

## CHAPTER 7

### SOVEREIGN DEFAULT

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*The views expressed in this paper are those of the authors and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.*

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This chapter reviews the phenomenon of sovereign default. We first define default, beginning with an overview of existing definitions, highlighting their problems and limitations. Section 7.2 considers the sovereign's decision to default, first, by creditor type, second, by the manner of default (debtor action). We illustrate these with case studies of crises in Jamaica, Ukraine, Uruguay, and Russia. Section 7.3 reviews the economic determinants of default, including domestic and external shocks, and considers the legal determinants, which merit further systematic study. Section 7.4 surveys the economic, financial and legal costs of default. Section 7.5 concludes with ideas for reducing the incidence and the cost of default.

## **7.1. Defining Default**

### **7.1.1. The Definition Challenge: An Overview and Proposed Solution**

1. It is surprisingly hard to define sovereign default. Default at its simplest is a broken promise, or a breach of contract. For sovereign debt, such a breach could include a missed payment, involuntary subordination, or data misreporting. The problem with defining default as a breach of contract is that this is both too broad and too narrow to be useful. It is too broad because the definition includes events that many would view as unimportant, such as minor delays in transmitting paperwork. It is too narrow because it ignores the economic context of events such as the Greek debt exchange in March of 2012, where no payments were missed and no contracts were breached—they were modified instead—but creditors still faced deep losses in a distressed debt restructuring.
2. When searching for a formal legal definition of sovereign default it is useful to start with those listed under the heading “Events of Default” (EoD) in English- and New York-law debt contracts<sup>5</sup> and their analogues in official bilateral and multilateral credit agreements. These contractual EoD terms are designed to be observable, cover a broad range of factors that could affect payoff, specify the consequences of breach, and are generally understood to be legally binding for debtors and creditors.<sup>6</sup> For this reason, we first discuss the definitions of default found in market instruments (bond and loan contracts) in Section 7.1.2, before considering parallel definitions in official agreements in Section 7.1.3. We then examine domestic debt instruments, which often fail to specify a clear-cut contractual definition of default, in Section 7.1.4.
3. Beyond debt contracts, we review definitions of default used by influential third parties, such as the credit rating agencies S&P and Moody's, and definitions used in the credit derivatives market, where default covers both missed payments (breach of contract) and distressed debt restructurings that involve losses for creditors. Third-party definitions are often pithier than those found in debt contracts, and focus on economic substance (payoff). Third-party

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<sup>5</sup> Sovereign debt loans and bonds are private contractual obligations, enforceable in national courts to the extent consistent with sovereign immunity.

<sup>6</sup> In contrast, because official creditors do not normally sue sovereign debtors in national courts, the parties might reasonably expect disputes to be resolved through diplomatic or administrative channels.

definitions of default can have major economic consequences, for instance, when they are used to trigger credit rating downgrades or credit default swap (CDS) payouts. Many economists, and the most widely used datasets on sovereign default, use rating agencies' definition of default (e.g., Reinhart and Rogoff 2009). We will discuss the definitions by rating agencies and those guiding CDS payouts in sections 7.1.5 and 7.1.6, respectively. We do not cover other potentially useful third-party markers, such as index inclusion, collateral eligibility, or regulatory treatment, which may merit further consideration.

4. In practice, neither formal contractual nor substantive economic definitions are fully satisfactory. For example, it is not obvious how to treat minor, short-lived contractual breaches, such as administrative mishaps, brief payment delays and episodes of credit deterioration that may entitle lenders to some contractual remedies, but are unlikely to bring about principal acceleration or expose the debtor to successful lawsuits. Moreover, the rise in domestic-law debt complicates matters for lack of clear contractual definitions of default, diversity of background law, and sovereign authority over the law. On the other hand, purely economic definitions entail drawing bright lines on a continuum of creditor losses; in some cases, creditor losses are combined with judgments about sovereign debtors' posture towards the creditors, which can appear arbitrary or subjective.
5. To address some of these shortcomings, we propose an analytical approach that would distinguish among *technical default*, *contractual default* and *substantive default*, as follows:

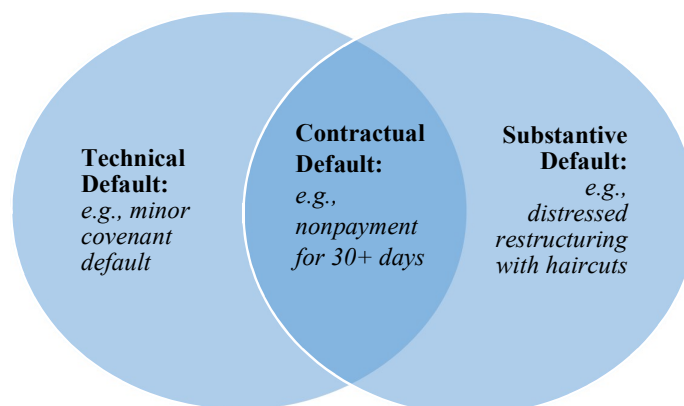
*Technical Default* includes any contractual EoD occurrence or equivalent for domestic and official debt that does not also constitute default under third-party definitions, such as those used by rating agencies and in standardized derivatives contracts. Administrative errors and some covenant defaults viewed as minor by market participants would fit under this heading.

*Contractual Default* includes the occurrence of any EoD or equivalent that also constitutes default under specified reputable third-party definitions. As we will see, virtually all definitions of default include payment default, subject to a grace period. At a minimum, it is reasonable to consider missed payments and payment shortfalls that persist for longer than 30 days (a typical grace period) as contractual default, regardless of debt form and creditor identity. However, preemptive (pre-default) debt exchanges and restructurings that follow contractual modification provisions would not fit this definition.

*Substantive Default* includes debtor actions that would count as default in third-party documentation and practice (in particular, a distressed debt exchange, or a restructuring using local law or Collective Action Clauses (CACs), if it results in less favorable terms for the creditor), but would not constitute an EoD under the underlying debt contracts. Of course, restructuring also presents special process and policy challenges, further explored in Chapter 8.

Figure 1 illustrates.

**Figure 1: Defining Default**



We find this approach appealing for its relative simplicity, as well as for its ability to account simultaneously for internal contractual and outside market views of what matters in default. The remainder of Section 7.1 will explore aspects of this definition—what are contractual EoD, and how do third parties define default? Because the economic literature is rife with alternative definitions, some of which conflate whether a debtor has defaulted with how that debtor goes about restructuring, we consider the prevailing approaches to default and review of the relevant literature in Section 7.2.

### **7.1.2. Contractual Events of Default: Market Instruments**

6. The following categories of contractual EoD are typical in the sovereign debt markets in London and New York:

Payment Default is failure to pay principal, interest, or other amounts (such as tax gross-up) when due, after the expiration of any applicable grace period. Interest payments typically enjoy grace periods ranging from 10 to 30 days. Grace periods are slightly less common, and may be shorter, for principal payments (e.g., Gooch & Klein 1992, Buchheit 2000 for loans; see Box 1 for examples from tradable securities).

The precise timing of payment default is significant and can be hard to ascertain. Contracts typically say that payment is made when the debtor has transferred funds to the paying agent, trustee, or clearing system (e.g., Gooch & Klein 1992, United Mexican States 2012). However, some contracts do not consider a payment to be made until each creditor has received the funds. For instance, Argentina’s 2005 and 2010 exchange bonds specified that [“the Republic’s obligation to make payments hereunder ... shall not have been satisfied until such payments are received by the Holders of this Security”](#) (Republic of Argentina 2005). The distinction between the debtor’s payment and the

ultimate creditor's receipt became salient when a U.S. federal court blocked Bank of New York Mellon as trustee for Argentina's exchange bonds from distributing the government's interest payment to the bondholders.<sup>7</sup>

Repudiation happens when the sovereign rejects its obligation to pay, which could happen before or after any payment is due. Governments typically avoid questioning the validity of their debts, or announcing their intention not to pay before missing a payment, since in practice, repudiation carries all the traumatic consequences of payment default discussed in Section 7.4. Repudiation may go hand in hand with governments questioning the legitimacy of one or more obligations. The literature on "Odious Debt" includes a handful of examples (King 2016, Lienau 2014). In 2008, Ecuador claimed that two bonds issued by a previous government were illegitimate and pledged not to pay them. It launched a buyback offer the following year in the shadow of the illegitimacy claim, and ultimately secured nearly 2/3 debt relief with more than 90 percent of the creditors participating.

Moratorium is a unilateral payment stop on one or more debt obligations. The sovereign might announce a moratorium—as Mexico did in 1982 (Kraft 1984)—as an interim measure before launching a debt restructuring; it might also stop payments indefinitely. A moratorium entails a public act, such as an announcement or legislation, apart from the missed payment, which can come before or after the payment default. However, it need not contest the validity of the underlying obligation. A moratorium is distinct from a negotiated payment suspension: if the creditors agree to a stop, they can waive the payment default.

Policy-Related EoD may include loss of IMF membership or ineligibility to draw on IMF resources. Such EoD have the practical consequence of incorporating elements of the IMF Articles of Agreement and policies, and amplify the effect of its sanctions (e.g., Choi, Gulati & Posner 2012). Other policy-related EoD, such as maximum debt ratios, are widespread in corporate debt but unusual among sovereigns. Notable exceptions include Ukraine's borrowing from Russia in 2014, which included a number of unusual EoD designed to maximize creditor control and make it easy to trigger acceleration. Because policy conditions are often at the heart of official lending, some forms of multilateral policy conditionality are indirectly incorporated in contractual EoD by reference to membership and sanctions.

Covenant Default is a residual category that captures breach of all other express promises under the debt agreement (Box 1), ranging from clerical omissions to material violations. The latter category might include effective subordination of creditors without their consent, such as violations of the *pari passu* or negative pledge clauses. Covenant defaults also include false representations, which could range from data misreporting to

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<sup>7</sup> Argentina had paid Bank of New York Mellon in violation of the court's injunction designed to compel ratable payment to holdout creditors whenever the exchange bondholders were paid.

lack of borrowing authority at the time the contract was made.<sup>8</sup> Subsequent loss of borrowing authority is usually a separate EoD.

Cross-Default terms link two otherwise-unrelated debt contracts, so that default under one becomes default under the other (Box 1). The theory behind cross-default is a mix of early warning and inter-creditor equity. All else equal, missing payments to other creditors points to debt distress. Without cross-default, a creditor may have no recourse as others sue and divide up the debtor's scarce assets among themselves.

Cross-default clauses vary in two important ways: trigger and scope. With hair-trigger cross-default, creditors may exercise their default remedies in response to a minor infraction under someone else's contract. At the other extreme, they might have to wait until creditors under the other contract have demanded immediate repayment in full. Some versions of the clause excerpted in Box 1 include minimum thresholds for missed payments on other debts. The scope of cross-default can range from a narrow sliver of similar debt (e.g., foreign-law bonds cross-defaulting to foreign-law bonds) to all sovereign and quasi-sovereign obligations, which is rare.

7. Four additional observations should help situate contractual EoD in the sovereign default context:

*First*, EoD only give creditors the right to invoke contractual remedies; creditors are under no obligation to do so. In prominent cases of selective default (see Section 7.2.2), including most recently Venezuela, bond holders chose not to exercise their rights long after the governments defaulted on other debt, preferring instead to get paid as long as possible. If creditors do not act, the debtor may have an opportunity to "cure" the default.

*Second*, a debt restructuring may not constitute a contractual EoD, regardless of creditor losses. A market-based debt exchange, a voluntary renegotiation, or a majority vote to change debt terms using collective action clauses (CACs) would either follow the contract or circumvent it. Neither would breach it.

*Third*, EoD in sovereign bond contracts are increasingly subject to collective action requirements. For instance, even if the government fails to make a scheduled interest payment and the grace period expires, bond holders may have to muster a vote of at least 25% of the principal to instruct the Trustee to accelerate. If the debtor later makes up the payment, holders of at least 50% of the principal could instruct the Trustee to reverse the acceleration (Buchheit & Gulati 2002).

*Fourth*, minor differences in EoD wording and procedural requirements, such as notices, can lead to different consequences for the same debtor actions.

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<sup>8</sup> If there is no authority to borrow at the time the original debt contract was made, the contract could be void. In the absence of an enforceable contract, creditors may still be able to sue for fraud.

8. It bears emphasis that contractual EoD found in London and New York do not supply a complete definition of default for at least three reasons.

*First*, even “standard-form” debt contracts are not fully standardized. EoD vary over time, between markets, across borrowers and across bonds and loans within a single borrower’s debt stock.

*Second*, obligations governed by the law of the issuing sovereign, which make up the bulk of the global sovereign debt stock and a growing portion of emerging market debt, may not spell out EoD at all. Default and its consequences are a matter for background law, which varies among legal systems ([Addo Awadzi 2015](#); [Austin 2015](#)).

*Third*, as noted earlier and elaborated below, acts and omissions that are not specified among EoD can have consequences functionally similar to those of EoD, and are widely understood as default in the markets, and among the relevant domestic and international official stakeholders.

### **7.1.3. Contractual Defaults on Official Debt—Suspension, Refund, Acceleration**

9. Official bilateral and multilateral credits resemble contractual EoD, but are structured differently in important ways, reflecting the creditors’ mandates and, for multilateral creditors, their character as membership organizations. We use the General Conditions of IBRD and IDA (together, World Bank) loans, revised in July of 2017, to illustrate ([World Bank Group 2017](#)). The General Conditions make a useful point of comparison to contractual EoD because the World Bank is the largest multilateral creditor, because it has a global policy mandate, because IBRD and IDA lend only to sovereigns or backed by sovereign guarantees, and because today’s General Conditions have been revised many times to reflect the World Bank’s experience in sovereign lending, including interaction between official and market finance.
10. The General Conditions are incorporated by reference in transaction-specific “legal agreements” between the World Bank and its borrowing member; unlike the legal agreements, General Conditions do not vary by borrower or by transaction.<sup>9</sup> Article VII of General Conditions contains three potential analogues to contractual EoD: (i) events that would allow the World Bank to suspend or cancel disbursements, (ii) events that would require a refund from the sovereign, and (iii) events that could trigger acceleration (immediate repayment). The last category, “Events of Acceleration,” comes closest to EoD in private contracts, and can trigger cross-default under private contracts.

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<sup>9</sup> For the first time, the 2017 revision introduced distinct General Conditions for three World Bank lending instruments: Investment Project Financing, Development Policy Financing, and Program-for-Results Financing. The instrument-based distinctions are unimportant for purposes of this chapter; we draw primarily on the development policy instrument conditions as the closest to general purpose market borrowing by the government.

Suspension and Cancellation. The World Bank may suspend disbursements and, in some cases, may cancel the loan in response to any of the following: “payment failure,” “performance failure” (referencing transaction-specific terms), fraud, corruption, misrepresentation, unauthorized assignment of obligations, ineligibility to draw, withdrawal from membership in the World Bank or the IMF, “cross-suspension” of other World Bank loans, or any of a series of events that convince the lender that the program is unlikely to be carried out. The latter include material financial, policy, and legal changes. Suspension and even cancellation are distinct from default under market instruments. The focus is on the policy objectives and the use of proceeds consistent with the lender’s mandate. Ideally, the prospect of suspension of all World Bank disbursements across the board should bring the authorities to the negotiating table and fix the underlying problem. However, it is not meant to bring about the collapse of the sovereign’s debt structure through cross-default.

Refund. The World Bank can require sovereigns to refund past disbursements if it determines that they were used in a manner inconsistent with its loan agreement, typically due to fraud or corruption. The 2017 revision made clear that the refund requirement was not intended, and was not perceived in the market, as a cross-default trigger for bonds and loans.

Acceleration. The World Bank can demand immediate repayment of a disbursed loan in the event of a payment default on any of its exposure to the sovereign, subject to a 30-day grace period, and in the event of a performance default, subject to a 60-day grace period. Unauthorized assignment, material adverse change, failure of co-financing, and events specified in transaction-specific agreements may trigger acceleration under some circumstances. Of all the sanction triggers specified in Article VII of General Conditions, the term “default” is only used in the third category, “Events of Acceleration,” which is understood to interact with cross-default terms in loan and bond contracts.

#### **7.1.4. Domestic Debt—No Definition, No Default?**

11. Debt governed by the sovereign issuer’s domestic law typically has few express terms. For example, it is not customary for domestic-law debt to include a litany of EoD. As a result, it can be difficult to identify a clear contractual definition of default on domestic debt. The relevant contractual terms may be incorporated by reference to statutes and administrative regulations, which vary in form and substance among different countries (Addo Awadzi 2015). For instance, the Uniform Offering Circular is a U.S. federal regulation that sets out terms and conditions for most tradable U.S. Treasury securities. Out of its 34 sections, 30 spell out auction procedures; one tells when the creditors are paid, and none address substantive modification or default ([31 C.F.R. 356 and 356.30](#)).
12. This does not mean that governments cannot default on domestic debt. Instead, default and remedies for default are a matter of background law—contract, constitutional, and administrative, among others. For instance, in most jurisdictions, a debtor that simply fails to pay as promised would be in default. However, as Austin (2015) illustrates with examples of payment disruptions on U.S. Treasury securities in 1814, 1933, and 1979, missing domestic



debt payments sometimes has no discernible domestic or international consequences for the sovereign. He suggests that of the three incidents, the failure to pay in 1814 on account of a “bankrupt” Treasury comes closest to the widely shared contemporary understanding of default. There is no agreement in the literature or jurisprudence on the default status of the other two episodes, which involved retroactive removal of indexation and administrative delays, respectively.

13. The power to change domestic law—so that default is either excused, or no longer counts as default—is inherent in sovereignty, subject only to constitutional constraints as interpreted and enforced by domestic courts. In some legal systems, governments have express additional flexibility under domestic law to respond to economic emergencies (e.g., Gross & Ni Aiolan 2006).<sup>10</sup>
14. In sum, even something as simple as payment default on domestic debt requires context for a meaningful definition. It is not clear that an event with no discernible legal or economic consequences should be called a default.
15. Although domestic-law sovereign debt may be less vulnerable to formal default, it is more vulnerable to unilateral modification by the debtor designed to lower its payment burden and reduce payoff for the creditors (e.g., Beers and Mavalwalla 2018; Moody’s 2011; Cruces and Trebesch 2013; S&P 2017; Fitch 2018). If debt is denominated in local currency, sovereigns can use monetary policy to reduce its value.<sup>11</sup> They can also use fiscal policy, such as withholding taxes, to recapture at least in part payments that would otherwise go to creditors.<sup>12</sup> Reinhart and Sbrancia (2015) group these policies under the rubric of modern-day “financial repression.”

### 7.1.5. Rating Agency Criteria for Default

16. Rating agency definitions of default matter because they inform ratings actions. A sovereign downgrade may lead to rapid sell-off of its debt, since some investors would be barred from

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<sup>10</sup> For a recent illustration, see e.g., Mamatras and Others v. Greece ECHR 256 (2016), 21.07.2016.

<sup>11</sup> Currency reforms to reduce debt payments include Cuba 1961; Myanmar, 1964, 1985, and 1987; Nigeria, 1967 and 1984; Laos, 1976; Vietnam, 1978 and 1985; Ghana, 1979 and 1982; Mozambique, 1980; Nicaragua, 1988; Angola, 1990; Sudan, 1991; Russia/Soviet Union 1991, 1993; North Korea, 1992 and 2009; Iraq, 1993; Rwanda, 1995; and Venezuela, 2016 (Beers and Mavalwalla 2018).

However, inflation in general is not normally considered default (Moody’s 2011). According to Fitch (2002), “Sovereign borrowers usually enjoy the very highest credit standing for obligations in their own currency. If they retain the right to print their own money, the question of default is largely an academic one. The risk instead is that a country may service its debt through excessive money creation, effectively eroding the value of its obligations through inflation.”

<sup>12</sup> For example, in 1999, the government of Turkey imposed a retroactive withholding tax of between four and 19 percent on interest income from domestic currency bonds. Note, however, that many bond contracts include explicit language fixing bondholders’ tax liability; imposition of a tax in such a case could constitute a contractual EoD.

holding it by regulation, contract, or mandate (Böninghausen and Zabel 2015). It may also trigger downgrades of other borrowers in the country, particularly financial institutions that benefit from sovereign guarantees, becoming a source of contagion.

17. As information intermediaries, credit rating agencies have developed distinct methodologies for evaluating sovereign default, which inform their analysis and ratings. Their criteria focus overwhelmingly on payoff. They reference underlying credit agreements but are both far more streamlined and broader than EoD. For example, Moody's definition of default includes three kinds of events:

- (i) failure to pay interest or principal within the grace period under the debt agreement,
- (ii) a distressed debt exchange that reduces the sovereign's financial obligation to avoid payment default, and
- (iii) unilateral change in payment terms "imposed by the sovereign that results in a diminished financial obligation, such as a forced currency re-denomination ... or a forced change in some other aspect of the original promise, such as indexation or maturity."<sup>13</sup> (Moody's 2018)

This definition relies on the underlying agreements for payment default parameters and includes two additional elements beyond payment default: a debt restructuring, even if it is preemptive and consensual (discussed in Chapter 8), and domestic law measures that target and adversely affect payoff, whether or not they amount to default under the terms of domestic debt instruments.

#### **7.1.6. Credit Default Swaps—Credit Events and Default**

18. Sovereign credit default swaps (CDS) are tradable contracts under which "protection sellers" take on sovereign credit risk for a fee from "protection buyers." The buyers enter into CDS contracts either to hedge existing exposure to the sovereign, or to bet against the sovereign credit. If the sovereign defaults—in CDS parlance, if a "credit event" occurs—the seller must compensate the buyer for the loss in value of a "reference obligation" specified in the CDS contract. Since protection buyers are not required to hold any sovereign debt, in theory, market participants can use CDS to create unlimited synthetic sovereign risk exposure. Sovereign CDS have grown as a share of the CDS market (primarily attributable to contracts referencing European sovereign credits), reaching 16% at the end of 2017. However, the aggregate notional amount of all sovereign CDS outstanding, approximately \$1.5 trillion, is still small relative to the \$40 trillion bond market (Aldasoro & Ehlers 2018).
19. CDS definitions of sovereign credit events matter because CDS contracts transmit credit risk and can become a source of financial market contagion in a sovereign debt crisis. CDS contracts are highly standardized. They are drafted by a trade group, the International Swaps

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<sup>13</sup> A fourth event of default, bankruptcy or receivership, does not apply to sovereigns.

and Derivatives Association (ISDA), which takes copyright in its standard terms. A single CDS contract might comprise the ISDA Master Agreement in effect between the two counterparties, a product-specific Definitions Booklet (here, CDS Definitions), a Credit Support Annex, which includes any collateral arrangements, and a transaction-specific confirmation.

20. The term “Credit Event” is included in the Definitions Booklet, periodically revised by ISDA in response to market and legal developments. Parties to a CDS contract incorporate the definitions by reference in particular transactions. To enhance CDS liquidity, definitions do not normally vary across parties or transactions. CDS could trigger independently of any definition of default in a sovereign debt contract. As a result, ISDA definitions can have a homogenizing effect in a world of incompletely standardized debt contracts.
21. The definition of sovereign credit events that trigger protection sellers’ payment obligation reflect the objectives of the CDS instrument: to isolate and transfer credit risk, as distinct from “legal” risks, economic conditions, or policy performance. In addition, CDS are meant to be actively traded, which implies that credit event attributes should be observable and verifiable.
22. Credit events for sovereign CDS can include
  - (i) failure to pay,
  - (ii) obligation acceleration,
  - (iii) obligation default,
  - (iv) repudiation/moratorium, and
  - (v) restructuring (ISDA 2003, 2014).

Failure to pay incorporates any applicable contractual grace periods. Obligation default is an EoD or similar event, other than failure to pay, that entitles creditors to accelerate under their debt contracts, subject to an additional minimum threshold for outstanding amounts affected. The definition of restructuring is the most challenging and controversial of the lot, since it captures a wide range of consensual and involuntary outcomes (e.g., Gelpern & Gulati 2012). It includes principal and interest reductions, payment date extensions, subordination, and redenomination into currencies other than those of the G-7 or top-rated OECD member countries, *provided* any such change is related to deteriorating creditworthiness or financial condition of the sovereign and is effected in a way that “binds all holders” of the reference obligation. Protection sellers and buyers can select which of the credit events would apply to their transaction.

23. Interpretation and application of credit event definitions is the province of five regional Determinations Committees (DCs), each comprising ten dealers (typically large financial institutions that buy and sell CDS) and five non-dealers, such as smaller hedge funds. Declaring a credit event requires 80% supermajority vote of the appropriate regional DC (ISDA 2015). An auction to determine how much protection sellers must pay protection buyers follows the determination.

24. CDS credit events would make an attractive template for defining sovereign default because ISDA definitions reflect a common research objective: linking breach of contract, payoff, and creditworthiness using transparent, observable criteria. However, drafting ambiguities persist, and the DC process has attracted its share of criticism. Moreover, some participants in the corporate, but not sovereign, CDS market were recently exposed for structuring their choice of CDS triggers to get paid in the absence of underlying credit deterioration—contrary to the stated goal of the instrument (ISDA 2018). Despite widespread concern, CDS have not been associated with significant disruptions or delays in sovereign debt crises.

## **7.2 Variants of Default: Who is Affected? How Is It Done?**

25. Default or its threat is among a sovereign debtor’s most powerful tools to achieve the goal of sufficient relief to put debt on a sustainable path. While the literature has traditionally treated debt default as binary—the country is either in default or not (e.g., Eaton and Gersovitz 1981; Arellano 2008)—more recent work has begun to delve more deeply into the different ways a sovereign can default. In order to explore the different considerations a debtor must weigh, we examine this decision from two angles: default by creditor type (i.e., on whom to default) and default by debtor action (i.e., how to default).

### **7.2.1 Default by Creditor Type**

26. Given that a default on different creditor groups will result in different consequences for a debtor, a debtor may choose to discriminate, often by using different categories of debt as a proxy. One key underlying concern in differentiating among creditors is that selective default may give rise to inter-creditor equity concerns and complicate the restructuring task down the road if the debtor’s actions are widely perceived as unfair. Whenever a debtor chooses to differentiate, therefore, it becomes important to justify that choice on relevant grounds.

#### ***Default on Official and Private Creditors***

27. Among multilateral, bilateral, and private creditors, multilateral creditors are least likely to face sovereign default (Schlegl, et al. 2017), and even less likely to participate in a restructuring.<sup>14</sup> It has been generally accepted by official and private creditors that IMF financing, in particular, should be excluded from sovereign debt restructurings, as the IMF’s lending during crisis situations (just when all other creditors are exiting) constitutes a public good that helps resolve a country’s balance-of-payments problems (Lastra 2014; Steinkamp

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<sup>14</sup> For example, Reinhart and Trebesch (2015) show 23 instances of members running arrears to the IMF over the institution’s 70-year history.

At the start of the 21<sup>st</sup> century, international pressure prompted some of the largest multilateral creditors, including the World Bank and the IMF, to provide conditional debt relief to a group of low-income countries through the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative, with assurances from the G-8 countries that such debt relief would jeopardize neither the multilaterals’ ability to continue to provide financial support nor the multilaterals’ own finances.

and Westermann 2014; IMF 2009; Rieffel 2003).<sup>15</sup> Other multilaterals are also generally considered senior creditors (*cf.* Roubini and Setser 2004), though that status has occasionally been called into question (Gelpern 2004).

28. By contrast, official bilateral creditors restructure frequently—pre- or post-default, formally and informally—either through the provision of new financing or the restructuring of existing debt. Indeed, because of the long-standing track record of official creditors giving concessional treatment to distressed sovereign debtors (see Chapter 8), credit rating agencies generally do not consider a failure to pay debt owed to another government a default (e.g., S&P Global Ratings 2017; Fitch 2018).<sup>16</sup>
29. Conventional wisdom has been that, despite the lack of *de jure* seniority rankings among creditors, private creditors generally face a higher risk of default and steeper haircuts than official bilateral creditors (e.g., Roubini and Setser 2004).<sup>17</sup> In line with this, Steinkamp and Westermann (2014) note that 65% of experts responding to the 2013 World Economic Survey indicated that they expected bilateral loans extended during the Eurozone crisis to be treated as senior debt. However, recent research challenges whether this perceived seniority holds true in practice. Schlegl, et al. (2017) and Moody’s (2018) both find that Paris Club restructurings outnumber defaults on private creditors and often result in larger haircuts on the official creditors.<sup>18</sup> Moreover, when focusing on the start of default, Schlegl, et al. (2017) find that sovereigns are more likely to accumulate arrears towards official creditors than towards private creditors. The speed and scope at which payments are missed suggests that government-to-government loans are to junior to private bank loans and bonds, even after controlling for country characteristics and the size and composition of the debt outstanding.

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<sup>15</sup> The *de facto* nature of the IMF’s “preferred creditor status” means that when a country receives financing from the IMF, there is no legal subordination of existing debt, and no credit event has occurred. For an example, see the International Swaps and Derivative Association’s determination regarding Ireland’s IMF financing in 2011.

<sup>16</sup> It should be noted that, with a rising proportion of official bilateral financing being extended by sovereigns outside of the traditional Paris Club process, the extension of this track record is uncertain.

<sup>17</sup> Trade creditors are often seen as outside this calculus because interruption of payments would have immediate implications for trade. Kaletsky (1985), for example, found that nearly all debtors had continued to promptly service trade debts, even while defaulting on medium-term bank loans, given that “the interruption of trade finance might turn out to be the heaviest penalty for a defaulter.” More recent work, however, has found that trade creditors face default more often than the previously supposed (Schlegl, et al. 2017).

<sup>18</sup> As highlighted by Roubini and Setser (2004), the differences between Paris Club treatments and private creditor restructurings—e.g., flow treatments by the Paris Club over a limited period compared with “stock” restructurings of privately held debt—makes an apples-to-apples comparison difficult. Other complications include the sequencing of restructurings (the Paris Club assumption is that official creditors will go first, determining their contribution to the restructuring and leaving the remainder for other creditors) and the lack of rules for allocating near-term cash flow among creditors.

### *Default on Foreign and Domestic Creditors*

30. A debtor may also seek to differentiate between foreign and domestic creditors and favor one or the other depending on their domestic concerns and their objectives in the ultimate restructuring (Zettelmeyer and Sturzenegger 2005). Erce and Díaz-Cassou (2010) have found that considerations that lead to this type of discrimination include the origin of liquidity pressures, the soundness of the banking system, and the domestic private sector's reliance on international markets. Others have identified domestic politics as a key factor (Kohlscheen 2010; Erce 2013). The economic consequences of default will be described in more detail below. In short, a default on resident creditors can impact the health of the financial system and will merely reallocate adjustment internally, whereas a default on non-resident creditors can impair private-sector access to capital markets but also will redistribute the burden partially outside the issuer's economy (Erce and Díaz-Cassou 2010; Erce 2013).
31. Domestic creditors can be subject to certain incentives to participate in an exchange. While a distressed exchange can occur with both domestic and foreign debt, domestic creditors may be particularly vulnerable to the issuer's regulatory power over financial institutions and moral suasion (e.g., appeals to patriotism to increase exposure to government debt).<sup>19</sup> For example, in the 2003 Uruguay restructuring, the central bank declared the old bonds ineligible for liquidity assistance, effectively rendering them unmarketable. Failure of a bank to participate in the exchange would have therefore hurt their provisioning and capital adequacy ratios (IMF 2014).<sup>20</sup> Where the stability of the financial sector was a concern, some restructurings have included a framework for central bank liquidity provision—Box 2 discusses the case of Jamaica, and Box 3 presents Uruguay. Russia provides an example of a sovereign default that had devastating effects on the domestic banks (Box 3).
32. In practice, cleanly separating foreign and domestic creditors is very difficult. The type of debt can be used as a proxy to some extent, categorizing along different axes, including governing law and currency.<sup>21</sup> However, as many observers have noted, the move toward liberalizing capital flows in recent years means that foreign creditors are increasingly holding domestic-law, domestic-currency instruments, and vice versa, making this distinction—and the resulting economic predictions—ever more difficult (Gelpern and Setser 2004; IMF 2015; Moody's 2017).

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<sup>19</sup> Erce and Díaz-Cassou (2010) provide examples from Uruguay's and Argentina's exchanges.

<sup>20</sup> IMF (2014), Annex IV.

<sup>21</sup> The residence of creditor should be distinguished from whether the debt itself is considered foreign or domestic. Traditionally, debt governed by local law and/or issued in local currency has been considered domestic. The governing law plays an important role in determining the issuer's tools in the context of a restructuring (see Chapter 8). The currency of issuance determines whether inflation can be leveraged to lessen the effective debt burden.

33. Jamaica’s restructuring in 2013 and Ukraine’s restructuring in 2015 provide an interesting contrast between debtors that chose to focus on debt held by domestic creditors and foreign creditors, respectively (See Box 2).

### *Default on Banks and Bondholders*

34. Rieffel (2003) and others have suggested that “there is a general impression that bonds are senior to bank loans.” This observation has empirical support, with Schlegl, et al. (2017) finding bank loans more likely to face payment arrears than bonds. Over the past 40 years, it is also true that bank loans of emerging market sovereigns have been restructured more frequently than bonds (Cruces and Trebesch 2013); it remains to be seen if the trend continues in the face of the increasing share of sovereign bonded debt.
35. It is important to note, that a default on bonds does not limit the damage to one type of creditor; bondholders include investment funds, pension funds, and even official entities like central banks and sovereign wealth funds. Importantly, banks themselves are fairly large holders of government bonds, making the distinction between bank loans and bonds artificial when looking at the effect on banks. For example, Gennaioli, et al. (2014) find that default on bonds can decrease the liquidity of domestic banks, particularly in countries with better-developed financial institutions (see below on the cost of default).

### **7.2.2 Default by Debtor Action**

36. Defaults can also be categorized by actions that the debtor takes, irrespective of which creditors stand on the other side.

### *Technical Default*

37. “Technical default” is not a legal term. As we suggest in the first part of this chapter, the phrase connotes a formal but ultimately unimportant breach. Which breach is important is in the eye of the beholder (hence our proposed choice of reputable and impactful third-party definitions). For example, the European Banking Authority defines a technical default (also called a “technical past due situation”) as occurring only where the default was the result of (a) a “data or system error of the institution,” (b) “failure of the payment system,” (c) the time lag between payment and receipt, or (d) certain specific issues in factoring arrangements (European Banking Authority 2017). Some others consider a “technical default” a non-payment that is cured within three months without an announcement of default (e.g., Schwarcz 2014).<sup>22</sup>
38. A few examples of historical defaults that some observers consider “technical” demonstrate to what type of events the term generally applies. In July 1998, Venezuela missed a payment on a local-currency bond with no grace period. The coupons were paid with a one-week delay,

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<sup>22</sup> Some have also defined “technical default” in a broader sense, including episodes in which all payments are actually honored, but a sovereign makes a rescheduling offer on less favorable terms than the original debt (Reinhart and Rogoff 2009, citing practices by Moody’s and S&P). For a further discussion on such “distressed exchanges,” see Section 2.1.2, above.

and the government claimed the problem was that the check signatory had been unavailable. The credit ratings agency Moody's considered this a technical default but, due to a pattern of similar missed payments, downgraded Venezuela's rating from B2 to Caa1 (Moody's 2008). A longer-running saga—that of Argentina's payments to exchange bondholders blocked by court injunction, mentioned above in Section 7.1.1—was also labeled by some observers, such as the United Nations Conference on Trade and Development, as a “technical” one (UNCTAD 2016).

### *Repudiation*

39. Repudiation, described in Section 7.1.1, is rare in modern times.<sup>23</sup> Repudiations most often occur after a regime change, and examples of repudiations include those in the wake of communist revolutions—such as Russia in 1917, China in 1949, and Cuba in 1960; Rhodesia in 1965, after its unilateral declaration of independence from the United Kingdom; Zaire in 1979; Ghana in 1979 and 1982; and North Korea in 1976.<sup>24</sup>
40. Repudiation can go hand-in-hand with the concept of “odious debt,” which posits that a government is not obligated to pay for those debts incurred by a previous government contrary to the interests of the public.<sup>25</sup> Though, the concept has strong moral appeal, it is difficult to define odious debt in a sufficiently limited way to allow its practical application (Reinhart and Rogoff 2009).<sup>26</sup> The doctrine has not gained traction with arbitrators, courts, or credit rating

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<sup>23</sup> In an earlier era, the repudiation of a predecessor government's debt was a common feature in treaties ending armed conflict—e.g., Treaty of Campo Formio of 1797 (France and Austria); Treaty of Tilsit of 1807 (France and Prussia); Treaty of Vienna of 1864 (Denmark, Prussia, Austria); 1947 Peace Treaties of Paris (Menon, 1986 at p. 116). Other repudiations followed significant regime changes: Spain in 1824, Greece in 1826, Portugal in 1834, Mexico in 1866, and the Dominican Republic in 1872.

<sup>24</sup> Moody's (2008) and Sturzenegger and Zettelmeyer (2007) provide examples.

<sup>25</sup> For a further examination of this doctrine, see Blair (2014), Gelpern (2007), Buchheit et al. (2007), Jayachandran and Kremer (2006).

<sup>26</sup> To get around the difficult determination of which particular debts should be considered odious, Bolton and Skeel (2011), for example, propose an “odiousness of the regime” approach rather than the traditional “debt-by-debt” approach.



agencies (Gelpern 2007; Blair 2014) and, the earlier example of Ecuador aside,<sup>27</sup> states tend not to assert it explicitly.<sup>28 29</sup>

### *Hard vs. Soft*

41. Defaults are often categorized as either “hard”/“unilateral” or “soft”/“negotiated,” though the exact meaning of these terms often depends on the speaker. The key consideration across the board, however, is whether the debtor is presenting creditors with nonpayment as a *fait accompli*, or proactively engaging with its creditors on the terms of a default and restructuring. As discussed in Section 7.1, this is a set of definitions used in the literature that conflates default (an event) with actions taken during the restructuring (a process). However, because it this group of definitions is so widely used, it is important to understand.
42. To measure and define creditor engagement and negotiated defaults it is useful to consider the IMF’s “good faith” criterion under its Lending Into Arrears Policy.<sup>30</sup> This policy is important because it outlines the conditions under which the IMF may provide crisis financing when a debtor is in arrears to its private creditors (IMF 2013). In order to be judged by the IMF to be acting in good faith toward its private creditors the debtor country should, with due regard to the circumstances, (1) engage in a dialogue with the creditors at an early stage and throughout the restructuring process, (2) share relevant non-confidential information on a timely basis, (3) provide creditors with the opportunity to give input on the design of the restructuring and individual instruments, and (4) engage with a timely-formed and representative creditor committee, where warranted by the complexity of the case (IMF 2002).
43. The literature generally depicts a “hard” or “unilateral” default as a combination of payment default and an aggressive restructuring posture, where the debtor refuses to negotiate with creditors in good faith (Andritzky 2006; Enderlein et al. 2014; Trebesch & Zabel 2017). Such cases may be more closely associated with creditor lawsuits, deep net present value reductions, and capital controls. Debtor-creditor interactions take place against the background of large information asymmetries.

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<sup>27</sup> See Feibelman (2010) for an argument that the government’s justification for default does not meet the traditional definition for “odious debt” in that it did not show that “the citizens did not obtain meaningful benefits from the underlying transactions.”

<sup>28</sup> See, e.g., [Reports of the International Arbitral Awards](#), *Aguilar-Amory and Royal Bank of Canada claims* (Great Britain v. Costa Rica), Vol. I pp. 369-399, October 18, 1923 (finding that Tinoco regime’s oil concessions to a British company and bank notes were binding on successive governments, despite the unconstitutionality of the contracting and the fact that Tinoco’s government was not recognized by Great Britain).

<sup>29</sup> As Blair (2014) notes: “The term ‘odious debt’ may ... be one of public international law, but it is not much used in English law, currently at least, and certainly has no technical meaning... ”

<sup>30</sup> The Lending Into Arrears (LIA) policy permits the IMF to lend to a member country in arrears to private creditors on a case-by-case basis where “(i) prompt Fund support is considered essential for the successful implementation of the member’s adjustment program, and (ii) the member is pursuing appropriate policies [and] is making a good faith effort to reach a collaborative agreement with its private creditors” (IMF 2013).

44. In a “soft” or “negotiated” default, by contrast, the debtor engages proactively with creditors to reach a negotiated solution.<sup>31</sup> Generally, a soft default would allow for comprehensive market soundings and informal negotiations with creditors, information sharing, and an offer that could take a menu approach with different options. Of course, this classification is subjective—one man’s market sounding is another’s take-it-or-leave-it offer. In reality, defaults and restructurings fall somewhere between these two extremes. Examples of defaults often classified as “hard” include the cases of Argentina in 2001 (see Chapter 8) and Russia in 2000 (see Box 3), while Uruguay’s 2003 restructuring provides an example of a “soft” approach (see Box 3).

### *Partial vs. Full*

45. The literature has also differentiated between “partial” and “full” defaults, typically by considering the amount being defaulted on, though there is significant disagreement over where the boundary lies. Some authors, including Arellano, et al. (2013), consider that sovereign debtors only ever partially default, as debtors will always continue to pay some portion of their debt—and often continue to borrow new amounts. Others, such as Eichengreen (1991), consider countries that miss “more than a small fraction of interest payments” to be “heavy” or full defaulters.

46. A very related concept is that of “selective default”, where sovereigns default on some creditor classes while sparing others. For a detailed discussion see Erce (2012) and Schlegl, et al. (2017).

### **7.3 Why Do Defaults Occur?**

47. What are the drivers of sovereign debt distress and default? To set the stage, one can think of debt crises as a result of either “mismanagement,” meaning bad financial and macroeconomic policymaking at home, and/or of “misfortune,” mainly due to external shocks such as a sudden spike in global interest rates, crises in financial center countries, commodity price swings, or natural disasters. In practice, a clean distinction between these two causes is difficult. In particular, it is well-known that countries can implement precautionary macroeconomic and fiscal policies that help to buffer and manage external shocks when they occur. Despite this, it is useful to summarize the findings from the early warning literature on defaults by looking at domestic determinants (Section 7.3.1) and external determinants (7.3.2) separately. This distinction can also be applied to the Eurozone debt crisis of 2010-2012, which has been characterized by some as a crisis of economic fundamentals and reckless over-borrowing by domestic politicians, while others emphasize the role of cross-border contagion, debt runs by foreign investors, and self-fulfilling default expectations (see Section 7.3.3). In this context, we will also summarize studies on legal drivers of default in Europe and beyond, in particular

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<sup>31</sup> Where the debtor continues to abide by the payment and other terms of the contract, this would not constitute a legal default. For a further discussion of distressed exchanges, see Section 2.1.2, above.

the impact of bond clauses and jurisdiction choice for sovereign risk and recovery rates (Section 7.3.4).

### 7.3.1. Mismanagement: Domestic Determinants of Default

48. To study the domestic determinants of sovereign default Manasse and Roubini (2009) distinguish between *liquidity and solvency*. Simply put, liquidity crises are episodes with roll-over problems, meaning difficulties in refinancing short-term debt, while solvency crises are marked by a high debt burden.<sup>32</sup> Their analysis shows that the risk of default due to *illiquidity* is especially high if short-term debt exceeds 130% of reserves. Above this threshold, defaults can even occur at moderate levels of debt to GDP.
49. With a view to *insolvency*, Manasse and Roubini (2009) find that the risk of default is particularly high in case of a high stock of *external* debt (in excess of 50% of GDP), while the level of total public debt to GDP is a less useful warning indicator. In line with this, Reinhart et al. (2003) show that a high public debt burden alone is not a good predictor of when and why countries default. Using long-run data they show that some countries are “debt intolerant” and have defaulted at debt/GDP ratios of just 20%, while others have tolerated debt stocks above 100% of GDP for decades without running into distress. At the same time, the authors show that the *credit history* of a country is a crucial predictor of default. All else equal, advanced economies and emerging market countries that have never defaulted are much less likely to run into debt problems than “serial defaulters”, with a high historical default probability.
50. The risks of external debt are also studied by Catao and Milesi-Ferretti (2014) who show that the ratio of net foreign liabilities (NFL) to GDP is an important predictor of sovereign debt crises, especially if this ratio surpasses 50%. The recent Eurozone crises fits into this picture, as much of the debt of countries such as Greece or Portugal was owed to foreign, not domestic creditors. *External dependence* thus appears as a dominant explanation for serial debt problems, not just in Europe, but also in Argentina and many other countries that have relied on foreign debt and defaulted again and again (Reinhart and Trebesch 2016).
51. Beyond solvency and liquidity indicators, recent years have brought to the fore another domestic trigger of sovereign distress, namely banking crises and *sovereign-financial “doom loops”* (Fahri and Triole 2012). Using 200 years of data, Reinhart and Rogoff (2011) show that domestic banking crises are often followed by a sovereign debt crisis, partly due to the large fiscal costs associate with a financial crash. Negative spillovers from bank balance sheets to the sovereign also played a major role during the Eurozone crisis, as documented by Acharya, Drechsler and Schnabl (2014). Announcements of large financial bailouts between 2010 and 2012 were followed by a strong and immediate increase of sovereign risk measures such as CDS spreads. Similarly, Ang and Longstaff (2013) show that systemic sovereign risk is highly related to financial sector distress, rather than macro fundamentals. Finally,

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<sup>32</sup> For sovereign debtors, the distinction between illiquidity and insolvency is blurry, as liquidity crises can result in a situation of insolvency, while crises of insolvency are often triggered by refinancing problems.

economists have also identified domestic macroeconomic volatility (Catao and Kapur 2006) or domestic political and institutional factors as relevant drivers of sovereign risk (Kohlscheen 2007; van Rikceghem and Weder 2009; Enderlein et al. 2012; Trebesch forthcoming).

### **7.3.2 Misfortune: External Determinants of Default**

52. External shocks are a main reason why countries default on their debt, especially during systemic debt crises that occur in multiple countries simultaneously (Kaminsky and Vega Garcia 2016). Sturzenegger and Zettelmeyer (2006, p. 6) study the main sovereign default clusters of the last 200 years and find external factors to be decisive, in particular (i) a worsening of the terms of trade; (ii) a recession in the core countries that acted as providers of capital; (iii) an increase in international borrowing costs, e.g., due to tighter monetary policy in creditor countries; and (iv) a crisis in an important country that causes contagion across trade and financial markets. These findings are in line with Reinhart et al (2016, 2018) who show that a collapse of international capital flows and commodity markets are a powerful predictor of default. Five of the six main waves of external default since 1815 were preceded by such a “double bust”, meaning a sudden stop in global capital flows that coincides with a collapse in global commodity prices. Kaminsky and Vega Garcia (2016) further show that terms of trade and export shocks have typically preceded defaults in Latin America, while Hilscher and Nosbusch (2010) show the volatility of terms of trade shocks to be a main driver of sovereign bond spreads. The role of sudden stops in capital flows is further examined by Mendoza (2010), while the link between commodity prices and sovereign risk is studied in a more granular way by recent work of Mendoza and Restrepo-Echavarria (2018) and Dominguez et al. (2018).

### **7.3.3 Can Debt Crises Be Self-Fulfilling?**

53. The idea that debt crises could be self-fulfilling goes back to Calvo (1988) and Cole and Kehoe (2000), among others. They show that the probability of default largely depends on investor expectations and that there can be multiple equilibria in crisis times. During the Eurozone crisis, this notion has regained new prominence. De Grauwe and Li (2013), for example, show evidence that, at the peak of the crisis, sovereign spreads were mostly driven by market sentiment and had decoupled from macroeconomic fundamentals or risk indicators such as debt/GDP. Beirne and Fratzscher (2013) also find that a large part of the increase in the level and dispersion of bond spreads during the Eurozone crisis cannot be explained by fundamentals. They distinguish between “pure contagion” or herding panics and “fundamentals contagion,” meaning a crisis-induced increase in market sensitivity to fundamentals, which was the main contagion channel during the Eurozone crisis according to their results (see Dell’Arriccia et al 2006 for a similar result for emerging markets after the Russian crisis). Bocola and Dovis (2016) provide a more theory-driven assessment on the role of fundamentals versus self-fulfilling crisis expectations. They find that rollover risks (or self-fulfilling crisis risk) can explain only a small part of the Italian bond spreads during the crisis, while economic fundamentals play the dominant role.

54. The overall take away from recent research is that there can indeed be more than one equilibrium in crisis episodes and that excessive debt accumulation and weak fundamentals can therefore “leave sovereign borrowers at the mercy of self-fulfilling increases in interest rates” (Lorenzoni and Werner 2016). Precautionary policies ex-ante can help countries to avoid

entering this “crisis zone” in the first place, e.g. via a fiscal rule (e.g. Conesa and Kehoe 2016; Lorenzoni and Werner 2016), while cross-border bailouts or central bank interventions can prevent or mitigate self-fulfilling dynamics ex-post (e.g. Corsetti and Dedola 2016; Corsetti, Erce and Uy 2018; Roch and Uhlig 2018). Furthermore, Chamon (2007) suggest relying on state-contingent debt (such as GDP-linked bonds) to reduce the likelihood of self-fulfilling runs.

### **7.3.4 Legal Determinants of Default: Do Contract Terms Matter?**

55. Policy and academic debates about sovereign debt contract reform occasionally imply that contract terms which make debt restructuring more orderly, such as Collective Action Clauses, should also make default easier, more attractive, and therefore more likely. However, studies have failed to find consistent evidence that terms described by market participants as “legal” or “process” terms—capturing all but the core economic bargain— increase sovereign debt prices at issue (e.g. Becker et al. 2003, Eichengreen and Mody 2004).
56. The puzzle that CACs and related terms have no (or limited) impact on bond pricing has been occasionally explained as a matter of offsetting effects: default may be more likely, but recovery values are higher if the subsequent restructuring process goes smoothly. However, if creditors find smoother restructuring attractive, the “upside” of process terms should become more salient as the sovereign slides into distress (default probability approaches 100%), so that contracts with CACs and similar terms that facilitate orderly restructuring should be priced more favorably (see e.g., Carletti et al. 2017). Instead, studies find growing price penalties for process terms as default draws near (e.g., Carletti et al. 2016, Chamon, Schumacher & Trebesch 2018).
57. Future studies could help illuminate the relevance of contract terms for the default probabilities and recovery values. Interviews with debtors, creditors, and other market participants suggest that they associate legal or process terms with recovery values, but view their impact on the probability of default as simply too uncertain at issue (Gelpern, Gulati, & Zettelmeyer 2018).

## **7.4 The Cost of Default**

58. Sovereign defaults can be costly for governments and investors alike and cause collateral damage to the economy of a defaulting country. This section summarizes these costs.

### **7.4.1. Loss of Market Access**

59. The theoretical literature typically assumes that defaults and distressed restructurings lead to the exclusion of sovereigns from international capital markets, as well as to an increase in borrowing costs afterwards (see, e.g. Eaton and Gersovitz 1989 or Arellano 2008). The empirical results, however, are mixed.
60. Overall, there is a consensus that defaults do hurt the conditions under which governments can borrow abroad and at home, but there is disagreement around how persistent this effect is. For example, the survey by Panizza et al. (2009) indicates that defaults increase borrowing costs (risk spreads) markedly, but only in the first two years post-default. Similarly, Gelos et

al. (2011) document that most defaulters regain access to international markets within just one or two years after a crisis. These findings are in line with older studies<sup>33</sup> and suggests that investors have short memories. In contrast, more recent work by Cruces and Trebesch (2013) and Catao and Mano (2017) account for the severity of default, measured by the size of haircuts or the length of the default, and find evidence for a more persistent, sizeable default premium, of 200 basis points, and a longer exclusion period from international markets.

61. One channel by which defaults affect market access and borrowing costs are credit rating downgrades. It is well-known that ratings decrease markedly before and after sovereign default events (see e.g. S&P 2018). Post-default ratings can also remain low for long periods, deterring institutional investors from buying and holding these low-rated bonds. Indeed, defaults and downgrades can result in portfolio relocation effects, also because distressed debt instruments are often excluded from benchmark indices. JP Morgan's EMBI index, for example, drops bonds when they become illiquid and have unreliable pricing, which is often the case in default, especially in protracted defaults. Given the current boom in index investing, these types of index exclusions are likely to be increasingly costly for sovereigns in distress.

#### 7.4.2. Collateral Damage for the Economy

62. The idea that default may cause “collateral damage” to the economy is nothing new. Cole and Kehoe (1998) develop a model of generalized reputation which suggests that default triggers reputational spillovers that adversely affect not only the sovereign credit market but also other fields of the economy. In line with this, a large literature has studied the link between default and various economic outcome variables.
63. First, sovereign debt crises are accompanied by a significant drop in *economic growth*, as shown in more than a dozen studies. Borensztein and Panizza (2009), Furceri and Zdzienicka (2012), and Kuvshinov and Zimmermann (2014), for example, use cross-country panel data to show that defaults are associated with two to six percentage points lower growth in the first years of the crisis. There is also a consensus that the fall in output is particularly large when defaults are accompanied by banking crises (see e.g. De Paoli et al. 2009; Kuvshinov and Zimmermann 2014). Furthermore, recent work has zoomed in on the aggregate relationship between default and growth. Levy-Yeyati and Panizza (2011), for example, use quarterly data to show that, on average, output contractions *precede* defaults and that the recovery starts right after the default. Tomz and Wright (2007) show that the relationship between default and output since 1820 is unexpectedly weak and that countries have also defaulted in “good times”. Trebesch and Zabel (2016) show that the output losses are more pronounced in “hard” defaults.
64. Moreover, the literature has documented a negative correlation between default and (i) trade, (ii) foreign direct investment and (iii) domestic firms in the defaulting country. Regarding trade, Rose (2005) estimates a gravity panel and shows that, following sovereign debt

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<sup>33</sup> The influential studies by Lindert and Morton (1989) and Özler (1993) find that the average default penalty is not sizeable, and leads to an average increase in spreads of, at most, 50 basis points in years one or two after the crisis. Additional evidence, going back farther in history, is provided by Jorgensen and Sachs (1989).

restructurings, trade falls bilaterally by about 7 percent per year and for more than 10 years. Both Martinez and Sandleris (2011) and Mitchener and Weidenmier (2005) show that the observed drop in trade during debt crises is mostly due to a “general” effect rather than a bilateral punishment channel. In a similar setup, Fuentes and Saravia (2010) show that countries that undergo a debt restructuring see their FDI flows drop by up to 2 percent of GDP per year.

65. Regarding domestic firms, Hebert and Schreger (2017) use data from Argentina to show that a sovereign default significantly reduces the value of domestic firms on the stock market, especially for exporters and foreign-owned companies. In earlier work, Arteta and Hale (2008) and Das et al. (2012) find that sovereign debt crises are accompanied by sizable drop in external borrowing by domestic firms. This indicates that corporations in defaulting countries face difficulties in accessing foreign capital markets. Borenzstein and Panizza (2010) and Zymek (2012) also focus on this credit channel and provide evidence that defaults hurt those sectors and exporters most that are dependent on foreign financing. These findings are in line with the theoretical model of Mendoza and Yue (2012) in which defaults increase the cost of borrowing abroad and, thus, the cost of paying for imported inputs. The resulting shift to domestic inputs causes efficiency losses in domestic production and lowers growth.

#### **7.4.3. Spillovers on the Domestic Banking Sector**

66. Sovereign default can also cause major damage on banks and other systemically relevant institutions, especially if they hold large amounts of government debt. This type of “top-down” sovereign-financial spillover has played an increasingly important role in recent years, most visibly during the Eurozone crisis. Indeed, there is a consensus that heightened sovereign default risk in economies with a large financial sector can result in an aggregate credit shortage, less investment and possibly a banking crisis and an output decline (e.g. Acharya et al. 2014; Perez 2015; Bocola 2016; Sosa-Padilla, forthcoming).
67. A widely cited paper on the link between sovereign default and banks is Gennaioli et al. (2014), who find that sovereign defaults are followed by large drops in private credit and that this post-default credit crunch is stronger for countries in which banks hold more government debt. In follow-up work, the same authors use finer-grained data and again find a strong negative correlation between a bank's holdings of government bonds and its lending during sovereign defaults (Gennaioli et al. 2018). Acharya et al. (2018) and Bofondi et al. (2018) come to a similar result when linking data on a bank's holdings of sovereign debt and that bank's lending activity.

#### **7.4.4. Creditor Lawsuits: The Legal Costs of Default**

68. Other important concerns for policymakers in the context of default are legal risks (threat of litigation) and the costs arising from the so called “holdout problem” (see Chapter 8; Panizza et al. 2009; Buchheit et al. 2013). Overall, the evidence shows that sovereign immunity has eroded since the 1970s, strengthening the hands of creditors and raising the legal cost of default for debtors, with implications for government willingness to repay.

69. The Argentine debt crisis after 2001 is the best-known example for how large the legal costs of default can become. Dozens of hedge funds filed suit against Argentina in New York, litigated for full repayment, and repeatedly attempted to seize Argentine assets abroad. Fifteen years later, those holdout creditors achieved a major victory in court, which ultimately forced the Argentine government into a settlement of more than \$10 billion – a multiple of the debt’s original face value (Cruces and Levy Yeyati 2016; Hébert and Schreger 2017).
70. Argentina is not an exception but is part of a general trend, as shown by Schumacher et al. (2018). Building on a new dataset on sovereign debt lawsuits, the authors document that the risk of litigation in the context of a sovereign default has increased greatly since the 1980s.<sup>34</sup> Furthermore, they show that legal disputes can disrupt government access to international capital markets, as foreign courts impose a financial embargo on defaulting sovereigns. Legal risks are therefore one possible channel explaining why government loose market access.
71. In recent years, the risks of creditor holdouts and litigation has only continued to increase. Schumacher et al. (2018) document that, unlike in the 1990s or early 2000s, governments in distress now frequently point to legal risks when explaining their policy choices, and the same is true for rating agencies justifying up- or downgrades. In line with this, Gulati et al. (2013) argue that the fear of a protracted, Argentine-style disputes with creditors was one of the reasons many Eurozone governments decided to avoid a default or debt restructuring. The one exception is Greece, but even there legal risks played an important role. Most importantly, the Greek government decided to repay holdouts on foreign-law bonds in full and on time, allowing them to escape the haircut imposed on all other creditors. The resulting transfers amounted to more than 2% of Greek GDP (Zettelmeyer et al. 2013).

## **7.5 Reducing the Incidence and Costs of Default**

72. A country’s decision on whether or not to default and how to restructure its debt is typically not taken on its own. Very often, such a decision comes about in the context of a lending program from the official sector, most typically from the IMF. Therefore, the international financial policy architecture and particularly the policy framework of the IMF that governs when and how much it can lend materially affects the incidence and cost of default.
73. This section reviews the experience with the incidence and cost of default, though it necessarily discusses the process of restructuring as well. It is largely based on a series of analytical and policy papers started by the IMF in 2013 to review its experience with resolving sovereign debt crises and considering changes to its policy framework governing its lending and sovereign debt restructuring. The section is organized as follows. Section 7.5.1 documents the “too little, too late” problem: whether or not a country defaults, restructurings are often delayed and when they do take place they often don’t entail a deep enough restructuring to definitively restore sustainability. Hence they end up being more costly. Section 7.5.2 reviews possible factors behind such outcomes, discussing both the

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<sup>34</sup> The risk of litigation is particularly high for sovereigns imposing a high haircut on large amounts of debt (Schumacher et al. 2015).



incentives of debtors as well as official creditors. Finally, Section 7.5.3 discusses what can be done and has been done to make default and restructurings less likely and when they do occur to reduce their associated costs.

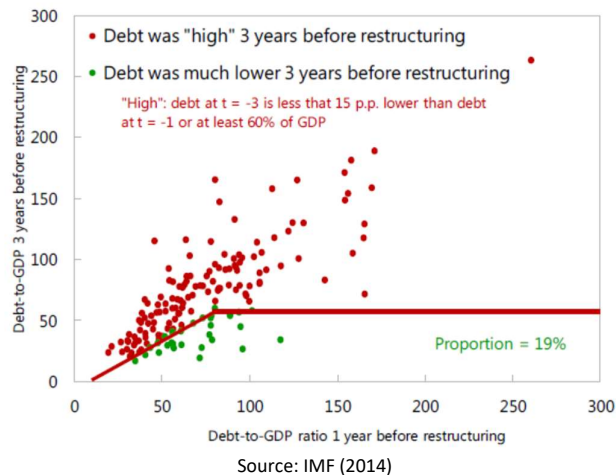
### **7.5.1. Too Little, Too Late: Timing and Depth of Restructuring**

74. A prominent example of a delayed restructuring is Greece (2012). As explained in detail by the IMF’s Independent Evaluation Office (2016), when Greece approached the IMF in May 2010, its debt situation did not meet the bar required by the IMF to lend it large amounts: in the IMF’s jargon, debt was not considered sustainable with “high probability” to allow “exceptional access” to IMF resources. Instead of withholding IMF financing until Greece undertook a debt operation that would bail in private creditors—what would normally have been the case under IMF policies—it was decided to change the IMF’s policies to allow it to bail out private creditors with official resources given the significant systemic spillover risks. The key motivation underlying this decision was the fear that a bail in of private creditors—primarily European banks—would raise the costs of resolving the crisis through contagion to other high-debt Euro-area sovereigns and banks. Besides, there was a chance that Greece might be able to pull itself out of its difficulties and regain market access. In the event, contagion worsened after the bail out, Greece’s debt profile became more rigid due to a higher share of official debt, and the remaining private creditors received a deep haircut in 2012—deeper than would have been necessary if other private creditors had not been paid out in the interim. Greece is not the only example of a delayed restructuring; IMF (2013) reviewed several other such cases.<sup>35</sup>
75. A follow up IMF paper in 2014 provided more systematic evidence on delayed restructurings. Figure 2, below, compares debt one and three years prior to a restructuring in a large sample of restructurings. About 80 percent of the countries that experienced a restructuring had a sustained high debt level three years before the date of the restructuring.

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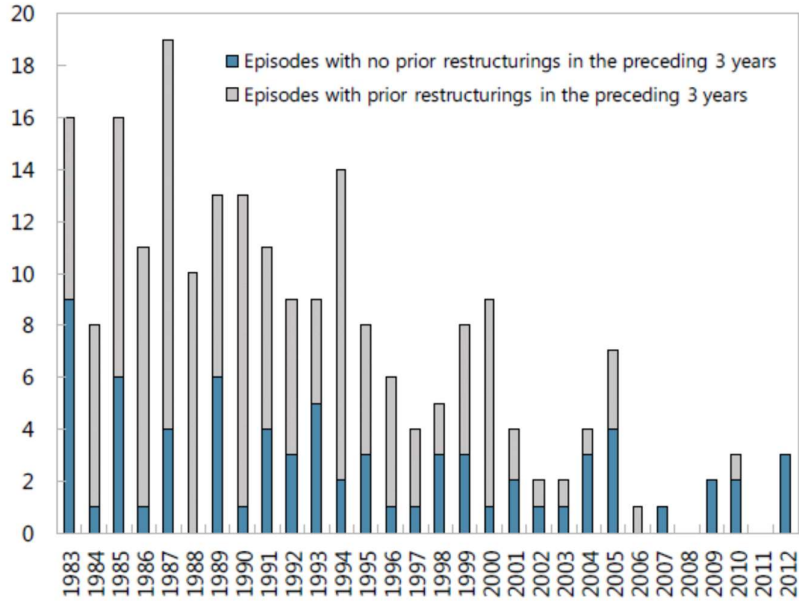
<sup>35</sup> Belize had a restructuring in 2007, outside of an IMF-supported program, but staff had noted explicit concerns about fiscal and debt sustainability in 2005. In Seychelles, the IMF noted in 2003 that debt was unsustainable. Seychelles defaulted in 2008 and sought financial assistance from the Fund to set the stage for restructuring its debt in 2009-10. In St. Kitts and Nevis, IMF reports going back as far as 2006 showed an explosive debt path for the baseline scenario. The government’s intention to restructure debt was announced only in 2011 in the context of a new IMF-supported program.

Figure 2. Delayed Restructurings



76. Delayed restructurings are costly first and foremost to debtors but also to creditors and the international financial system (IMF 2014). For debtors, a situation of debt overhang depresses investment and growth and creates a sense of financial uncertainty that can raise the eventual magnitude of the debt problem. For creditors, delayed restructurings, particularly when some private creditors are paid out in the interim, imply that those that are left, or who lent on longer maturities, will have to absorb a greater loss. Finally, bailout induced delays are bad for the international financial system. For countries experiencing debt distress which are considering approaching the Fund for assistance, creditors have an incentive to lend on shorter maturities recognizing that they have a higher chance of being bailed out. This in turns distorts the incentives of the country to favor short term borrowing further worsening its debt profile.
77. When restructurings have taken place, they have often failed to restore debt sustainability and market access, leading to repeated restructurings and dependence on official financing (the too little problem). The literature finds that more comprehensive initial restructurings lessen the likelihood of repeat restructurings—relatively low haircuts often presage serial restructurings (Schroeder 2014; Mariscal, et al. 2015). The Dominican Republic, Grenada, and Jamaica all returned for another Fund-supported program after their restructurings and with the initial program going off track quickly. A famous example from earlier times is Poland. It went through six restructurings with private creditors and four with the Paris Club between 1981 and 1990, mostly consisting of rescheduling of principal and interest. The debt problem was not fully resolved until the Paris Club granted 50 percent debt forgiveness in 1991 and, after lengthy negotiations, private banks agreed to a 45 percent debt reduction in 1994. IMF (2014) provided more systematic evidence on the tendency for restructurings to be too little. From 1980 to 2012, of the 44 countries that restructured their debt, 86 percent had more than one restructuring. This pattern emerged in restructurings with both private and official creditors; on average each country had over 5 restructurings, of which about half were with private foreign creditors (see Figure 3 and Table 1, below). Repeat restructurings suggest that a one-time restructuring was often not enough to solve the debt problem. On average, two-thirds of all restructurings with private foreign creditors did not successfully establish sustainability and led to repeat restructurings.

Figure 3. Repeat Restructurings



Source: IMF (2014), Reinhart and Rogoff (2009); Das, Papaioannou, and Trebesch (2012); and Cruces and Trebesch (2013).

Table 1. Repeat Restructurings

Country	Private Foreign	Official	Domestic	Total
Ecuador	6	8	1	15
Jamaica	5	7	1	13
Poland	7	5		12
Argentina	5	5	1	11
Brazil	6	4	1	11
Gabon	2	8		10
Philippines	4	6		10
Mexico	5	3	1	9
Morocco	3	6		9
Peru	3	5	1	9
Russia	3	5	1	9
Costa Rica	3	5		8
Dominican Republic	3	4	1	8
Chile	5	2		7
Indonesia		5	1	6
Panama	3	2	1	6
Romania	3	2		5
Uruguay	5			5
Albania	1	3		4
Algeria	2	2		4
Bulgaria	1	3		4
Equatorial Guinea		4		4
Pakistan	1	3		4
Turkey	2	1	1	4
Ukraine	3	1		4
Venezuela	3		1	4
Bosnia and Herzegovina	1	2		3
FYR Macedonia	1	2		3
South Africa	3			3
Trinidad and Tobago	1	2		3
Angola		1	1	2
Croatia	1	1		2
Egypt		2		2
Grenada	1	1		2
Paraguay	1		1	2
Seychelles	1	1		2
Sri Lanka		1		1
St. Kitts and Nevis	1	1		2
Belize	1			1
El Salvador		1		1
Greece	1			1
Guatemala		1		1
Serbia	1			1
Slovenia	1			1
<b>Total</b>	<b>99</b>	<b>115</b>	<b>14</b>	<b>228</b>

Sources: IMF (2014), Cruces and Trebesch (2013); Das, Papaioannou, and Trebesch (2012); Reinhart and Rogoff (2009)

### 7.5.2. Causes of Delayed and Inadequate Restructurings

78. Why are restructurings delayed and often insufficient to definitively restore sustainability?

The latter part of the question may be easier to answer. Inadequately-sized restructuring may be linked to the desire to avoid the costs associated with large debt reductions. The available literature finds that significant debt reductions often have higher economic costs, with lengthier market exclusion (Cruces and Trebesch 2013). IMF (2014) also argued that light restructurings have smaller economic costs. However, while it is clear that a deeper restructuring has greater costs, it is not clear why repeated restructurings are considered a better outcome than a “one-and-done” approach. Indeed, Reinhart and Trebesch (2016) find

that countries in a situation of chronic debt overhang tend to grow again only after a significant debt relief agreements involving face value reductions, such as the Brady deals of the 1990s or the cancelation of war debts after 1932.

79. With regard to bilateral official creditors, the incidence of many repeat restructurings may reflect the political difficulties associated with giving a principal reduction. Repeated flow treatments have been a common experience of the Paris Club as in Poland, as noted earlier. Moreover, the countries that have gotten significant stock reductions have all been politically important cases: Poland (in 1991 to woo it away from the Soviet Union after the break up), Egypt (to reward it for its support to the western countries during the 1991 Persian Gulf war), and Iraq (after the Second Gulf War).
80. Reasons for why restructurings are delayed may be more complex. On the one hand, an inclination to delay is no surprise. Debtor governments fear the economic, financial, and political fallout of a restructuring, particularly if the domestic financial sector hold a significant amount of public debt (e.g., Jamaica). Private creditors will also naturally wish to avoid a debt restructuring if at all possible and will therefore press for a bailout by the official sector. Finally, official creditors may also have incentives to delay a restructuring out of concerns that a restructuring would reduce incentives for the debtor country to adjust, force banks located in official lenders' countries to recognize losses, and trigger market turmoil affecting similarly-situated countries, or to preserve flexibility for the future.
81. However, when a debt restructuring is the only option to deal with a distressed situation, it is not clear how the debtor country or the official sector help themselves by delaying the inevitable.

### **7.5.3. Reducing the Costs of Restructurings**

82. It would be naïve to suppose that countries would take heed of the foregoing discussion on the costs of default and always abstain from policies that could put them in a situation of debt distress. It would be similarly naïve to suppose that private creditors would be working with the debtor to find ways for timely and adequately sized restructurings that would be less costly. However, the rules of the game for official sector, and particularly the IMF, on when and how much to lend can materially affect the costs associated with restructurings. To this effect, this section reviews recent changes in the IMF's lending policy framework to improve the framework for sovereign debt restructurings.
83. One of the key changes brought about by the IMF in 2016 was the change to its policy for giving large loans (the exceptional access policy). As noted earlier, the IMF, starting in 2013, embarked on a review of its policies after its experience in Greece and other restructuring cases. While there were several papers produced as part of this work program, a key strand was to make the IMF's exceptional access policy more flexible and better tailored to countries debt situations (IMF 2013, 2014, 2015).
84. Prior to changes made in the context of lending to Greece 2010, the IMF's exceptional access policy required that if a crisis-struck country's debt position was such that it did not meet the bar of debt sustainability with "high probability" it needed to undertake a debt restructuring

sufficiently deep to satisfy this condition. This approach had merit for cases where debt was considered clearly unsustainable. However, it was too rigid for cases where debt was considered sustainable but risks around the debt outlook did not allow this assessment to be made with high probability—that is, cases where debt sustainability was considered to be in the “gray” zone. In such cases, it could be sufficient to give a chance to a lighter restructuring—a reprofiling or an extension of maturities—which would improve debt sustainability and help the country overcome the crisis without incurring the costs of a deeper restructuring. The key change in the exceptional access policy in 2016 was to introduce such flexibility in the IMF’s lending framework and better tailor lending options to the country’s debt situation as illustrated by Figure 4, below.

Figure 4. Changes to the IMF’s lending framework

	2002 Framework	2010 Framework	2016 Framework
Debt is unsustainable	Definitive debt restructuring/ official concessional financing	Definitive debt restructuring/ official concessional financing	Definitive debt restructuring/ official concessional financing
Debt is sustainable but not with high probability		Definitive debt restructuring/ official concessional financing <b>OR</b> Invoke systemic exemption	Maintain non-Fund exposure (e.g., reprofiling or official financing) to improve debt sustainability and enhance safeguards for Fund resources
Debt is sustainable with high probability	Exceptional access without debt restructuring	Exceptional access without debt restructuring	Exceptional access without debt restructuring

Source: IMF (2015)

85. Introduction of such flexibility in the lending framework also allowed the Fund to do away with the systemic exemption that was used to lend resources in exceptional levels to Fund members after 2012. This exemption was introduced out of concerns regarding contagion-related costs associated with a deep restructuring. These costs would be less with other options, such as a reprofiling. Moreover, the systemic exemption had several other problematic aspects that tended to delay a restructuring. By severing the link between underlying debtor risk and yields, the exemption encouraged moral hazard and over-borrowing ex-ante, and exacerbated market uncertainty in periods of sovereign stress, as traders bet on whether the exemption will be activated, rather than focusing on underlying sustainability fundamentals. Moreover, it reduced safeguards for Fund resources since, if a debt restructuring was eventually needed, a smaller pool of private sector claims would be available to absorb losses. Bringing about these changes in the Fund’s policy framework was contentious, and nearly two years passed between staff’s first proposal in 2014 and the Executive Board’s approval in January 2016.

86. While the changes to the Fund’s lending policy should help with more timely and efficient restructurings and faster resolution of debt crises, important other issues remain. One key

challenge is to further strengthen the Fund's debt sustainability framework for market-access countries to guard against pressures for sanguine assessments of debt sustainability to avoid restructurings. Welcome changes were made to the framework in 2013/14 with a new framework and template. To complement this work, the Fund should, except in cases of active restructurings, publish the underlying template for each country's DSA with the associated data so creditors and investors can run the DSA. This transparency would hold the Fund accountable for objective DSAs and make it easier for creditors to assess risk to debt sustainability.

87. While the foregoing discussion has focused on the role that the Fund's lending policy can play in helping achieve timely and more efficient restructurings there also other important measures that can help with this goal. This section has not reviewed the important work done on improving the process of restructuring for example through the use of more robust collective action clauses, which is covered in Chapter 8. It has also not discussed the delays in restructuring caused by potential hold out behavior by official bilateral creditors, especially those outside the Paris Club. Finally, it has also not reviewed the usefulness of potential contingent debt instruments that can give creditors and debtors better incentives and make the process of resolving debt distress smoother.

**Box 1: Examples of Events of Default—  
Payment Default, Covenant Default, and Cross-Default  
in Foreign-Law Tradable Sovereign Debt Securities**

**Italy 2013  
(New York Law, Fiscal Agency)**

**Default; Acceleration of Maturity**

Each of the following is an event of default under any series of debt securities:• We default in any payment of principal, premium or interest on any debt securities of that series and the default continues for a period of more than 30 days after the due date.

- We fail to perform or observe any other obligation under any debt securities of that series and the default continues for a period of 60 days following written notice to us of the default by any holder.
- Any other present or future Public External Indebtedness in an amount equal to or exceeding US\$50 million (or its equivalent) becomes due and payable prior to its stated maturity by reason of default in payment of principal thereof of premium, if any, or interest thereon.
- Any other Public External Indebtedness in an amount equal to or exceeding US\$50 million (or its equivalent) is not paid at its maturity as extended by any applicable grace period. [...]

**Kazakhstan 2014  
(English Law, Fiscal Agency)**

[...] **Events of Default**

The Fiscal Agent shall upon receipt of written requests from the holders of not less than 25% in aggregate outstanding principal amount of the Notes or if so directed by an Extraordinary Resolution shall, give notice to the Issuer that the Notes are and they shall immediately become due and repayable at their principal amount together with accrued interest if any of the following events (each, an “Event of Default”) occurs and is continuing:

- (a) Non-payment: the Issuer is in default with respect to the payment of interest or additional amounts on any of the Notes and such default continues for a period of 30 days; or
- (b) Breach of other Obligations: the Issuer is in default in the performance, or is otherwise in breach, of any covenant, obligation, undertaking or other agreement under the Notes (other than a default or breach elsewhere specifically dealt with in this Condition 13 and such default or breach is not remedied within 60 days after notice thereof has been given to the Issuer at the Specified Office of the Fiscal Agent by any holder of Notes; or
- (c) Cross Default: (a) any other Public External Indebtedness of the Issuer (i) becomes due and payable prior to the due date for payment thereof by reason of default by the Issuer, or (ii) is not repaid at maturity as extended by the period of grace, if any, applicable thereto, or (b) any Guarantee given by the Issuer in respect of Public External Indebtedness of any other Person is not honoured when due and called upon; provided that the aggregate amount of the relevant Public External Indebtedness or liability under such Guarantee in respect of which one or more of the events mentioned in this Condition 13(c) shall have occurred equals or exceeds U.S.\$65,000,000 or its equivalent in other currencies; [...]

**Mexico 2014  
(New York Law, Trust Indenture)**

**Default and Acceleration of Maturity**

Each of the following is an event of default under any series of debt securities:

- Mexico fails to pay any principal, premium, if any, or interest on any debt security of that series within 30 days after payment is due;
- Mexico fails to perform any other obligation under the debt securities of that series and does not cure that failure within 30 days after Mexico receives written notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities requiring Mexico to remedy the failure;
- Mexico’s creditors accelerate an aggregate principal amount of more than U.S. \$10,000,000 (or its equivalent in any other currency) of Mexico’s public external indebtedness because of an event of default resulting from Mexico’s failure to pay principal or interest on that public external indebtedness when due;
- Mexico fails to make any payment on any of its public external indebtedness in an aggregate principal amount of more than U.S. \$10,000,000 (or its equivalent in any other currency) when due and does not cure that failure within 30 days after Mexico receives written notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities requiring Mexico to remedy the failure; [...]



**Box 1: Examples of Events of Default  
(cont'd)**

**Ghana 2014  
(English Law, Fiscal Agency)**

[...] *Events of Default*

If any of the following events ("Events of Default") shall have occurred and be continuing:

(a) *Non-payment*

(i) the Issuer fails to pay any principal on any of the Notes when due and payable and such failure continues for a period of 15 days; or

(ii) the Issuer fails to pay any interest on any of the Notes or any amount due under Condition 8 (Taxation) when due and payable, and such failure continues for a period of 30 days; or

(b) *Breach of Other Obligations*

the Issuer does not perform or comply with any one or more of its other obligations under the Notes, which default is incapable of remedy or is not remedied within 45 days following the service by any Noteholder on the Issuer of notice requiring the same to be remedied; or

(c) *Cross-default*

(i) the acceleration of the maturity (other than by optional or mandatory prepayment or redemption) of any External Indebtedness of the Issuer; or

(ii) any default in the payment of principal of any External Indebtedness of the Issuer shall occur when and as the same shall become due and payable if such default shall continue beyond the initial grace period, if any, applicable thereto; or

(iii) any default in the payment when due and called upon (after the expiry of any applicable grace period) of any Guarantee of the Issuer in respect of any External Indebtedness of any other person, provided that the aggregate amount of the relevant External Indebtedness in respect of which one or more of the events mentioned in this paragraph (c) have occurred equals or exceeds US\$25,000,000 or its equivalent; [...]

## Box 2

### Case Studies: Jamaica 2010/13 and Ukraine 2015—domestic vs external debt

#### **Jamaica (2010, 2013)<sup>36</sup>**

In the decade leading up to the 2010 debt exchange, Jamaica faced annual debt service costs of 112 percent of government revenue, with interest on some local currency bonds reaching 28 percent. By 2009, annual interest payments constituted over 60 percent of fiscal revenue.

In January 2010, with a debt-to-GDP ratio of 124 percent, the government launched a pre-default debt exchange chiefly aimed at reducing the fiscal burden of domestic debt service; external debt was explicitly excluded. The 2010 debt exchange (also known as the Jamaica Debt Exchange, or JDX) covered over 350 domestic debt instruments (local currency, USD-indexed, and USD-denominated)—constituting USD 7.86 billion, or 63.7 percent of GDP. Following informal creditor consultations, the exchange involved a reduction of coupons and an extension of maturities with an NPV haircut of approximately 20 percent. The exchange, which was intentionally designed to be light so as to avoid domestic disruption, was completed just one month later in February 2010 with over 99 percent participation and resulted in fiscal savings of 3.5 percent of GDP, an average extension of maturities for domestic debt from 4.7 years to 8.3 years, and an average coupon decline of 650 bps to 12.5 percent. There was no official-sector restructuring. Jamaica's credit rating was initially downgraded to Selected Default until the IMF approved a stand-by arrangement for Jamaica. Jamaica reentered the domestic capital market in April 2010 at lower rates than before the JDX, and it raised funds in the international capital market in February 2011 on an oversubscribed bond issuance.

In the end, however, the exchange provided only a temporary reprieve. The following years saw slow growth, continued high government spending, and weak tax compliance. By the end of 2012, the debt-to-GDP ratio stood about 150 percent. In February 2013, the government announced another preemptive restructuring of domestic debt (this time known as the National Debt Exchange, or NDX) also supported by the FSSF. The restructuring, which again reduced coupons and extended maturities, included 28 domestically-held local-currency and USD-denominated bonds amounting to approximately USD 9.1 billion, or 64 percent of GDP. With participation of nearly 100 percent, the restructuring was designed to achieve fiscal savings of 8.5 percent of GDP and involved an NPV haircut of about 10 percent with maturities extended by three to ten years, and coupons lowered between 75 and 500 bps. Rating agencies downgraded Jamaica's credit rating to Selected Default, raising it after the exchange, but not to pre-NDX levels (CCC vs. B-). As of 2018, Jamaica's debt continued to be high according to the IMF, but was on a downward path.

Because 65 percent of government debt was held by domestic financial institutions at the time of both restructurings, the government proceeded with caution to avoid threats to domestic financial stability. The government performed stress tests to identify vulnerabilities in the financial system and tailored the exchange accordingly. It also established the Financial Sector

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<sup>36</sup> Bank of Jamaica (2013); UNDP (2010); IMF (2014); IMF (2015) at Annex II, Appendix; Erce (2013); Grigorian, et al. (2012); IMF (2013); IMF (2018) at Annex II.

Support Fund (FSSF), which offered liquidity support for institutions exchanging at least 90 percent of their old sovereign bonds. Ultimately, no Jamaican bank accessed FSSF liquidity support. Jamaica explicitly excluded foreign-law bonds from the restructurings for several reasons. First, domestic debt presented the largest ongoing payment concern. Second, the government wished to quickly reestablish access to international markets. Third, the government lacked sufficient information about foreign bondholders to help secure adequate participation.

### **Ukraine (2015)<sup>37</sup>**

Heightened tensions with Russia following the annexation of Crimea exacerbated ballooning financing needs, and it became clear by end-2014 that Ukraine's debt burden was unsustainable. A preemptive debt exchange operation was announced in January 2015 and launched in September 2015, with three objectives, tied to the parameters of an IMF-supported program: (i) generating USD15 billion in public sector financing over the next three years; (ii) lowering debt-to-GDP ratio from almost 80 percent to under 71 percent by 2020; and (iii) limiting gross financing needs to an average of 12 percent of GDP in 2015-18 and 10 percent of GDP in 2019–25.

The debt exchange covered four categories of debt—USD 18 billion of government-issued Eurobonds held by external creditors including Russia, USD 0.5 million of government-guaranteed external commercial loans of SOEs, USD 0.6 million of City of Kyiv Eurobonds, and USD 3.3 billion of non-sovereign-guaranteed external debt of three SOEs. Following extensive discussions with a creditor committee representing large bondholders, the restructuring called for a 20 percent haircut on outstanding Eurobond amounts, a four-year extension of maturities, and a higher coupon (7.75 vs. 7.2). The exchange also included a GDP warrant to provide a potential upside to creditors in 2021-40. The terms for guaranteed SOE loans and City of Kyiv Eurobonds mirrored those for the Eurobonds but with a 25 percent haircut and shorter maturity extension. There was no haircut for non-guaranteed SOE debt, which were stretched out with a higher coupon. CACs were triggered on the two sets of Eurobonds and the non-guaranteed SOE debt, resulting in no holdouts save Russia's National Wealth Fund (see below). Participation in the other debt categories were lower.

While debt held by official creditors was generally not restructured, a USD 3 billion Eurobond held by Russia's NWF was initially swept into the Eurobond restructuring by Ukraine. Russia refused to participate, and Ukraine defaulted on the bond in December 2015. Upon petition by Russia, the IMF declared the Russian-held Eurobond to constitute official bilateral debt under the IMF's arrears policies, prompting Ukraine to enter into bilateral discussions on restructuring. Russia filed suit in English court to enforce payment. [At the time of this publication, the debt had not been restructured.]

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<sup>37</sup> IMF (2016a) at Debt Sustainability Analysis Annex; IMF (2016b); IMF (2015b); Ministry of Finance of Ukraine (2015).

Two-thirds of public debt was held by non-residents; domestic creditors, including those holding foreign-currency debt, were excluded. This perimeter was drawn partly due to financial stability concerns but primarily because increased recapitalization needs would incur a fiscal cost, leading to non-observance of the objectives laid out under the IMF-supported program.

### Box 3

#### Case Study: Uruguay and Russia—hard vs soft

##### Uruguay (2003)<sup>38</sup>

Uruguay's economy was severely impacted by the Brazilian and Argentine crises of the late 1990s and early 2000s, in part due to high dollarization. In May 2002, widespread withdrawals from the banking system, including by Argentine depositors, who held 40 percent of deposits in Uruguayan banks, led the Uruguayan authorities to declare a five-day bank holiday. Facing low foreign exchange reserves and crippling external debt-service payments, the government decided to float the currency. The peso depreciated by 27 percent overnight and ultimately by 50 percent. Public debt, which constituted 40 percent of GDP in 2001, reached approximately 100 percent in 2003.

Despite an investment-grade rating as late as 2002, in March 2003, the government announced a preemptive and voluntary debt exchange involving an extension of maturities. The exchange covered USD 5.4 billion in foreign-currency debt held by private creditors, including domestically-issued bonds and bills, a Samurai bond issued in Japan, and international bonds issued under foreign law. This was about half of total debt and was considered comprehensive. Domestic creditors were thought to hold just over half of debt and to mostly constitute retail investors. Official bilateral debt, which was not a major component of debt at the time, was not rescheduled. The exchange was launched in April and settled in May with a small NPV reduction. Maturities were extended by an average of 6.4 years for foreign-law bonds and 8.6 years for domestically-issued bonds.

The exchange achieved a high rate of participation—99 percent participation in the domestic exchange, and 93 percent overall—through a combination of techniques. Only the relatively small (USD 0.3 billion) Samurai bond included a CAC. For the other bonds, participating creditors could choose whether to vote for exit consents to remove the cross-default/cross-acceleration clause, to allow the bonds to be delisted in international exchanges, and to amend the waiver of sovereign immunity. This final exit consent sought to address participating bondholders' concerns that holdout bondholders would attempt to attach payments on the new bonds by specifically withdrawing the waiver of sovereign immunity regarding those payments. The government also encouraged participation by offering sweeteners until a given deadline and received support from the IMF for the exchange through a letter from the Managing Director encouraging participation. For domestic bank bondholders, the central bank encouraged participation in the exchange by announcing that old bonds would no longer be

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<sup>38</sup> IMF (2014) at Annexes II, III, IV; IMF (2003a); IMF (2003b); Erce (2013); Cruces & Trebesch (2013); Buchheit & Gulati (2000); Buchheit & Pam (2004).

eligible for liquidity assistance. Because the old bonds had to be marked to market and would require a 100 percent risk weight for capital ratios, it was an inevitability that banks would participate in the exchange. To minimize financial instability, the government, supported by multilateral institutions, established the Fund for Fortifying the System of Banks (FFSB), later replaced by the Fund for the Stability of the Banking System (FSBS). The FSBS, which was established in August 2002 to rectify certain shortcomings of the FFSB, had resources of USD 1.5 billion and was designed to support the central bank's lender-of-last resort facilities, to provide financing for bank recapitalization, to cover all US dollar deposits in public banks, and to provide liquidity support to the payment system. Ultimately, the FFSB helped restore confidence in the financial system.

Uruguay presented the reprofiling as a voluntary exercise and took great pains to engage early and often with creditors. The government conducted roadshows—including one in Japan—to seek views and suggestions to ensure participation. After presenting an initial proposal, the government amended the terms of the offer in consultation with bondholder representatives. Most bondholders were able to choose between new bonds with maturities extended by an average of five years with a similar coupon or switching to a “benchmark bond” with greater liquidity than the first option. Uruguay sought to ensure inter-creditor equity including by providing cash payments upfront for bondholders with accrued interest.

Following the exchange, and supported by strong economic policies and an IMF arrangement, Uruguay reestablished debt sustainability and entered a period of economic recovery. The country regained market access quickly, issuing a dollar-denominated bond in June 2003. Uruguay's credit rating, which was downgraded to “Selective Default” for less than a month, recovered over the following year but did not reach investment grade until 2012.

### **Russia (1998)<sup>39</sup>**

Oil price shocks and the Asian Financial Crisis exacerbated domestic political tensions and financial market pressures in early 1998. By May, interest rates quintupled, and the central bank doubled its sales of foreign exchange to defend the ruble. The government's debt service on short-term government bonds (GKOs) skyrocketed, but investor flight continued, and international reserves plummeted. In a mid-July supported by the IMF, the government announced a voluntary swap of USD 4.4 billion of GKOs for long-term Eurobonds. However, very low participation in the exchange, coupled with the political failure of key fiscal measures intended to support the exchange, triggered a rise in GKO yields to nearly 300 percent. The central bank faced pressures from multiple sides—providing credit to the government, supporting commercial banks, and draining reserves to support the ruble. Between July 10 and August 14, the central bank lost USD 4.5 billion in reserves.

In August 1998, the government suspended payments on USD 45 billion (at the pre-crisis exchange rate) in treasury bills (GKOs and medium-term ruble bonds known as OFZs) maturing

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<sup>39</sup> Chiodo & Owyang (2002); Pinto & Ulatov (2010); IMF (1999a); IMF (1999b) at pp. 107-112; Sturzenegger & Zettelmeyer (2005); Erce (2013); Kharas, et al. (2001); Olivares-Caminal (2009) at chapter 4.

before end-1999 and announced a 90-day standstill in servicing private external debts, short positions on currency forwards, and margin calls on repo operations. Because domestic debt represented the biggest liquidity constraint, the government was able to remain current on post-Soviet external debt obligations.<sup>40</sup> Also in August, the government widened the exchange rate band, suspended secondary market trading of GKO and OFZs, and announced plans to introduce capital controls. Despite large-scale interventions, the central bank was unable to maintain the band, and the ruble was allowed to float in early September. The float, coupled with the default on GKO and OFZs, led to the collapse of many domestic banks, which had invested heavily in government securities. The banking system broke down, with interbank transactions collapsing and the payments system paralyzed.

The debt restructuring was ultimately concluded two years following the default and encompassed USD 71.6 billion at pre-crisis exchange rate levels and involved private sector restructuring, a Paris Club treatment, and a London Club restructuring. The exchange with private creditors took only six months. Though the offer was criticized as unilaterally imposed and discriminatory, it received nearly 99 percent support. Non-residents ultimately received approximately five cents on the dollar, though the loss was largely attributable to devaluation. The Paris Club agreement, reached in January 1999, provided a flow rescheduling for Soviet-era debt of USD 8 billion—or 4.6 percent of public debt. Agreement was reached with the London Club<sup>41</sup> in August 2000 and provided an over 50 percent haircut on USD 31.9 billion in bank loans.

Russia recovered from the crisis over the following years and was again rated as investment grade by Moody's in October 2003.

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<sup>40</sup> The government defaulted on external Soviet-era debt.

<sup>41</sup> While initially led by the London Club Bank Advisory Committee, the committee of 19 international banks broke down, and creditors ultimately exchanged their debt bilaterally.

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