

# FRBSF ECONOMIC LETTER

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## Resolving Sovereign Debt Crises with Collective Action Clauses

Ever since Mexico's "Tequila crisis" in 1994–1995, policymakers have debated how best to reduce the cost of protracted sovereign debt restructuring when emerging markets are in financial crisis. Two dominant approaches have emerged. One promotes changes in the bond contracts international lenders offer; in particular, it encourages the use of collective action clauses (CACs) rather than unanimous action clauses (UACs). The other approach proposes creating statutory procedures for restructuring unsustainable debt.

At their spring 2003 meetings, the International Monetary Fund and the World Bank decided to move forward with the contractual approach while continuing to study the IMF's proposed Sovereign Debt Restructuring Mechanism. This decision was shaped by Mexico's successful launch in March 2003 of a \$1 billion global bond in New York that included CACs; subsequently, Mexico, Korea, South Africa, and Brazil issued bonds with similar provisions.

CACs allow a qualified majority of the holders of a bond issue (typically representing 75% of the debt for sovereign debt) to vote to bind all bondholders to a change in the terms of the bond contract; UACs, in contrast, require that all holders vote on a change in the terms of the contract. With UACs, individual bondholders can take advantage of the situation and veto restructurings while they hold out for preferential treatment; CACs effectively thwart this behavior.

CACs are routinely included in bonds issued in the United Kingdom and Luxembourg. For sovereign bonds issued in the United States (typically, under New York law), majority action clauses are rarely applied to the terms of repayment, either the amounts or timing of repayments. Under the Trust Indenture Act of 1939, publicly issued corporate bonds must require the consent of all bondholders to revise the terms of repayment. This act does not apply to sovereign debt issued in the

United States, but bonds issued in New York overwhelmingly follow this convention. The same applies to sovereign bonds issued in Germany, while Japanese law appears to require the application of unanimous consent to international bond issues.

The promotion of CACs raises at least three concerns. One is whether the clauses actually do reduce the cost of protracted debt restructurings; furthermore, if they do, then a negative consequence is that they can induce "moral hazard"—that is, if the governments of emerging market economies find it easier to handle debt crises, they may not work so hard to avoid them, so debt crises might happen more readily. Another concern is whether it will be very difficult for countries whose existing bond issues feature UACs to make the transition to CACs. A third concern is that CACs apply to individual bond issues separately, so that CACs may not help when many bond issues need to be restructured simultaneously in a coordinated way. In this *Economic Letter*, I summarize the empirical evidence on how interest rate premiums—that is, the spread between a measure of the interest rate on a relatively risk-free bond and the interest rate on sovereign bonds—vary with the inclusion of CACs; I also discuss how the differences in these premiums shed light on the debate over the potential benefits of CACs for investment-grade and speculative-grade countries.

### Measuring the effects of CACs

Quantitative studies of the effects of CACs generally compare the interest rate premiums between bonds issued with and without CACs, focusing on bonds issued in the UK with those issued in the US. A higher premium suggests higher risk, which implies that creditors expect the moral hazard problem to dominate the benefits of easing restructuring under stress. A higher premium also should be associated with lower capital inflows to borrowers and, perhaps, to resistance to the wider adoption of CACs. A lower premium suggests that the

encouragement of collective action provisions is beneficial. Studies by Eichengreen and Mody (2000a, b) and by Becker, Richards, and Thaicharoen (2000) concentrate on premiums for the launches of primary issues, while Richards and Gugiatti (2003) and Eichengreen, Kletzer, and Mody (2003) expand the data to consider both primary and secondary market premiums for a very inclusive set of bond issues. The datasets and methods of analysis vary, but the last, and latest, of these papers analyzes data that includes the universe of bond issues studied by the others.

A major finding of Eichengreen and Mody (2000a, b) and of Eichengreen, Kletzer and Mody (2003) is that the credit rating of the issuer matters. The inclusion of CACs lowers interest rate premiums on bonds issued by countries with investment-grade ratings and raises them for bonds issued by debtors with sub-investment-grade ratings. General sentiment in the market for emerging market bonds also matters. Interest rate premiums on bonds issued with CACs rise relative to premiums for bonds issued with UACs when the premium for the Emerging Market Bond Index (EMBI) is higher, that is, when bonds issued from emerging markets generally are viewed as riskier. CACs lower borrowing costs, as evidenced by both launch and secondary market interest rate premiums, for more countries and by larger amounts for investment-grade countries when the EMBI is lower, that is, when the emerging bond market is strong. An interpretation of this result is that investors fear that when the EMBI is higher, individual debtor countries may use the general uncertainty as cover for taking greater risks which may lead to default. Overall, the empirical evidence to date supports the conclusion that the use of CACs will modestly reduce funding costs for investment-grade emerging market borrowers and raise them for lower-rated countries.

The issues by Mexico and Brazil in late spring of this year, issued under New York law with CACs, reflect the results of these estimations. Mexico's first issue featuring CACs, with a maturation date in 2015, was priced to yield a spread of 313 basis points over 10-year U.S. treasuries at the time of issue. Exact comparison bonds do not exist, but market analysis suggests that this bond was priced at a premium of about 8 to 10 basis points over otherwise comparable bonds issued by Mexico with UACs. A similar bond issued in April 2003, was thought to be issued at a small discount. The

empirical analysis implies that a country that has just reached investment-grade status (Mexico had bond ratings of BBB-/Baa2 from Standard and Poor's and from Moody's, respectively) should realize a discount of about 25 basis points for such bonds relative to the yield curve.

Brazil's \$1 billion issue in late April was the first speculative-grade bond issued under the initiative (Brazil's ratings were B2 and B+, respectively). This bond was not comparable in that it requires approval of 85% of bondholders for repayment restructuring while the other bonds issued require 75% majorities. Some market observers judged Brazil to be paying a penalty of 10 to 15 basis points for the CACs, consistent the empirical results of Eichengreen, et al., while others detected no premium or discount, consistent with the notion that the penalty should fall as the qualified majority requirement tightens.

### **The transition problem**

More than two-thirds of current outstanding emerging market debt carries UACs, and many of these bonds will not mature for several years. Therefore, the transition to widespread use of CACs might take some time. One question, addressed by Eichengreen, et al., is whether countries with predominantly UAC debt will want to issue new bonds with CACs. Another is whether markets eventually will revert to bonds issued with UACs. To investigate these transition issues, they estimate how the share of outstanding debt issued in bonds with CACs affects the interest costs for the borrower. Consistent with the view that restructurings are more likely for low-rated debtors, they find that the interest rate premium is higher for bonds issued with CACs when the overwhelming majority of outstanding debt carries UACs for low-rated countries, but not for higher-rated speculative-grade and investment-grade borrowers. They also find that when the majority of existing debt is issued with CACs, a new issue with UACs pays a premium for low-rated issuers. It may be that the holders of bonds with UACs fear that can be left hanging when the government restructures the majority of its debt using CACs.

### **The coordination problem with multiple bond issues**

CACs are structured to help coordinate the actions of holders of a specific bond issue. But countries may have multiple bond issues—for example, Argentina currently has 80 outstanding bond issues—and that can raise another coordination

problem. In particular, the qualified majority of a single bond issue can act as holdouts in the renegotiation of a country's debt. Bankruptcy proceedings address this problem for corporations or individuals, and it is an important motivation for the IMF's proposals to establish international debt restructuring procedures. Empirically, its importance can be considered by estimating the effect of the number of bond issues outstanding on the interest premium demanded by investors for bonds issued with CACs. Eichengreen, et al. (2003) do find a small multiplicity premium for all issues, but it is not affected by whether the outstanding bonds are issued with CACs.

Although CACs do not exacerbate the coordination problem with multiple bond issues, they might be used to reduce it for countries that are more likely to restructure through the adoption of super-CACs during times of distress. For example, Uruguay undertook an innovative bond exchange in April and May of 2003. The new bonds include super-CACs that allow revisions of financial terms if 75% of the holders of an issue agree or if 85% of the holders all of bond issues and 66.66% of the holders of each affected issue agree. The exchange was successful, but the terms encouraged exit consents, which deface old bonds, and the government warned that default might be the only alternative.

#### **Are CACs a small step in the right direction?**

By pricing moral hazard in sovereign debt markets, CACs could encourage market discipline. By facilitating creditor coordination, CACs also should reduce the costs in terms of a nation's output that are due to protracted debt restructurings. Any substantial benefits of promoting CACs in sovereign bonds might require further innovations to the

international financial architecture. For example, by reducing the costs of debt restructuring, CACs might relax the pressure on the IMF to extend financial assistance to countries whose debts may not be sustainable. If both creditors and debtors perceive a lower probability of IMF intervention, then greater market discipline might follow.

**Kenneth Kletzer**  
**Professor of Economics, UC Santa Cruz,**  
**and Visiting Scholar, FRBSF**

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