Sovereign Debt Restructurings: A Survey on Concepts, Trends, Empirics, and Theory*

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Abstract

Many sovereigns have issued external debt held by private creditors abroad. Sovereign debt restructurings might take place not only after sovereigns suffer a debt crisis but also preemptively without missing payments. The current paper provides a survey covering basic concepts and trends, empirics, and theory. First, we define concepts and the process of sovereign debt restructurings and overview recent trends in the last decade. Second, we explain empirical findings and theoretical implications on three issues: (i) the process and outcomes under preemptive debt restructurings; (ii) how business and financial cycles in creditor countries affect the process and the outcome of debt restructurings; and (iii) impacts of debt restructurings on the domestic economy and future borrowing.

Keywords: sovereign debt, external debt, sovereign default, debt restructuring
JEL classification: F34, F41, H63

I. Introduction

During 2010–20, a total of 17 private external debt restructurings have occurred, covering not only emerging markets (EMs) and low-income countries (LICs), but also advanced market (AM) economies. Typically, countries experiencing a sovereign debt restructuring suffer various adverse effects on the economy (e.g., GDP growth decline, reputational losses, deterioration in credit ratings, etc.). Therefore, it is important to assess the costs and un-

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derstand the mechanisms leading to the changes.

Both academic research and policy discussion have provided a better understanding of issues on sovereign debt restructurings. In academic research, three strands of literature—concepts and trends, empirical analysis, and theoretical analysis—have grown rapidly providing insights into the process of debt restructurings and its common implications. The current paper attempts to shed light on sovereign debt restructurings along all three of these strands. For all strands, we particularly focus mainly on three dimensions: (i) restructuring strategies, (ii) role of creditor committees and chairs, and (iii) costs of restructurings.

Several recent studies provide surveys on debt restructuring. For example, Das, Papaioannou, and Trebesch (2012) summarize basic concepts and provide overview of sovereign debt restructurings. Tomz and Wright (2013) and Asonuma, Erce, and Sasahara (2018) provide a survey of empirical literature on sovereign debt and debt restructurings. Aguiar and Amador (2014) and Aguiar et al. (2016) summarize theoretical analyses on sovereign debt.[1] However, to our knowledge, no article provides a comprehensive survey on all three dimensions of sovereign debt restructuring showing on how these three dimensions are mutually related and linked.

To fill this gap, we provide a comprehensive survey on basic concepts, recent trends, empirical findings, and theoretical implications.[2] In particular, the paper covers the following issues:

- *Concepts*: Definitions of default and debt restructuring, the process of debt renegotiation, the establishment of a creditor committee and selection of committee chairs.
- *Recent trends*: Prominent features of recent sovereign debt restructurings in 2014–20.
- *Empirical findings*: Stylized facts on restructuring strategies, the role of the creditors, i.e., chairs and committees on debt restructurings, and costs of debt restructurings.
- *Theoretical implication*: Theoretical explanations on a choice of restructuring strategies, the mechanisms of how creditors may influence debt restructurings, and how restructurings result in different costs.

In addition, we cover recent related studies on empirical and theoretical analysis. The current paper is aimed to serve as an introductory overview for a wide range of audiences including academics, policymakers, and financial market participants. For this purpose, we provide more intuitive and general explanations and refrain from technical and detailed discussions.

The rest of the paper is structured as follows: Section II defines various concepts, explains debt restructuring strategies and processes, and summarizes recent trends. Sections III, IV, and V provide both empirical findings (i.e., stylized facts) and theoretical implications on three aspects of debt restructurings: restructuring strategies, the role of creditors,

[1] Ams et al. (2020) provide a survey on development of IMF policies on sovereign debt and IMF (2020) proposes various reforms to the current legal framework.

[2] This current paper reviews previous studies on restructurings of privately-held *external* debt. For previous studies on restructurings of privately-held *domestic* debt, see Reinhard and Rogoff (2011), D'Erasmo and Mendoza (2016), and Erce and Mallucci (2018).

i.e., chairs and committees, and outcomes of restructurings. Section VI briefly summarizes our discussions.

II. Definition, Process, Recent Trend of Debt Restructurings

II-1. Definitions

We start by defining and explaining the following concepts: sovereign default, debt restructuring, restructuring strategy, and debt renegotiation process.

Sovereign Default and Debt Restructuring

The literature on sovereign debt (e.g., Reinhart and Rogoff 2009) follows conventional definitions used in the financial sector (e.g., Standard and Poor's 2006):

- *Sovereign default*—a government's failure to make a principal or interest payment by the due date.
- *Sovereign debt restructuring*—replacement of a distressed debt resulting in less favorable terms than the original debt.[3]

There are two types of debt operations in a debt restructuring: *debt rescheduling*—lengthening of debt maturities and/or reducing the coupon rate, while keeping the face value of debt the same; and *debt reduction*—a reduction in the nominal face value of old instruments.

Restructuring Strategy

In practice, restructurings take place at different timings. In some cases, the sovereign debtor misses payments and renegotiates its debt afterwards, while in others, the debtor renegotiates its debt prior to and without missing payments. To understand these different patterns of restructurings, Asonuma and Trebesch (2016) classify external debt restructurings held by private creditors as follows:[4]

- "Strictly preemptive restructurings"—cases which are implemented without missing any payments at all (no legal default).
- "Weakly preemptive restructurings"—cases in which some payments are missed, but only temporarily, and after the start of formal or informal negotiations with creditor representatives (no *unilateral default*).
- "Post-default restructurings"—all other cases in which payments are missed unilaterally and without the agreement of creditor representatives (unilateral default prior to negotiations).

Preemptive restructurings include both "weakly" and "strictly" preemptive cases, while all other cases with unilateral defaults are post-default restructurings.

[3] The difference from the conventional liability management (e.g., SWAP) is that the exchange is not conducted on market terms.

[4] The restructuring strategy is classified by researchers after each renegotiation process is completed (i.e., ex post information).

Debt Renegotiation Process

Debt renegotiation occurs in between the "start" and "end" of a debt restructuring. The start of a restructuring is defined as either a default on debt payments (i.e., missed payments) or the announcement of a debt restructuring. The end of a restructuring is defined as an exchange of old (existing) instruments with new instruments. This section summarizes the renegotiation process following the descriptions in Das, Papaioannou, and Trebesch (2012, Section III.A).

At the start of a debt restructuring, the sovereign sees the restructuring as the only way to restore fiscal and debt sustainability (i.e., there is no economically and politically feasible adjustment that could make debt sustainable without a restructuring) and announces publicly its intension to restructure debt. In some preemptive restructuring cases, it continues servicing debt during the renegotiation process. Either prior to or immediately after the announcement, it often hires legal and financial advisors.

During the renegotiations, involving advisors, the debtor sets both restructuring targets and parameters. Regarding restructuring targets, the debtor explores a sustainable debt trajectory under a macro framework with policy adjustments and financing provided by different creditors. As to restructuring parameters, the debtor explores the scope of debt to be subject to restructuring by considering legal and financial features of the government outstanding bonds and loans. The debtor—together with advisers—present restructuring scenarios to the creditors. Once the debtor (and its advisers) agree with a scenario (called "agreement in principle"), an exchange offer proposal is formed.

Next, the debtor submits an exchange offer to the creditors for their consideration. In most cases, the debtor and creditors reach an agreement, resulting in a successful exchange. In some limited cases, a group of creditors—dubbed "holdouts"—take a negotiation stance different from the majority of creditors and reject the offer. They sometimes bring to the courts under governing law (i.e., New York or London) and sue the sovereign. The exchange offer typically comes in a form of a menu of new instruments to be exchanged for old instruments.

Creditor Committees and Chairs

This subsection follows Asonuma and Joo (2020, Section 2.1) in discussing the creditors' role in the debt renegotiation process. At the start of negotiation, a sovereign debtor appoints a "creditor committee chair" and the chair forms a "creditor committee." The chair is typically appointed based on which creditor holds the largest share of their sovereign debt or the same creditor who chaired the previous debt renegotiation.[5] There are some cases which a multiple of creditor committees were formed (Argentina 2019–20 and Ecuador 2020).[6] Other creditors—in most cases, banks—are also invited to join the committee by the creditor committee chair(s). The committee members selected through the process must meet the

[5] See Lomax (1986), Rieffel (2003), and Das et al. (2012).

[6] See IMF (2020) for details of creditor committees in Argentina (2019–20) and Ecuador (2020) debt restructurings.

requirement that every creditor country has at least one seat representing their nationality on the committee.

The creditor committee and its chair(s) represent the creditors and play an important role in the renegotiation. The committee can decide whether to accept, alter, or reject the sovereign debtors' exchange offer, and has the decision on when the exchange offer will be made. In some cases, it announces its views regarding terms of restructurings by issuing a press release.

Collective Actions

In bond debt restructuring, Collective Action Clauses (here after CACs) embedded in bond contracts are often employed. There are broadly two types of provisions, majority restructuring and majority enforcement. When a majority of creditors holding bonds with CACs (e.g., above 75 percent of total outstanding) reaches an agreement, a supermajority is reached to impose terms of restructurings on the remaining minority creditors.

II-2. Recent Sovereign Debt Restructurings in 2014–20

The updated dataset constructed by Asonuma and Trebesch (2016) show that, after 2010, there were 17 completed debt restructurings and there are seven ongoing debt restructurings as of September 2020. This section summarizes recent trends in sovereign debt restructurings in 2014–20 as documented in IMF (2020).[7] First, there were numerous debt restructurings in the period as well as in past decades. Most of them were bond restructurings, some of which were also associated with the use of the CACs. As in the 1990s, the majority of debt restructurings were restructurings of bonds. Only one of the restructurings in 2014–20 was a restructuring of loans. In addition, more than half of the cases used CACs to induce creditors to participate in negotiation. As a result, the cases with CACs led to no litigation with private creditors after each negotiation.

Second, there was a rising share of preemptive debt restructurings. Since 2014, nine out of thirteen cases were preemptive debt restructurings. This contrasts with the pre-2014 pattern where most debt restructurings were held after sovereign debtors defaulted (i.e., missed payments). Third, the duration of the restructurings in 2014–20 is 1.2 years on average. This average duration is shorter than that of restructurings of privately-held external debt in 1978–2010. The next section discusses academic studies on the second and third trends in the recent debt restructurings. Furthermore, IMF (2020) discusses four recent restructuring cases in LICs. G20 and Paris Club have made various policy reforms to help conduct debt restructurings in these countries.[8] There have been numerous restructuring cases in LICs because these countries are more vulnerable to external adverse shocks than AM economies.[9]

[7] IMF (2013) overviews trends of sovereign debt restructurings in 2002–13.

III. Restructuring Strategy

Sections III–V focus on three aspects of sovereign debt restructurings. On each aspect, we review both empirical findings (i.e., stylized facts) and theoretical implications provided by previous studies. First, we begin by describing empirical findings on restructuring strategies. Concepts of restructuring strategies are provided in Section II-1.

III-1. Empirical Findings

Asonuma and Trebesch (2016) present two comprehensive datasets on restructuring strategies and duration at a monthly frequency which cover the 179 private external debt restructurings in 1978–2010. A 'duration' is defined as a period between the default (or the announcement of a restructuring) and the last debt exchange. The authors find that preemptive restructurings (i) constitute about a third of total episodes, (ii) result in lower net present value (NPV) haircuts, (iii) take less time to complete, (iv) lead to lower declines of GDP, and (v) take less time to regain access to the international capital market.

First, out of 68 restructuring episodes that were preemptive (from the total of 179), 45 episodes in 26 countries were weakly preemptive (some missed payments, but no unilateral default) and 23 episodes in 13 countries were strictly preemptive (no payments missed). The remaining 111 restructurings (or 62 percent of total episodes) in 68 countries were post-default.

Second, NPV haircuts for preemptive restructurings average 18 percent, while those for post-default restructurings average 48 percent. There is a significant difference in NPV haircuts between the two types of restructurings mainly because most preemptive restructurings have small face value reduction. On the third finding, the duration for preemptive restructurings is 12 months on average, while that for post-default restructurings is 58 months on average.

Figure 1 shows a scatter plot of restructuring episodes and NPV haircuts in chronological order—the horizontal axis indicates the time from 1975 to 2010 and the vertical axis indicates NPV haircuts (in percentage). We see a sizable number of preemptive restructurings accounting for 38 percent of total episodes, which occurred frequently over four decades. Haircuts for preemptive restructurings have smaller average and variation than those for

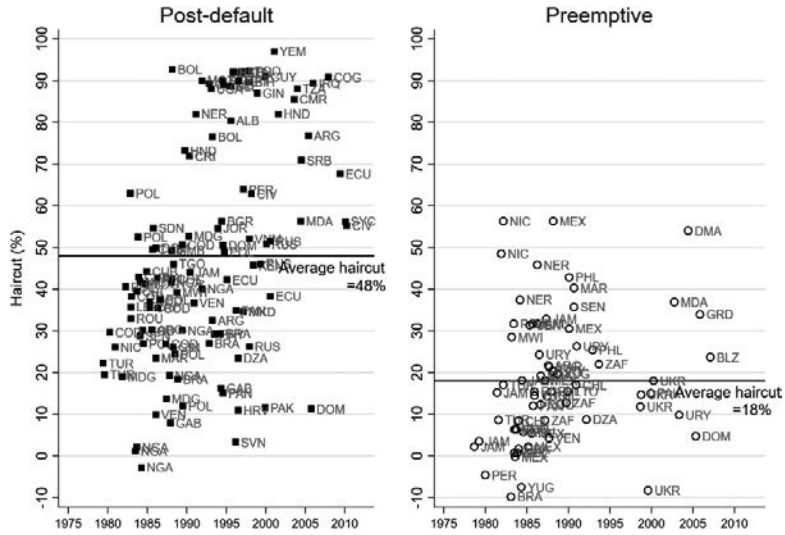
[8] Regarding bilateral official external debt, on April 15, 2020, the G20 and Paris Club approved the Debt Service Suspension Initiative (DSSI) to help low-income developing countries avoid debt crises (G20, 2020). Furthermore, payments of bilateral official debt were extended to December 31, 2020; and, as of September 18, 2020, 43 low-income developing countries officially announced that they are participating in the DSSI (IMF and World Bank, 2020). On October 14, 2020, G20 and Paris Club approved that the DSSI was extended to June 30, 2021 (Paris Club, 2020). On April 13, 2021, G20 and Paris Club approved that the DSSI was extended further to December 31, 2021 (Paris Club, 2021).

[9] Asonuma et al. (2018) document the restructuring case of Grenada. They show that, due to the 2008–09 Global Financial Crisis, the country's construction and tourism industries were severely impacted. As a result, its economic activities declined by about eight percent, which is greater than the five percent average decline of countries in the same region. This led to a sovereign default in Grenada in 2013.

post-default restructurings, in particular, a maximum haircut for preemptive restructurings of 56 percent.

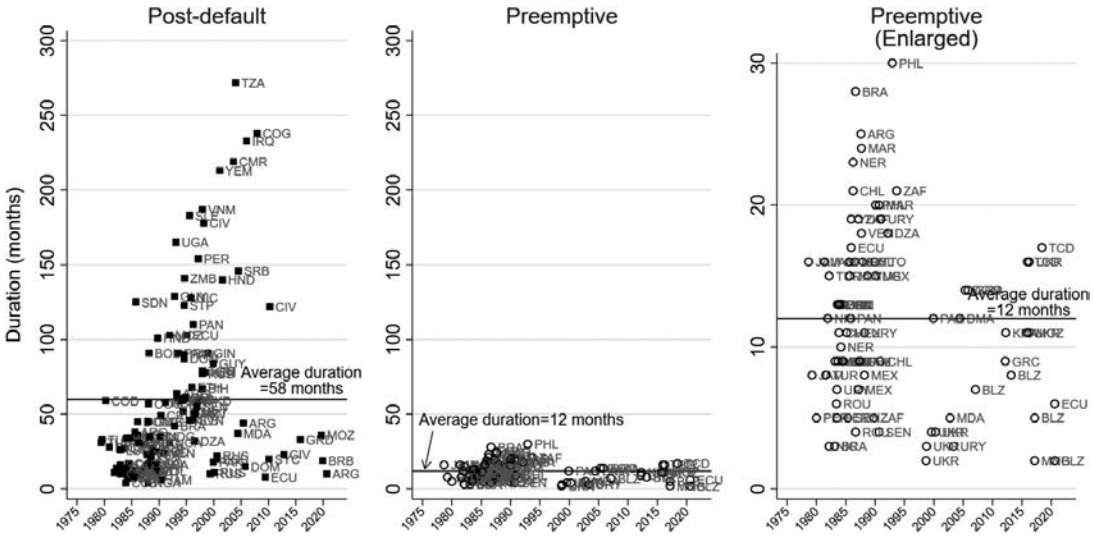
Third, duration of debt restructurings is described in Figure 2 which follows the same format as in Figure 1. It shows that the average duration of preemptive cases is substantially

Figure 1. Haircuts for Preemptive and Post-default Restructurings



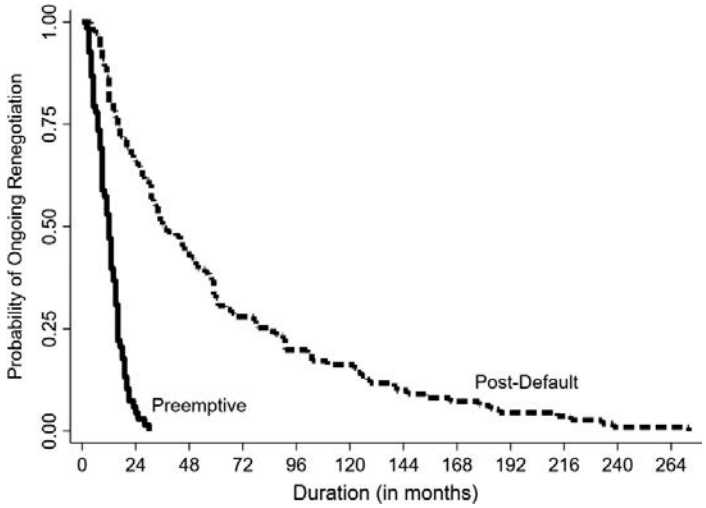
Source: The data come from Asonuma and Trebesch (2016) and the original source of NPV haircut data is Cruces and Trebesch (2013).

Figure 2. Duration for Preemptive and Post-default Restructurings



Source: The data come from Asonuma and Trebesch (2016). The figure includes restructuring episodes in 2010–20 from the 2020 Update of Monthly Default and Restructuring Dataset by Asonuma and Trebesch (2016). The right panel is an enlarged version of the middle panel, focusing on a shorter duration on the y-axis.

Figure 3. Kaplan-Meier Survival Functions for Restructuring Duration



Source: Asonuma and Trebesch (2016).

shorter than that of post-default cases. Asonuma and Trebesch (2016) estimate a non-parametric Kaplan-Meier survival function for both preemptive and post-default restructurings (Figure 3). While the probability of continuing negotiations decreases to 25 percent after 12 months for preemptive restructurings (the thick solid line), it does not decrease to the same level until at least 72 months for post-default restructurings (the thin dash line). The figure also supports the finding of a short duration for preemptive restructurings compared with post-default episodes.

III-2. Theory

Underlying mechanisms for aforementioned three stylized facts are explained theoretically in Asonuma and Trebesch (2016). Specifically, the authors provide an explanation of both the sovereign's choice and outcome of preemptive and post-default renegotiations. First, on the choice between the two types of restructurings, the authors explain that a sovereign debtor and creditors will opt for preemptive renegotiation only if there is a higher risk of default. Otherwise, in the expectation that a default is avoidable, the debtor and creditors will prefer to gamble and repay until the debtor suffers a bad income shock to start post-default renegotiation.

Second, on the outcome of the two types of restructurings, the authors explain that haircuts are lower in preemptive cases because the restructuring offer is made before a potential default. Creditors will agree on recovery rates (haircuts) if the proposed rates are higher than the expected return on bonds. This outside option of preemptive restructuring depends on both the probability that the creditor will receive full repayment and the recovery rates in case of post-default restructurings. Moreover, the authors explain that, in preemptive rene-

gotiation, the duration is shorter because a decline in GDP is smaller and no payments are missed (no accumulation of arrears).

IV. Role of Creditors and Creditor Committees

Next, we turn to the role of creditors and creditor committees. Concepts of creditor committees and chairs are explained in Section II-1.

IV-1. Empirical Findings

Asonuma and Joo (2020) construct a novel dataset on creditor committees, chairs, and representatives of debt restructurings in 1978–2010.[10] The authors find that creditor committees were formed in 130 cases and sovereign debtors appointed creditor committee chairs in 118 cases (73 percent and 66 percent of the 179 episodes, respectively). Of these episodes, US and European banks have served as creditor committee chairs for 59 and 41 restructurings, respectively.

Additionally, the authors also include a dataset on business and financial cycles of both creditor chairs and committee members in the same sample of the 179 debt restructurings. The dataset shows that, when creditor chairs are in a good business and financial cycle, (i) it takes a longer period to complete the restructuring, (ii) its associated NPV haircut is lower, and (iii) face value reduction is lower.[11]

On the first finding, Figure 4 shows a scatter plot of average creditor chair risk premium on bank lending rates and duration of restructurings in years. The average risk premium refers to bank lending rates minus short-term Treasury bill interest rates. The figure shows a negative correlation between the duration and the average risk premium; when creditors are in a good business and financial cycle, i.e., the creditors are facing low risk premiums on bank lending rates, the restructurings are lengthy.

On the second finding, Figure 5 shows a scatter plot of creditor chair risk premium on bank lending rates at settlement and NPV haircuts. On the third point, Figure 6 shows a scatter plot of creditor chair risk premium and face value reduction. In both figures, the vertical axis indicates a fraction of the variable that is not explained by other variables.[12] The risk premiums on bank lending rates are positively correlated with haircuts (Figure 5) and face value reduction (Figure 6). These findings imply that, when creditors are in a good business and financial cycle (i.e., low risk premiums on bank lending rates), both agreed haircuts and face value reduction are lower.

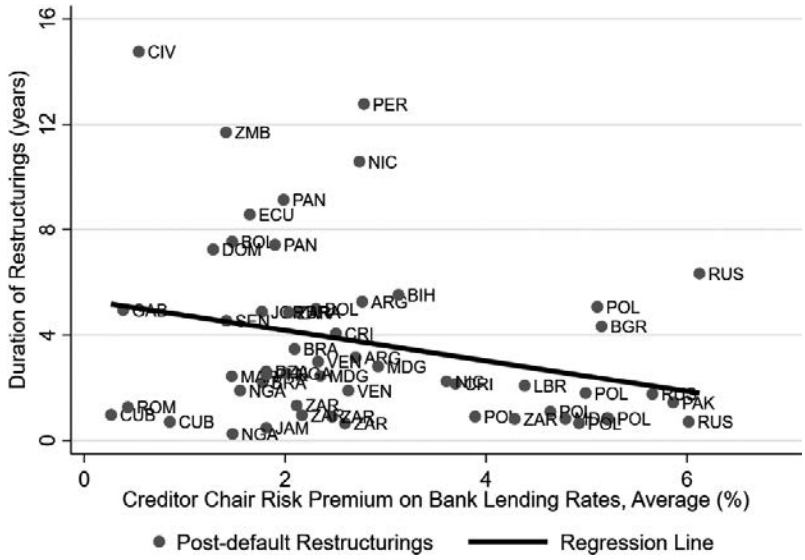
Next, we separate restructurings into two groups by strategies and find additional facts.

[10] All of the 179 restructuring cases covered in their analysis are restructurings of privately-held external debt.

[11] Asonuma and Joo (2020) also show that results are robust for creditor committee members (i.e., 10.4 members on average) which include both chairs and non-chair members. The sample of restructurings with creditor committee members covers 55 episodes (31 percent of total 179 episodes).

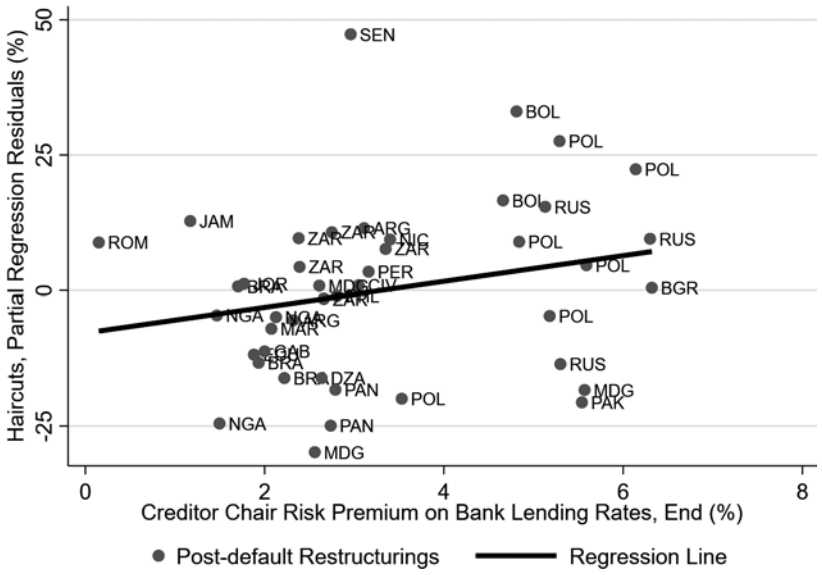
[12] Values on vertical axis are residuals from the regression of the original dependent variable on (i) duration of restructurings, (ii) the debtor's debt, and (iii) GDP deviation from its trend as well as other controls.

Figure 4. Duration and Creditor Chair Risk Premium on Bank Lending Rates



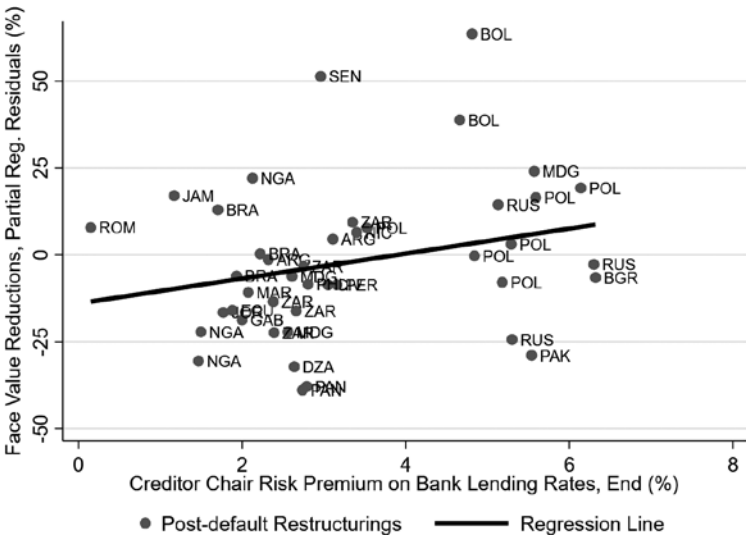
Source: The data come from Asonuma and Joo (2020). This figure is conceptually the same as Figure 1 in Asonuma and Joo (2020) which measures creditor chair GDP growth rates (average).

Figure 5. Haircuts and Creditor Chair Risk Premium on Bank Lending Rates



Source: The data come from Asonuma and Joo (2020). This figure is conceptually the same as Figure 2 in Asonuma and Joo (2020) which measures creditor chair GDP growth rates at settlement.

Figure 6. Face Value Reduction and Creditor Chair Risk Premium on Bank Lending Rates



Source: The data come from Asonuma and Joo (2020). This figure is conceptually the same as Figure A1 in Asonuma and Joo (2020) which measures creditor chair GDP growth rates at settlement.

For preemptive cases, creditor committees were formed in 88 percent of total episodes (60 out of 68). Preemptive episodes with creditor committees have smaller NPV haircuts than those without creditor committees (17 vs. 29 percent), while almost the same duration (1.0 vs. 0.6 years). For post-default cases, creditor committees were formed in 64 percent of total episodes (71 out of 101), less than preemptive cases. Post-default episodes with creditor committees have smaller haircuts (40 vs. 61 percent) and shorter duration (3.5 vs. 7.5 years).

IV-2. Theory

Underlying mechanisms for these two stylized facts are explained theoretically in Asonuma and Joo (2020). Specifically, the authors explain the role of the risk-averse creditor related to the process and outcome of debt restructurings.[13] Asonuma and Joo (2020) build a model of sovereign debt which includes post-default renegotiations and risk-averse sovereign debtor and creditor. The paper explains that, when the creditor is facing a good business and financial cycle, the restructuring is protracted (i.e., delayed) and results in low haircuts. This is because the creditor is reluctant to experience losses on defaulted debt for the consumption-smoothing purpose in the current period. As such, he demands a higher recovery rate comparable to the expected recovery rate in the future. As a result, the sovereign that is currently in default is more willing to delay the settlement or has to accept a high re-

[13] See Aguilar et al. (2016), Borri and Verdelhan (2011) and Lizarazo (2013) on the role of the risk averse creditor on debtors' borrowing costs (i.e., higher bond spreads).

covery rate, equivalently a small haircut.

V. Outcome of Debt Restructurings

Lastly, we focus on the outcome of debt restructurings.

V-1. Empirical Findings

Empirical literature on sovereign debt documents different types of costs associated with sovereign debt restructurings: (i) output (GDP) costs; (ii) reputation costs in the international capital market; (iii) international trade costs[14]; and (iv) political costs (Borensztein and Panizza, 2009).

On the first type of costs, while Borensztein and Panizza (2009) show that GDP declines after a default, Levy-Yeyati and Panizza (2011) document a decline in output starts shortly before a default.[15] Levy-Yeyati and Panizza (2011) use a panel dataset of quarterly GDP growth series in 1970–2005 covering 24 sovereign defaults in 14 countries. Their results show that a sovereign default reduces GDP growth rates by 1.3 percentage points in the year of default with no statistically significant effect in subsequent years. The paper argues that sovereigns experience a larger contraction in real activity prior to the actual default and the short-lived output declines afterward because market participants have already anticipated a default prior to the actual event (i.e., a self-filling output decline).

On the second type of costs, Cruces and Trebesch (2013) analyze impacts of restructurings on borrowing costs and re-access to the international capital market. Following Struzenegger and Zettelmeyer (2008)'s methodology of measuring creditor losses, the authors construct a dataset on NPV haircuts for 179 private external debt restructurings in 1978–2010. The authors use the enriched dataset of haircuts for the panel analysis taking advantage of episode-specific haircuts (instead of systematic/uniform haircuts in previous studies). They find that an increase in NPV haircuts increases borrowing costs after a default and the time it takes to regain market access.[16] Previously, it was widely assumed that creditors would forgive the defaulted debtor and will not reflect in its future borrowing. However, Cruces and Trebesch (2013) challenge the conventional wisdom and show the aforementioned empirical findings.

[14] See Rose (2005), Martinez and Sandleris (2011), Zymek (2012), and Asonuma, Chamon, and Sasahara (2016) for trade declines in sovereign defaults and debt restructurings.

[15] See also Tomz and Wright (2007), De Paoli, Hoggarth, and Saporta (2009), Furceri and Zdzienicka (2012), Asonuma and Trebesch (2016), Trebesch and Zabel (2017), Asonuma et al. (2019) for output costs in sovereign defaults and debt restructurings.

[16] They show that a one percentage point increase in NPV haircuts raises the bond spread by 5.2 percentage points in the following year and 1.5 percentage points over the 6–7 years after default. In addition, they find that countries which experienced defaults with higher haircuts are excluded from the capital market for a longer period than those with lower haircuts.

V-2. Theory

Underlying mechanisms for aforementioned stylized facts are explained theoretically in theoretical literature on sovereign default (e.g., Mendoza and Yue, 2012; Sosa-Padilla, 2018; and Asonuma, 2016. First on output costs, Mendoza and Yue (2012) and Sosa-Padilla (2018) provide an explanation of output and banking sector costs of sovereign defaults, respectively. Mendoza and Yue (2012) build a model of sovereign debt with output produced by labor, imported inputs, and domestic inputs. These two inputs are imperfect substitutes. The paper explains that when a sovereign debtor defaults and loses access to the international capital market, it suffers output costs driven by inefficient allocation in production. In particular, when the debtor repays debt and maintains access (non-default), it continues to import intermediate goods from abroad. Therefore, final goods producers can use both imported inputs and domestic inputs. In addition, they borrow working capital at the world interest rate. On the contrary, when the debtor defaults and loses access, it cannot import intermediate goods from abroad. Thus, final goods producers need to use domestic intermediate goods only. As a result, more labor is allocated to intermediate goods sector and less to final goods sector generating inefficiency in production.

Similarly, Sosa-Padilla (2018) also develops a sovereign debt model with the banking sector holding sovereign debt issued domestically. When a sovereign defaults, the bank's holdings of sovereign debt are impaired. As a result, lending to the corporate sector is disrupted resulting in a credit crunch. The corporate sector receives less credit at a higher lending interest rate, which reduces production. In contrast, when the sovereign debtor repays debt (no default), the bank's holdings of sovereign debt are not impaired (i.e., value of assets remains unchanged) and the bank provides credit lending to the corporate sector at a low lending interest rate.

Second, on borrowing costs, Asonuma (2016) theoretically explores the mechanisms behind the association between higher haircuts and larger increases in bond spreads. His model implies that a sovereign debtor needs to pay recovered debt payments in the form of an immediate large recovery rate at settlement or higher borrowing costs later. Repaying its debt at a lower recovery rate (high haircut) at settlement leads to high borrowing costs in later periods. This raises the probability of another default in the future. As a result, the sovereign debtor, indeed, chooses to repeat defaults and restructurings, i.e., a serial default and restructuring.

VI. Conclusion

Recent research has shed light on different multiple dimensions of sovereign debt restructurings over past decades. The current paper provides an overview of concepts and trend, theory and empirics, and a summary of the literature on the following issues: (i) the difference between preemptive and post-default debt restructurings; (ii) the role of creditors

and creditor committees on process and outcome of debt restructurings; and (iii) different costs of sovereign debt restructurings.

This paper remains as an introductory overview on sovereign debt restructurings for a wide range of audiences including academic researchers, policymakers, legal experts, and market participants and further discussion on different aspects of debt restructurings is left for future studies. We hope that the wide range of audiences also find interesting pursuing further on academic research on sovereign debt restructurings.

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