

UNITED STATES

FIXED-INCOME

RESEARCH

MARCH 9, 2000

Emerging Markets Fixed Income

UNITED STATES

Sharon Y. Lee
(212) 816-9902
sharon.y.lee@ssmb.com
New York

Michael E. Venezia
(212) 723-7791
michael.venezia@ssmb.com
New York

A Primer on Brady Bonds

- Origins of the Brady Bond Market
- Description of Brady Bonds
- Size and Scope of the Brady Bond Market
- Frequently Asked Questions

This report can be
accessed
electronically via

- SSB Direct
- Yield Book
- E-Mail

Please contact your
salesperson to receive
SSMB fixed-income
research
electronically.

Contents

Introduction to Brady Bonds	3
The Origins of Brady Bonds	3
What Exactly Is a Brady Bond?	3
The Exchange Process	4
Brady Bond Structures and Types	5
Structure Options.....	5
Brady Bond Types.....	5
Size and Scope of the Market for Brady Bonds	8
Risks Associated with Brady Bonds	9
Frequently Asked Questions	11

Introduction to Brady Bonds

The Origins of Brady Bonds

In March 1988, the government of Mexico issued Aztec Bonds, the proto-Brady bond. The bonds were issued to commercial bank creditors in exchange for debts owed by the Mexican public sector. Commercial bank creditors forgave 30% of the debt in question in exchange for a collateralized, floating-rate Aztec Bond. The Aztec had a tenor of 20 years and the bullet principal repayment was collateralized by Mexico's purchase of a 20-year zero-coupon US Treasury bond to be deposited with the US Federal Reserve until maturity.

This type of voluntary restructuring of nonperforming debt, including debt relief, was incorporated into a US government initiative announced by Secretary of the Treasury Nicholas Brady in March 1989. The program, now known as the Brady Plan, called for the United States and multilateral lending agencies (including the International Monetary Fund and The World Bank) to cooperate with commercial bank creditors in restructuring and reducing the debt of those developing countries that were pursuing structural adjustments and economic programs supported by these agencies.

As of July 1999, 17 countries had restructured commercial bank debts under the Brady Plan: Albania, Argentina, Brazil, Bulgaria, Costa Rica, Dominican Republic, Ecuador, Jordan, Mexico, Nigeria, Panama, Peru, Philippines, Poland, Uruguay, Venezuela, and Vietnam.

The nominal value of the Brady bonds outstanding is approximately \$130 billion, the majority of which is in US dollars. There are minor issues in other currencies, including German marks, French and Swiss francs, Dutch guilders, Japanese yen, Canadian dollars, and British pounds sterling.

What Exactly Is a Brady Bond?

Debt relief for developing countries on the part of their creditor banks is an important aspect of the Brady Plan. Brady bonds are issued by a developing country as a result of a restructuring of its defaulted bank debt.¹ They are government obligations issued after the debtor nation negotiates with the creditor banks' advisory committee² to restructure loans that are no longer performing. The creditor banks exchange the nonperforming loans for various Brady bonds offered by the debtor government.

To put it another way, think of the nonperforming loan on the bank's books as an asset that is not producing any revenue. The asset was once worth 100% of its face value but has been written down over time and reclassified as nonperforming. The Brady Plan allows the bank to remove this asset from its books and replace it with a bond issued by the same creditor. Rather than have a nonperforming loan, the bank

¹ In the early 1980s, countries like Mexico and Argentina declared a general moratorium on their bank debt. Their inability to service this debt was a result of fiscal and economic mismanagement as well as overlending by commercial banks looking to recycle petrodollars.

² Rather than negotiate with each bank individually, the creditor banks form a committee that represents the interests of all the banks.

has a performing bond as an asset on its books. The bank has exchanged a loan for a bond. From the perspective of the debtor government, its liability is now the Brady bond rather than the bank loan. The developing nation's bank debt has been restructured into a bond.

The Exchange Process

A negotiation process takes place between the debtor nation and the bank advisory committee to exchange the defaulted loan for a package of newly issued Brady bonds. At the conclusion of these negotiations the creditor banks are given various Brady bond structures from which to choose. Once issued, the Brady bonds begin trading in the secondary market.³

³ They begin trading in the when-and-if-issued market about 3–6 months before issue.

Brady Bond Structures and Types

Structure Options

Brady bonds have been structured in a variety of ways. Early Brady agreements included a fixed- and floating-rate bond, with principal collateralized by US Treasury zero-coupon bonds, and cash collateral representing a set number of future interest payments. More recent Brady plans include a wider array of bond options. Structures now include fixed, floating-rate, and step-up coupons, bullet or amortizing principal, with collateralized and noncollateralized principal and interest payments.

To collateralize the principal on a Brady bond, issuing countries purchase US Treasury zero-coupon bonds with a maturity corresponding to the maturity of the individual Brady bond. These zeros are held in escrow at the Federal Reserve. An investor purchasing a Brady with collateralized principal knows that at maturity, a third-party paying agent will receive a payment from the US Treasury that will be used to repay the principal on the Brady issue. In the event of default, the bondholder will receive the principal collateral on the maturity date.

A certain number of interest payments may also be collateralized by cash. The cash collateral refers to a rolling interest guarantee, whereby a specified cash amount is set aside that can be used to pay interest for a number of months in the event that the sovereign country misses an interest payment. This cash is usually equal to six, 12, 14, or 18 months' interest and is invested in money market instruments rated double-A or better.

Not all types of Brady bonds are collateralized and no Brady bond is US Government-guaranteed. Par and Discount bonds are usually collateralized as to principal and a specified number of interest payments. FLIRBs have a number of interest payments collateralized only for a certain period of time.

Brady Bond Types

Par

- *Coupon* — fixed or step-up
- *Interest* — usually a specified amount of cash set aside as collateral
- *Principal*— bullet, collateralized

Par refers to the even par amount of bonds received in the exchange process. As an example, a creditor bank exchanging \$100 million in defaulted bank debt would receive \$100 million principal in Par bonds.

Discount

- *Coupon* — floating
- *Interest* — usually a specified amount of cash set aside as collateral
- *Principal*—bullet, collateralized

Discount refers to the discounted par amount received in the exchange process. As an example, a creditor bank exchanging \$100 million in defaulted bank debt would receive only \$65 million principal in Discount bonds.

DCB

- *Coupon* — fixed, floating, or step-up
- *Interest* — not collateralized
- *Principal*—amortizing after a grace period, not collateralized

DCB is an abbreviation for Debt Conversion Bond. During the exchange process a creditor selecting the DCB option receives an even par amount of bonds, but must also lend the debtor new cash. The debtor country then issues a New Money bond (described below) to represent this additional obligation.

FLIRB

- *Coupon* — steps up, then floats
- *Interest* — collateralized only for a certain period of time
- *Principal*—amortizing after a grace period, not collateralized

FLIRB is an acronym for Front-Loaded Interest Reduction Bond. It provides the issuer with below-market interest relief in its early years, followed by market interest rates in later years. Creditors who choose this option receive even par amounts for exchanged debt.

Capitalization

- *Coupon* — fixed, partly paid in cash, partly added to the principal (capitalized)
- *Interest* — not collateralized
- *Principal*—amortizing after a grace period, not collateralized

The capitalization, or C-bond, was issued at par value for exchanged debt. Bondholders accepted more bonds in place of cash for part of the coupon through the end of 1999.

New Money

- *Coupon* — floating
- *Interest* — not collateralized
- *Principal*—amortizing after a grace period, not collateralized

Creditors who select the DCB option are required to invest new cash during the exchange process. The debtor country issues New Money bonds to represent this additional obligation.

EI

- *Coupon* — floating
- *Interest* — not collateralized
- *Principal*—amortizing after a grace period, not collateralized

EI refers to Eligible Interest. These bonds are issued in exchange for interest arrearages.

FRB

- *Coupon* — floating
- *Interest* — not collateralized
- *Principal*—amortizing after a grace period, not collateralized

FRB refers to Floating-Rate Bonds. They are issued to holders of interest arrearage claims.

IAB/PDI

- *Coupon* — step-up or floating
- *Interest* — not collateralized
- *Principal*—amortizing after a grace period, not collateralized

IAB stands for Interest Arrearage Bonds. PDI stands for Past-Due Interest. These bonds are issued in exchange for interest arrearages.

Size and Scope of the Market for Brady Bonds

As of December 1999, the outstanding face value of Brady bonds was \$130 billion, with US dollar issues accounting for approximately 90% of this amount.

The Emerging Markets Traders Association publishes an annual survey of the sovereign fixed-income market, and it has chronicled the incredible growth of the Brady portion of that market. In 1993, when the total volume traded was \$1.979 trillion, Bradys accounted for 51.6%. Instruments from Latin America held an 81.9% share of the market.

In 1996, the recorded volume grew to \$5.297 trillion. Latin American issues had slipped to 80.5% of the market and Bradys to 50.8%. In 1997, the market reached a trading volume of \$5.916 trillion, with Latin American issues declining to 78.4% of the market and Bradys to 40.6%.

The total volume of sovereign fixed-income securities traded in 1998 declined to \$4.174 trillion. However, due to the market turmoil caused by the Russian default in August 1998, Brady bonds accounted for 36.9% of the total trading. Eurobonds (24.5% of volume traded) and local instruments (28.2%, including short-term instruments) continued to gain popularity. Latin American securities were 68.1% of the total. Eastern European issues, in particular, were active in 1998, making up 20.3% of the volume traded.

The Brady bond market is the largest and most actively traded segment of the emerging market asset class. Round lot (\$2 million and up) bid-offer spreads can be as small as a quarter-point in the more actively traded Brady issues. Spreads on less actively traded bonds are wider. In most cases any size under \$2 million is considered an odd lot and bid-offer spreads may be slightly wider.

The liquidity and size of the market make Brady bonds the instruments of choice for institutional investors and other professional investors wishing to express their views of the economic and political outlook for a particular emerging country.

Risks Associated with Brady Bonds

An investment in emerging market debt is subject to special risks, which an investor should carefully consider:

- **Interest Rate Risk.** This risk is intrinsic to all types of fixed-income investments, whether from an emerging market issuer or a triple-A issuer. It is the risk that a debt security's value will decline as a result of an increase in market interest rates.
- **Credit Risk.** An emerging market debt security that is not investment-grade generally has predominantly speculative characteristics with respect to capacity to pay interest and repay principal. This means that investors in these bonds run a greater risk of nonpayment of interest and loss of principal. In fact, many sovereign issuers have in the past experienced substantial difficulties in servicing their debt obligations, leading to restructurings. Country risks also may make the risks of default higher for an issuer of emerging market securities than for a comparably rated US debt security. In view of these risks, emerging market debt securities generally offer investors a potentially higher rate of return than is available from investment-grade securities issued by US corporations.
- **Sovereign Risk or Country Risk.** Emerging market debt securities are vulnerable to the direct or indirect consequences of political, social, or economic changes in issuing countries. Many of these countries have experienced, and may continue to experience, economic and political uncertainty or instability, high rates of inflation, high interest rates, exchange rate volatility and convertibility difficulties, and extreme poverty and unemployment. Investments in foreign companies may also be subject to the possibility of nationalization and governmental measures, as well as withholding of dividends at the source. In addition, it may be difficult to enforce a judgment against a non-US issuer.
- **Convertibility Risk.** This is a form of sovereign risk. A government may impose currency convertibility controls, prohibiting a borrower from remitting US dollars out of its country. An emerging market issuer that is perfectly solvent and able to service interest and repay principal may be prohibited from doing so because of government action. In such cases, the investor could wait until the restrictions were lifted or accept local currency.
- **Currency Risk.** The value of investments in emerging market debt securities denominated in currencies other than the US dollar will be affected by changes in the exchange rate between the US dollar and that currency. A relative increase in the value of the US dollar will adversely affect the value of a non-dollar-denominated investment.
- **Disclosure Risk.** There may be less publicly available information about a foreign issuer than about a US domestic issuer. Foreign issuers also are subject to accounting and reporting requirements that generally are less “**rigorous**” than the requirements applicable to domestic issuers.
- **Liquidity Risk.** The markets in which emerging market debt securities are traded generally are more limited than those in which US investment-grade

securities are traded. These more illiquid markets for emerging market debt securities may make it more difficult to resell such securities and to obtain accurate market quotations.

- **Volatility Risk.** The market values of emerging market debt securities tend to be more sensitive to developments involving the issuer and to changes in economic conditions than investment-grade securities typically are. Consequently, emerging market securities have greater price volatility than US debt securities.

Frequently Asked Questions

1. Are Brady bonds guaranteed by the US Government?

No. The US Government does not guarantee any Brady bond. A Brady bond is a direct obligation of its issuing country.

The principal on some Brady bonds is *collateralized* by US Treasury zeros. This means that when the Brady bond was issued, the issuing country purchased a US Treasury zero that matures on the same date as the Brady obligation. The zero is held in escrow at the Federal Reserve. The collateralized Brady bond holder knows that at maturity, a third-party paying agent will receive a payment from the US Government that will be used to pay back the principal on the Brady bond.

In addition, certain Brady bonds possess additional collateral as a specified cash amount that can be used to pay interest for a number of months, usually 6–18 months. This cash is referred to as a rolling interest guarantee and is held in escrow by a third-party paying agent.

The two most popular types of collateralized Brady bonds are Par bonds and Discount bonds. Holders of either of these Bradys know that if the issuing country were to have financial difficulties, they would receive a number of months' worth of interest because the cash has already been set aside. In addition, the US Treasury collateral assures them that their principal will be returned at maturity. However, they would be at risk for any cash flow not collateralized by cash or zeros. Be careful about the specifics regarding a bond's collateral. Some Pars and Discounts have just principal collateral.

2. What is a rolling interest guarantee?

Think of a rolling interest guarantee as a checking account with a reservoir of cash equal to a number of months' worth of interest. If an issuer fails to make a payment, the paying agent has the reservoir of cash to draw on. If the reservoir runs dry, the paying agent will be unable to distribute interest payments to bondholders.

3. What is the difference between a Brady bond and a sovereign eurobond or a Global bond?

A Brady bond is a bond issued as a result of a debt restructuring. A country restructuring its defaulted bank debt will issue Brady bonds just once.

Eurobonds and Global bonds are issued on an ongoing basis and are not part of any debt restructuring. A country may issue these bonds as needed, for general government purposes. These issues generally are smaller than Brady issues and are not usually collateralized. Because their minimums are in many cases much smaller than Bradys', they are much more congenial to retail investors.

4. What's the minimum an investor can buy?

The market convention minimum is a face amount of \$250 million. Certain Bradys can be traded in smaller sizes.

5. Can individual retail investors buy Brady bonds?

Yes.

6. Do Brady bonds carry currency risk?

If you are a US dollar-based investor and you buy a US dollar-denominated Brady bond, there is no currency market fluctuation risk. Keep in mind, however, that a non-US country's ability to service its US dollar debts is a function of its ability to convert its currency into dollars. Severe economic conditions or government restrictions may inhibit a non-US issuer from obtaining US dollars to service interest and repay principal. This is called currency convertibility risk.

Any collateralized payments would not be subject to a potential convertibility restriction, since they are already set aside in US dollars and held by a third party.

7. Are Brady bonds liquid?

Most Brady bonds have good liquidity. Bid-ask spreads depend on the liquidity of the issue and usually range from a quarter-point to two points for institutional round lots of \$2 million or more. Less than \$2 million is considered an odd lot and spreads may tend to be a bit wider.

8. What is the difference between a step-up and a floater?

A floating-rate coupon adjusts periodically (usually every six months) based on a spread over LIBOR. Step-up coupons increase over the life of the bond according to a predetermined schedule.

9. How often do Bradys pay interest?

Most pay interest semiannually.

10. Are Brady bonds callable?

Yes, many are callable at 100 on any interest payment date, in full or in part for face value plus accrued interest.

11. How do you calculate the yield to maturity on a floating-rate Brady if you don't know what the coupon payments will be in the future?

Without knowing the future cash flow from the investment, it is impossible to calculate the bond's yield-to-maturity. An investor in floating-rate instruments could theoretically enter into an interest-rate swap agreement swapping their floating-rate income for a fixed-rate cash flow. Assuming an investor does this, the future cash flow from the investment could be determined and used to calculate the theoretical yield to maturity. A retail investor would not be able to execute an interest-rate swap, since the swaps market is solely an institutional marketplace. Therefore, the yield-to-maturity of a floating-rate bond is solely a theoretical rate that can be used to compare the bond with other fixed- and floating-rate investments.

12. How are Brady bond trades settled?

Brady bonds can be held in Salomon Smith Barney client accounts. Brady trades settle in Euroclear or Cedel by electronic book entry. Euroclear and Cedel are the international equivalents of the DTC in the United States. Brady bonds can be delivered to another institution that can assume custody for securities in either Euroclear or Cedel. Brady bonds cannot be issued in physical form.

ADDITIONAL INFORMATION AVAILABLE UPON REQUEST

For securities recommended in this report, Salomon Smith Barney (SSB), including its parent, subsidiaries, and/or affiliates (the Firm), usually makes a market, may sell to or buy from customers as principal, and may from time to time perform investment banking or other services for or solicit investment banking or other business from any company mentioned in this report. Securities recommended, offered, or sold by SSB: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. The Firm, or any individuals preparing this report, may at any time have a position in any securities or options of any of the issuers in this report. An employee of the Firm may be a director of a company mentioned in this report.

Although information has been obtained from and is based upon sources SSB believes to be reliable, the Firm does not guarantee the accuracy of the information, and it may be incomplete or condensed. All opinions and estimates included in this report constitute SSB's judgment as of the date of this report and are subject to change without notice. This report is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security. This report does not take into account the investment objectives, financial situation, or particular needs of any particular person. Investors should obtain individual financial advice based on their own particular circumstances before making an investment decision on the basis of the recommendations in this report. Investors who have received this report from the Firm may be prohibited in certain states from purchasing securities mentioned in this report from the Firm. Please ask your Financial Consultant for additional details.

This publication has been approved for distribution in the United Kingdom by Salomon Brothers International Limited, which is regulated by the Securities and Futures Authority. The investments and services contained herein are not available to private customers in the UK. This report was prepared by SSB and, if distributed by Nikko Salomon Smith Barney Limited, is so distributed under license. This report is made available in Australia through Salomon Smith Barney Australia Securities Pty. Ltd. (ACN 003 114 832), a Licensed Securities Dealer, and in New Zealand through Salomon Smith Barney New Zealand Limited, a member firm of the New Zealand Stock Exchange.

The research opinions of the Firm may differ from those of The Robinson-Humphrey Company, LLC, a wholly owned brokerage subsidiary of Salomon Smith Barney Inc. Salomon Smith Barney is a service mark of Salomon Smith Barney Inc. © Salomon Smith Barney Inc., 2000. All rights reserved. Any unauthorized use, duplication, or disclosure is prohibited by law and will result in prosecution.

(5900N)

FI03A070