposes a sufficiently high debt haircut on its private creditors and, in addition, accepts a macro-economic adjustment program, as already stipulated in the existing ESM treaty.

The advantages can be summarized in three points. First, any insolvency delay would be prevented and the ESM strengthened as a bridge for liquidity bottlenecks. Second, the possibility of organized and preventative restructuring would reduce the economic costs of a debt crisis. Third, it would re-establish necessary market mechanisms counteracting the problem of excessive indebtedness in the euro area in advance.

**Legislation Changes Could Prevent Blocking by Private Investors**

The national economies of Europe and, in particular, the euro area are not only strongly financially integrated but also through with respect to inner-European trade. In addition to capital flows, trade revenues are frequently targeted for attachment by holdout investors. Internal European capital and trade flows could be made immune from seizures by amending the ESM treaty for countries in a program. A precedent case for such a measure took place in 2003: the restructuring of sovereign debts in Iraq, when the United Nations adopted a resolution which protected incomes from oil exports against seizures by private creditors.

Conditional on defaults, courts usually award full judgments to litigating creditors. The enforcement of such judgments, however, is often difficult and protracted. This makes the option of rejecting a debt restructuring unattractive to many investors. The most recent interpretation of the pari passu clause in the lawsuit between Argentina and its creditors could change this trade-off substantially, however, since the blocking of payment flows offers holdout plaintiffs a relatively simple and, at the same time, effective leverage to enforce judgments or force countries into a settlement (see Box 4). Particularly in the euro area, with its strongly integrated payment flows, a blockade of this kind would provide compelling leverage.

This risk could be reduced through legislation changes in the financial centers of Europe to protect payment flows against blockades or seizures by investors. Belgium, headquarters of clearing company Euroclear, amended the relevant legislation ten years ago. Similar legislative amendments—particularly in the UK, Luxembourg, France, and Germany—would minimize the risk substantially.

**Contractual Changes and Improved CACs**

In a much-publicized reform proposal, representatives of the financial industry body International Capital Markets Association (ICMA) recommended changes to two key elements of government bond documentation in August 2014. In addition to a stronger aggregation feature in CACs, a new formulation of the pari passu clause is supposed to exclude the interpretation of pro-rata payouts to exchange and holdout creditors.

The suggested CAC formulation is similar in many respects to the Euro-CACs, but contains an additional, third voting option. This option allows a restructuring to be imposed on all creditors if an aggregate majority of 75 percent of the total nominal value of the outstanding debt agrees to it. Even if individual bond series refuse the proposal completely, investors cannot prevent an exchange, as long as they do not represent at least 25 percent of the total debt.

A pari passu clause similar to the recent ICMA proposal, which explicitly excludes a pro-rata payment in the event of a debt restructuring would result in a significant mitigation of the risk of payment flow seizures or blockades. The current practice of employing im-

36 J. Schumacher et al., “Sovereign defaults in court.”
38 L. Buchheit, et al., “Revisiting sovereign bankruptcy”; see also U.N. Resolution 1483.
proved collective action clauses is inconsistent. While Armenia, Belize, and Italy, inter alia, have amended the legal structure of their bonds to a less capacious formulation, many other countries have not made any changes. A more consistent formulation in which pro rata payment of creditors is not required would significantly reduce the risk of adverse interpretations as in the Argentine case in future debt restructurings.

Conclusion

Given that public debt in the euro area is still high, future debt restructurings cannot be ruled out. Due to existing coordination problems among private creditors, such sovereign debt restructurings also come with significant inefficiencies. This applies in particular to the euro area with its strong economic and financial integration.

The reforms carried out so far are not sufficient to prevent these inefficiencies. Easy-to-implement institutional changes, in particular protecting trade flows and institutions of the payment system against blockades by private creditors, should therefore be combined with more extensive contractual amendments with improved CACs. Introducing stronger collective action clauses with aggregated voting thresholds and relaxing the pari passu equality clause might significantly reduce coordination problems among creditors, thus making sovereign debt restructurings easier in the future. A more far-reaching and possibly institutional restructuring framework for states in the euro area is desirable and should be implemented in the course of amendments to the ESM Treaty.

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45 For Italy, see www.creditslips.org/creditslips/2013/04/italys-pari-pas-su-scrubbing.html; the different formulations can be found in the Fiscal Agency Agreements from 2003 and 2013, www.sec.gov/Archives/edgar/data/52782/0000115697303000912/u46221exv99wa.htm and www.sec.gov/Archives/edgar/data/52782/000019312513038559/d475398dex99a.htm. For Armenia, see documentation for bond XS0974642273; Belize, USPI6394AG62.

46 Among others, Costa Rica, Ivory Coast, Mongolia, Rwanda, Serbia, and Ukraine, ftalphaville.ft.com/2012/12/06/1298193/all-of-this-has-happened-before-and-will-happen-again-sovereign-pari-passu-edition/.