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Video Recording/Remarks: Distance
Education Program on the Offer of
Currency Choice for IBRD Loans
(JDW to make Introductory Statement)

Wednesday, July 30, 1997 5:45 - 6:15 p.m. MC11-127 Conference Room

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WORLD BANK LOAN PRODUCTS VIDEO MODULE SCRIPTS

7-20-97

FOREWORD: ON-CAMERA STATEMENT BY PRESIDENT WOLFENSOHN

Greetings from Washington. I am delighted to welcome you to our distance education program on the Bank's loan products. I attach great important to both the medium and to the message.

As far as the medium is concerned, this is one of the Bank's first uses of the distance education format. Through a carefully designed curriculum and the use of technology, learners and course leaders are brought together, even though you may be in different locations. You will be able to use the course materials to study in the comfort of your own office or home and to participate as part of a larger group in live interactive sessions.

Our goal is for each of you to be able to learn at your own pace, within the structure of the program, while also benefiting from learning and sharing together. I am excited that distance education has the potential to be an important means to provide information and front-line support to you in a timely way.

As to the message, I am pleased that, after many years of offering only one product, the Bank now offers a wide range of currency and interest rate choices, both for new loans and for existing loans. You will learn about these products in this course, and how they can fit into borrowers' debt management strategies.

As I told our Board when the initiative was approved, "We should use the Bank's tremendous intermediation capacity to deliver the full range of financial products our clients need."

Your feedback is crucial to our future product development. Let's keep an open dialogue, so that the Bank can continue to offer products and services that you will find competitive and responsive.

1A. PROGRAM OVERVIEW

OPENING TITLE: IBRD FINANCIAL PRODUCTS

WORLD BANK HEADQUARTERS

The International Bank for Reconstruction and Development, also known as the World Bank, currently has two types of financial products: loans and guarantees. This video is about the Bank's loan products.

MONTAGE: HEALTH, TELECOM, AGRICULTURE, POWER EDUCATION, WATER

The World Bank makes loans to sovereign members or borrowers in developing countries with the sovereign's guarantee for projects and programs in the member's country. Bank loans are foreign currency liabilities that borrowers must manage and repay. In managing these liabilities, borrowers are concerned about their currency and interest rate features, as well as their repayment and prepayment terms.

OLD BANK HEADQUARTERS BLACK AND WHITE 1960s FINANCIAL MARKET FOOTAGE:

For much of its history, the Bank offered only one loan product. The currency characteristics of the Bank's loans depended upon its access to the bond markets. Disbursements were made in a variety of currencies, and the currencies of borrowers' loan obligations differed from one loan to the next.

NEWSPAPER HEADLINES 1970s DOLLAR DECOUPLED FROM GOLD STANDARD OIL CRISIS

When exchange rates were allowed to float in the late 1970s, borrowers faced different exchange risks with World Bank loans.

CURRENCY MONTAGE: USD, DEM, JPY, CFC TYPE OVER: UNTIL 1980 FIXED INTEREST RATE AFTER 1980 VARIABLE INTEREST RATE

This led to the introduction in 1980 of the currency pooling system. This is a mechanism that pools exchange risk so that the currency composition of all borrowers' loans is the same.

Currency pool loans were made at fixed interest rates until 1980. Since then, all currency pool loans carry a variable lending rate.

WORLD BANK BOARD OF DIRECTORS

In response to borrower demand for a choice of currency and interest rate features, the Bank began offering single currency loans in 1993. It now offers two types of single currency loans: LIBOR-based single currency loans and fixed-rate single currency loans.

PAN OVER BROCHURE SHOWING PRODUCT MENU

The Bank's product menu offers broad currency and interest rate choice for new loan commitments. This choice is intended to help borrowers reduce, or at least better manage, the financial risks they face.

OFFERING OF CHOICE BROCHURE

Borrowers also have requested currency choice for existing currency pool loans. In response, from September 1996 until June 1, 1998, the Bank is offering borrowers the option to amend the terms of their currency pool loans to the offered currency of their choice.

This video presents the Bank's three loan products and the conversion offer for currency pool loans.

You will learn about:

GENERIC BACKGROUND WITH TYPE:

LIBOR-based Single Currency Loans

Fixed-rate Single Currency Loans, and

Currency Pool Loans

You will see how these products differ in terms of:

CURRENCY ICON (Stack of bills)

currency characteristics,

INTEREST RATE ICON (Percentage sign)

interest rate characteristics

REPAYMENT ICON (Calendar)

repayment terms and

PREPAYMENT ICON (Hour glass)

prepayment terms.

PRESS RELEASE: OFFER OF CONVERSION TYPE OVER: UNDISBURSED AMOUNTS

You will also learn about the Bank's conversion offer for existing currency pool loans, which enables borrowers to change the currency composition of these loans. Borrowers may convert the undispersed portions of their CPLs

FLY 7 SINGLE CURRENCIES: USD, JPY, DEM, CHF, FRF, POUND, NLG, USD again TYPE OVER: DISBURSED AMOUNTS OR ENTIRE LOANS

to single currency loan terms.

FLY 4 CURRENCIES: USD, DEM, CHF, JPY

And to convert the disbursed portions or entire loans to single currency pool terms.

SCALE: BENEFITS/RISKS

As with all financial transactions, the terms and conditions associated with World Bank loan products must be carefully weighed. As we review these products, you will also see examples of how borrowers have selected different products to meet their particular needs.

TITLE GRAPHIC FADE TO BLACK

1B. THE SINGLE CURRENCY LOAN PRODUCTS

OPENING TITLE: IBRD FINANCIAL PRODUCTS PAGE FLIP TO SECTION TITLE: "SINGLE CURRENCY LOAN PRODUCTS"

HIGHLIGHT AND ZOOM OUT "SCL" FROM TITLE TYPE RESTS ON SOLID COLORED CIRCLE

Single currency loans, or SCLs, are loans whose currency characteristics are selected by borrowers.

QUAD SPLIT: 4 ICONS CURRENCY ICON PUSHES TO FULL

Single currency loans are currently offered in:

TYPE BUILDS WITH NARRATION

US dollars,
Deutsche Mark,
Japanese yen,
French francs,
pounds sterling,
Swiss francs,
and Netherlands guilders.

ADD TYPE: Other

SCLs may be available in other currencies, so long as there is sufficient borrower demand and the Bank judges it can fund itself efficiently in that currency.

GRAPHIC: BANK LOGO AND SCL CIRCLE GBP, ITL, CAD MOVES RIGHT TO LEFT DEM MOVES LEFT TO RIGHT

Borrower's loan obligations are denominated in the SCL currency, but disbursements can be transacted in any convertible currency, as needed for the project. For instance, you select a one hundred million Deutsche mark SCL, and you need to purchase equipment for your project in Canada, Italy and the UK. The World Bank will disburse to you the equivalent of one hundred million Deutsche marks in the

currencies you need. Regardless of the currencies disbursed to you, your repayment obligation is still one hundred million Deutsche marks. This means that borrowers can select loan currencies that are appropriate for their debt servicing capacity, without worrying about the currencies in which procurement may be transacted. It is very important that you select carefully because Bank loans are 15-20 year obligations and once your choice is made you will not be able to change it.

TWO SCL CIRCLES: LABELED USD AND FRF TWO CIRCLES MERGE TO ONE

In most cases for a given loan, borrowers select one currency as their loan currency. They may select a different currency for another loan to achieve their desired overall currency exposure.

GRAPHIC: SINGLE CURRENCY LOAN/ SCL WITH MULTIPLE CURRENCIES

Borrowers can also combine currencies to finance different portions of the same loan. In this way they can use SCLs to tailor the currency composition of their liabilities to suit their needs.

WORLD MAP

Let's look at how some borrowers selected the currency of their loan.

ZOOM OUT CARIBBEAN FOOTAGE

One borrower selected USD single currency loan terms. In this case, the government on-lent the funds to commercial banks making loans to enterprises. These banks wanted to lend in USD because their clients had export revenues in USD.

WORLD MAP: ZOOM OUT EASTERN EUROPEAN FOOTAGE

Another borrower factored information about the currency composition of it's net trade position, as well as the likelihood that it's export markets would change over time.

The borrower judged a multi-currency obligation to be appropriate, but not in the same composition as currency pool loans. The borrower used the flexibility to select more than one SCL currency by combining SCL tranches in USD, DEM and FRF.

QUAD SPLIT: FOUR ICONS

INTEREST ICON PUSHES FULL SCL CIRCLE BUILDS OVER INTEREST ICON

SCLs also offer borrowers a choice of interest rate basis. Two types of single currency loans are available:

VARIABLE RATE LINE BUILDS ON INTEREST ICON AND CIRCLE

A floating-rate single currency loan...whose lending rate is based on 6-month LIBOR.

FIXED RATE LINES REPLACE VARIABLE RATE LINE

and a fixed-rate single currency loan.

LIBOR AND FIXED COMPARISON TABLE

While the currency features are the same, the interest rate, repayment and prepayment features vary for each of these SCL products.

Let's take a closer look at the features that are special for the LIBOR-based SCL.

TITLE: LIBOR-BASED SCLs OVER: CIRCLE WITH VARIABLE RATE LINE

The LIBOR-based single currency loans are long-term loans that carry a floating interest rate that changes every six months. The interest rate is based on the 6-MONTH London InterBank Offer Rate, plus a spread.

GRAPH: LIBOR RATES IN THREE CURRENCIES

LIBOR is the short-term rate at which commercial banks lend to each other, and is a common market index for floating rate instruments.

6-month LIBOR is the rate that a commercial bank would pay to borrow at a fixed rate for six months, or for a longer period at a rate that is reset every six months.

LENDING RATE ICON BUILD CIRCLE

Part of the appeal of the LIBOR-based SCL is that it is simple to understand, and compare against other products commonly available in the market.

BUILD VARIABLE RATE LINE

How does the Bank's LIBOR-based SCL compare against other LIBOR-based financial products available in the market? Let's look at the rate and the maturity.

TABLE: LIBOR SPREADS

Since commercial banks are normally rated AA, and the World Bank is rated AAA, the World Bank is able to borrow at rates that are lower than LIBOR. The margin the Bank charges reflects that cost advantage plus the Bank's normal lending spread of one half percent (0.50%.)

TABLE: LIBOR SPREADS AND USD MATURITY

Most World Bank loans have maturities ranging from 15-20 years, while most World Bank clients typically can only borrow from other sources at maturities up to 10 years.

HIGHLIGHT IBRD LINE IN TABLE

Compared to other loan products available in the market, the LIBOR-based SCL offers clients an interest rate that moves with the market, a low spread, and a long maturity.

CHART OF HISTORIC LIBOR RATES

While the LIBOR-based SCL lets you borrow at a very low spread against LIBOR, you also bear the risk of LIBOR's variability. LIBOR has fluctuated over a wide range in the past, and your interest rate will vary every six months over the life of your loan. While your cost of debt will move with the market, you will have the benefit of a low spread against the market rate.

WORLD MAP

Let's look at some examples of why borrowers chose LIBOR.

ZOOM OUT COUNTRY FOOTAGE: HUNGARY, INDIA, ECUADOR, JAMAICA

In many countries, the LIBOR-based product was selected for projects involving credit line components. This rate basis was considered suitable for onlending to sub-borrowers at market rates

HEADLINE: LIBOR-BASED RATES FACILITATE:

because it allowed participating banks to:

TYPE BUILD: PRICING SUB-LOANS

- price their loans relative to familiar benchmarks,

TYPE BUILD: REVOLVING LINES OF CREDIT

- lend for intermediate maturities and revolve the line of credit at market rates,

TYPE BUILD: BLENDING FINANCIAL SOURCES

- more easily blend IBRD finance with cofinancing from other sources.

WORLD MAP: ZOOM OUT IRON MINE FOOTAGE

In another case, the LIBOR-based product was chosen because it allows the flexibility to hedge when the borrower wants to do so.

HEADLINE: LIBOR-BASED LOANS FACILITATE:

TYPE BUILD: HEDGING

- SWAPS
- CAPS
- COLLARS

Since the Bank's lending rate is based on 6-month LIBOR, borrowers may use LIBOR-based market instruments such as swaps, caps, and collars to hedge any interest rate risks they may face with this product.

QUAD SPLIT: FOUR ICONS

So far we have looked at currency and interest rate characteristics of the LIBOR-based SCL.

REPAYMENT ICON PUSHES TO FULL

Now we are ready to look at repayment and prepayment terms.

WORLD MAP WITH COUNTRY CRITERIA SHADINGS

LIBOR-based single currency loans have repayment terms that are based on country criteria, such as per capita income. The repayment terms are not necessarily linked to expected disbursements nor to the expected cash generation, if any, of the project. Two types of standard country terms are available:

ANNUITY REPAYMENT STRUCTURE (loan project spreadsheet)

Annuity amortization provides for 3-5 year grace periods and 15 to 20 year maturities.

LEVEL REPAYMENT STRUCTURE (loan project spreadsheet)

Level principal repayments have a 5 year grace period and 15 or 17 year maturities.

Within these standard country terms, Bank policy provides flexibility for borrowers to tailor loan repayment terms to match their project requirements. There are two areas of flexibility:

GRAPHIC: THREE STEP ANNUITY AMORTIZATION

- 1. GRACE PERIOD
- 2. REMOVE LAST 4 YEARS
- 3. ADJUST LEVEL OF INTEREST AND PRINCIPAL

First, borrowers can extend the grace period of their loan by shortening the final maturity. There is six months of additional grace period for every one year deducted from the final maturity. This flexibility is available for LIBOR-based SCLs and CPLs.

GRAPHIC: EXAMPLE WITH TWO 17 YEAR LOANS FIRST LOAN ADJUSTS TO 15 YEARS SECOND LOAN ADJUSTS TO 19 YEARS

Second, any decrease in the grace period or final maturity in one loan can be used to increase that of another loan to the same country in the same fiscal year, so long as the weighted average conforms to standard country terms.

WORLD MAP: ZOOM OUT ECUADOR FOOTAGE

For instance, one borrower used both types of flexibility to get an overall cash flow that was more suited to the needs of two projects.

HEADLINE: STANDARD TERMS: 5 YR GRACE / 20 YR. MATURITY

TYPE BUILD: 5 YR GRACE / 15 YR MATURITY 5 YR GRACE / 25 YR MATURITY

First, they shortened the final maturity of one loan so that they could extend the maturity of another loan in the same fiscal year.

TYPE BUILD: 7 YR GRACE / 21 YR MATURITY

Then, they extended the grace period of the longer-dated loan by 2 years by reducing the final maturity by 4 years.

PREPAYMENT ICON

Like all IBRD loans, LIBOR-based single currency loans may be prepaid.

GRAPHIC:

ASSET

LIBOR-BASED LOAN

LIABILITY LIBOR FUNDING

The Bank may charge a prepayment premium based on its redeployment costs.

GRAPHIC:

ASSET

LIABILITY LIBOR FUNDING

PREPAID FUNDS

When a loan is prepaid the Bank needs to redeploy these prepaid funds.

GRAPHIC:

ASSET

LIABILITY LIBOR FUNDING

PREPAID FUNDS LIBOR-BASED LOAN LIBOR BASED ASSET

It can do so by disbursing on another LIBOR-based loan, or investing in a LIBOR-based asset. Since in most cases the Bank's return would be equal to or greater than its cost, the Bank will not incur a loss, or have to charge a prepayment premium.

For many borrowers, this is an attractive feature of this product.

TITLE GRAPHIC FADE TO BLACK

1B. THE SINGLE CURRENCY LOAN PRODUCTS (CONTINUED)

TITLE: FIXED-RATE SCLs GRAPHIC: SCL CIRCLE WITH 3-LINE FIXED-RATE SYMBOL

The World Bank also offers a fixed-rate single currency loan product. Fixed rate SCLs were introduced in 1995 in response to demand from clients for a loan product bearing a fixed interest rate.

INTEREST SYMBOL

Unlike Bank loans prior to 1982,

SCL CIRCLE FORMS AROUND INTEREST SYMBOL

this product does not have a fixed rate that is set at the time of commitment that applies to the entire loan.

3-LINE FIXED-RATE SYMBOL REPLACES INTEREST SYMBOL IN CIRCLE

To accommodate the need to make disbursements over a long time period, the interest rate is fixed over portions of the loan as disbursements are made.

GRAPH:

TITLE: SAMPLE REPAYMENT TERMS / FIXED-RATE SCL 3 SEMESTER DISBURSEMENTS SHOWING VARIABLE INTEREST RATE AND RATE FIXING POINTS

The lending rate is fixed on semi-annual rate-fixing dates for disbursements made during the preceding six-month period. Once the rate is fixed for a group of disbursements, it remains fixed for that portion of the loan until that portion is repaid.

Thus, the fixed-rate SCL can be described as a series of subloans each having its own interest rate and repayment schedule, with each subloan being composed of the disbursements during a given semester.

REPAYMENT SYMBOL (CALENDAR)

The repayment terms of the fixed-rate SCL

TABLE: FIXED-RATE AMORTIZATION SCHEDULE

are not determined by the country's per capita income as is the case for LIBOR-based SCLs.

HIGHLIGHT FIRST COLUMN OF TABLE

Rather, they are determined by the expected disbursement period.

HIGHLIGHT SECOND COLUMN OF TABLE

Each subloan has a 3-year grace period starting from its rate fixing date.

HIGHLIGHT THIRD COLUMN OF TABLE

Depending on the expected disbursement period of the loan, each subloan can have a final maturity of 6, 9 or 12 years.

HIGHLIGHT 3-YEAR DISBURSEMENT

If the expected disbursement period is 3 years or less each sub-loan would have a final maturity of 12 years.

HIGHTLIGHT 3-6 YEAR DISBURSEMENT

If the expected disbursement period is 3-6 years, each sub-loan would have a final maturity of 9 years.

HIGHLIGHT 6-YEAR + DISBURSEMENT

For loans that are expected to take more than 6 years to disburse, the final maturity of each sub-loan would be six years.

GRAPH: SAMPLE REPAYMENT TERMS / FIXED RATE SCL SHOWING REPAYMENT SHIFT AND BALLOON PAYMENT

Fixed-rate SCLs repay principal using level principal amortization. Some borrowers value that principal repayments are tied to project implementation. When disbursements are delayed, principal repayments get pushed back. However for fast and medium disbursing loans the loans the loan must still be repaid within 15 years.

LENDING RATE SYMBOL

As we have just seen,

GRAPH:

BARS SHOWING THREE SEMESTERS OF GRACE AND REPAYMENTS

lending rates for fixed-rate SCLs are set on semiannual rate-fixing dates for disbursements during the preceding six-month period, and remain fixed from then on.

GRAPH:

BARS SHOWING THREE SEMESTERS OF GRACE AND REPAYMENTS.
LIBOR-BASED SLR SYMBOL APPEARS IN FRONT OF EACH BAR.

For the interim period from the disbursement date until the ratefixing date, the lending rate is the same as the LIBOR-based lending rate for that currency.

INTEREST SYMBOL IN SCL CIRCLE WITH THREE-LINE FIXED-RATE SYMBOL

Let's take a look at the fixed-lending rate. Before we start, you should know that the actual rate on your loand will depend on:

TYPE BUILD: CURRENCY

The currency of yur SCL.

TYPE BUILD: MATURITY

The maturity, determined by the expected disbursement period.

TYPE BUILD: MARKET RATES

The level of market rates when the rate is fixed.

ADD TO:

CURRENCY: USD

The following example will show how the fixed rate is determined for a US dollar SCL,

ADD TO:

MATURITY: 12 YEARS

with a 12-year maturity, determined by and expected disbursement period of 3 years,

ADD TO:

MARKET RATES: JULY 15, 1997

on July 15, 1997.

If any of these variables changed, the lending rate would be different.

TABLE: SAMPLE SCL LENDING RATES

Let's look at the components of the fixed-lending rate and how the compare with the LIBOR-based rate.

The fixed-lending rate consists of the base rate, plus a total spread made up of the cost margin, the risk premium, and a lending spread of one-half percent.

HIGHLIGHT BASE RATE IN TABLE

The base rate is derived from the amortizing swap rate, which is a widely accepted market-based rate used to price instruments with maturity structures similar to the fixed-rate SCL.

HIGHLIGHT COST MARGIN IN TABLE

You will see that similar to the LIBOR-based SCL, the Bank's cost margin for fixed rate SCL's is a negative number. This is because the Bank borrows at rates below the amortizing swap rate. The cost margins of the two SCL products are different for several reasons:

- First, the Bank uses different liabilities to fund each of its loan products.
- Second, cost margins differ across maturities. While LIBOR is a short-term rate, the fixed-rate SCL is based on medium-to-long-term interest rates.
- Third, while the cost margin on the LIBOR-based SCL can change every six months, once the rate is fixed on a portion of your fixed-rate SCL, the cost margin remains fixed for the remaining life of the loan.

HIGHLIGHT RISK SPREAD IN TABLE

The Bank bears some risk in funding the fixed-rate SCL. While the cost margin that borrowers pay is fixed over the life of their loan, the Bank's funding cost margin may change during that period. For this reason, the Bank charges a small risk premium.

HIGHLIGHT LENDING SPREAD IN TABLE

Finally, the Bank charges the same 0.50% lending spread that it charges on all of its loan products.

PREPAYMENT SYMBOL

Fixed-rate single currency loans may be prepaid, but a premium is likely to be charged for re-deployment costs. Why?

GRAPHIC:
ASSETS LIABILITIES
FIXED-RATE SCL 7.40% FIXED-RATE FUNDING 6.80%
PREPAID FUNDS
FIXED RATE SCL 6.50%

Because most borrowers would find it financially attractive to prepay if rates had fallen. This means that the Bank would only be able to relend at a lower rate, even though the cost of its debt was fixed when the rates were higher. The prepayment premium will be based on the differences between the Bank's funding costs and the rates at which the prepaid funds could be redeployed over the remaining life of the loan.

WORLD MAP: ZOOM OUT FOOTAGE FROM ARGENTINA, MEXICO, MOROCCO

Fixed-rate SCLs have most often been selected for fast-disbursing loans to countries whose external debt already includes substantial LIBOR-based funding.

TYPE OVER:

BORROWERS SELECTED FIXED-RATE SCLs TO:

- DIVERSIFY INTEREST RATE RISK
- LIMIT EXPOSURE TO SHOCKS

Some borrowers have selected the fixed-rate design to diversify their interest rate risk and limit their exposure to potential shocks in the commercial banking sector.

WORLD MAP: ZOOM OUT INDONESIA FOOTAGE

Other borrowers, such as this one in East Asia,

TYPE ON:

BORROWERS SELECTED FIXED-RATE SCLs TO: SAMPLE MEDIUM AND LONG TERM RATES REGULARLY

have selected fixed-rate SCLs to achieve a low-volatility interest rate for their portfolio of IBRD loans.

TITLE GRAPHIC FADE TO BLACK

2A. TITLE: CURRENCY POOL LOANS

OPENING TITLE: IBRD FINANCIAL PRODUCTS

PAGE FLIP TO SECTION TITLE: "CURRENCY POOL LOANS"

HIGHLIGHT AND ZOOM OUT "CPL" FROM TITLE TYPE RESTS ON BACKGROUND OF CURRENCIES: \$, DM, CHF, NLG, YEN.

SINCE 1980, the Bank has offered a currency pool loan product, or CPL.

TYPE BUILDS OVER CURRENCY BED HEAD: CURRENCY POOL LOANS

- BALANCED CURRENCY COMPOSITION
- STABLE LENDING RATE

The Targeted Currency Pool offers borrowers a balanced currency composition and a stable lending rate. It is important to understand this product since most borrowers have currency pool loan liabilities that they manage.

TYPE OVER CURRENCY BED
HEAD: BORROWERS MAY
SELECT CPL TERMS FOR NEW LOAN COMMITMENTS

CPL terms are also offered for new loan commitments.

TYPE OVER CURRENCY BED HEAD: BORROWERS MAY CONVERT EXISTING CPL LOAND TO SCL TERMS UNTIL JUNE 1, 1998

And borrowers have the opportunity - until June 1, 1998 - to request conversion of these loans to single currency terms.

CURRENCY ICON

CPLs are committed in US dollar equivalents. The borrower's obligation is not a US dollar obligation. It is a multi-currency obligation.

WB BOARD OF DIRECTORS

The multi-currency composition of currency pool loans is determined by World Bank policy. Since 1989 the currency composition has been targeted to

TYPE BUILDS OVER B-ROLL

- PROVIDE BALANCE AND STABILITY
- EASIER TO MANAGE

provide greater balance and to make CPLs easier to manage for borrowers. These targets are subject to review every five years. They are expected to be reviewed in 2001.

3 CURRENCIES: USD, YEN, DEM (OVER CHF AND NLG)

The targeted currencies are:

the US dollar, the Japanese yen, and the Deutsche mark group, which includes Deutsche marks, Swiss francs and Dutch guilders.

CPL TARGET SYMBOL TYPE OVER: 1 USD 125 JPY 2 DEM

In a targeted currency pool loan, at least 90% of the borrower's obligation is in targeted ratios of:
1 USD
125 JPY
2 DEM group

PIE WEDGE FORMS ON CPL TARGET SYMBOL WEDGE LIFTS AND 3 CURRENCY ELEMENTS SEPARATE TYPE IDENTIFIES ELEMENTS

With targeted currency pool loans, borrowing members share the risks of exchange rate fluctuations equally.

Since the currency composition of the CPL is targeted and maintained within a narrow range, your obligation can be managed as if it were 3 separate loans in USD, JPY and DEM.

The amount of each currency that a borrower will owe depends on these ratios and exchange rates prevailing on the disbursement dates. Thinking of CPLs as if they were made in a synthetic currency makes it easier to understand this concept.

CALCULATION OVER GENERIC BACKGROUND

Let's define a synthetic currency, the CURRENCY POOL UNIT or CPU, comprised of 1 USD, 125 JPY and 2 DEM.

CALCULATION CONTINUES OVER GENERIC BACKGROUND

Assume that on the disbursement dates exchange rates are as follows:

Given the CPU's currency composition and these exchange rates, let's calculate how much one CPU is worth in terms of dollars.

CALCULATION CONTINUES OVER GENERIC BACKGROUND

		USD EQUIV
1 CPU =	1 USD	I USD
	+	+
EXCHANGE RATES	125 JPY	1.25 USD
100 JPY/USD	+	+
1.65 DEM/USD	20 DM	1.21 USD
		=
		3.46 USD

One CPU is equal to one dollar, plus 125 yen, divided by the exchange rate of 100 yen per dollar, plus two Deutsche marks at an exchange rate of 1.65 Deutsche marks per dollar. This gives you a total of three- dollars-forty-six-cents per CPU.

NEW CALCULATION BUILDS OVER USD BACKGROUND

 $\frac{1.000}{3.46} \qquad \frac{\text{USD}}{\text{USD/CPU}} = 289 \text{ CPU}$

For example, if the Bank disbursed 1,000 USD equivalent to you, you don't owe 1,000 USD. Rather you owe 289 CPUs, which was calculated in the following way:

HIGHLIGHT CALCULATED ITEMS

If you take the 1,000 US dollars disbursed to you and apply the CPU exchange rate we calculated earlier of 3.46 US dollars per CPU, you would owe 289 currency pool units.

NEW CALCULATION BUILDS OVER USD BACKGROUND

YOU OWE CPU

Since one CPU is made up of 1 dollar, 125 yen, and 2 Deutsche marks, 289 CPUs would equal 289 US dollars, plus 36-thousand-one-hundred-twenty-five yen, plus 578 Deutsche marks.

NEW CALCULATION OVER USD BACKGROUND

YOU OWE	EXCHG. RATES	USD
289 USD	1 USD/USD	289
36,125 JPY	100 JPY/USD	361
578 DEM	1.65 DEM/USD	350
TOTAL		1,000

If exchanges rates never changed, then your obligation, expressed in US dollar equivalent terms, would stay the same. Using the exchange rates in our earlier example, you can see that this would be the case.

If you applied the exchange rates of 100 Japanese yen per US dollar, and 1.65 Deutsche marks per US dollar, your CPU obligation expressed in US dollars equivalent would be 1,000 US dollars.

CHANGE CALCULATION BASED ON NEW EXCHG. RATES

YOU OWE	EXCHG. RATES	USD
289 USD	1 USD/USD	289
36,125 JPY	105 JPY/USD	3 4 4
578 DEM	1.50 DEM/USD	385
TOTAL		1,018

As exchange rates move in the future, your CPU obligation will not change, although the USD equivalent of what you owe, expressed at current exchange rates, will fluctuate.

INTEREST SYMBOL COMBINE WITH: CPL TARGET SYMBOL

Now we will discuss the interest rate for currency pool loans.

REPLACE INTEREST SYMBOL WITH NON-DRAMATIC VARIABLE RATE LINE OVER CPL TARGET SYMBOL

The lending rate for currency pool loans is a variable rate that changes every six months.

TABLE: CPL INTEREST RATES

It is based on the Bank's borrowing costs for funding the product,

HIGHLIGHT LENDING SPREAD IN TABLE

plus a lending spread of one-half percent.

HIGHLIGHT COST OF BORROWINGS IN TABLE

Every January and July the Bank calculates the average cost of borrowings in each currency funding the pool in each currency funding the pool during the preceding semester.

HIGHLIGHT WEIGHTED AVERAGE IN TABLE

It then weights these component currency costs by their share of the currency pool to determine the weighted average cost basis.

The lending rate does not change much from one semester to the next because most of the borrowings funding the pool are medium to long-term fixed-rate borrowings. The lending rate reflects the moving averge soct of these borrowings.

GRAPH: MARGINAL AND 5-YEAR AVERAGE OF US TREASURY RATES

To illustrate this point, let's take a look at the difference between a marginal rate and a moving average rate.

Marginal rates are the same as market rates at any point in time.

An example of this is a chronology of 5-year US Treasury rates.

A moving average rate is not a market rate. It is an average of market rates from a specified period.

For example, the 5-year moving average of these US Treasury rates plots the average of US Treasury rates for each of the past five years.

As you can see, moving-average rates change less than marginal rates.

The moving average nature of the lending rate dampens its volatility. The currency pool lending rate lags market developments. It is never as high as the highest marginal market rate, nor as low as the lowest market rate.

REPAYMENT SYMBOL ADD CPL SYMBOL TYPE BUILD: BASED ON STAIL

TYPE BUILD: - BASED ON STANDARD COUNTRY TERMS
- SAME AS FOR LIBOR-BASED SCLs

Currency Pool loans have repayment terms that are based on country criteria. Standard country terms and flexibility to tailor CPL repayment terms to meet project needs are the same as for LIBOR-based SCLs.

GRAPH: ANNUITY REPAYMENTS

Annuity repayments have 3-5 year grace periods and 15 to 20 year maturities.

GRAPH: LEVEL PRINCIPAL REPAYMENTS

Level principal repayments have a 5 year grace period and 15 to 17 year maturities.

PREPAYMENT SYMBOL ADD CPL SYMBOL

Currency Pool loans may be prepaid.

LOAN AGREEMENT (SCHEDULE 2)

The loan agreement provides for a schedule of the prepayment premia that may be changes depending on when the loan is prepaid.

WORLD MAP: HIGHLIGHT 13 COUNTRIES

TYPE BUILD OVER MAP:

- IMPROVE OVERALL RISK MANAGEMENT

Some borrowers select currency pool loans to improve their overall risk management. These borrowers consider the balanced currency composition and stable variable lending rate to be suitable for their needs.

TYPE BUILD OVER MAP: - BECAUSE OF UNCERTAINTY

Other borrowers select CPLs because they face uncertainty about the currency of their future debt servicing capacity.

TITLE GRAPHIC FADE TO BLACK

3A. CONVERSION OPTIONS FOR EXISTING CURRENCY POOL LOANS.

OPENING TITLE: IBRD FINANCIAL PRODUCTS

PAGE FLIP TO SECTION TITLE: "LOAN CONVERSION OPTIONS"

GRAPHIC: CURRENCY BED (7 CURRENCIES) WITH EXCHANGE FLUCTUATION MOTIF

World Bank borrowers have asked for assistance in addressing one of the biggest risks they face - currency risk on World Bank loans.

TYPE OVER: SEPTEMBER, 1996 TO JUNE 1, 1998 CURRENCY CHOICE FOR EXISTING CPLs

In response, from September, 1996 to June 1, 1998, World Bank member borrowers are being offered currency choice for their existing IBRD currency pool loans.

TYPE OVER:

HEAD: OFFER OF CURRENCY CHOICE FIXED-RATE CPLs, 1980 - 1982 VARIABLE RATE CPLs - 1982 - SEPTEMBER 1996

The offer applies to: All fixed-rate currency pool loans made from 1980 to 1982. And all variable rate currency pool loans made from 1982 to 1996.

TYPE OVER:

HEAD: BORROWERS CAN

- RETAIN EXISTING CPL TERMS
_ CONVERT TO SINGLE CURRENCY TERMS

Borrowers can remain with CPLs with existing currency targets, or convert to single currency terms.

Three single currency conversion options exist:

OPTION #1

UNDISBURSED > SCL DISBURSED

Option number one.

Borrowers may change undisbursed CPL amounts to SCL terms and retain CPL terms for disbursed balances.

OPTION # 2

UNDISBURSED > SCL DISBURSED > SCP

Option number two.

Borrowers can convert undisbursed amounts to SCL terms and convert disbursed CPL balances to one of four new single currency pools, or SCPs.

OPTION #3

UNDISBURSED > SCP DISBURSED > SCP

Option number three.

Borrowers can convert their entire CPL, disbursed and undisbursed funds, to single currency pool terms.

TYPE ON GENERIC BACKGROUND HEAD: SCP CONVERSION DATES - JANUARY 1, 1998 _ JULY 1, 1998

While conversion to SCL terms may take place at any time, conversion to SCP terms is implemented on one of two dates:

January 1, 1998, and July 1, 1998.

HEAD: CPL CONVERSION TO SCL TERMS

GRAPHIC:

CPL SYMBOL DISBURSED

UNDISBURSED > LIBOR-BASED SCL SYMBOL > FIXED-RATE SCL SYMBOL

Single currency loan terms are offered for undisbursed currency pool loan balances.

SCL terms for converted loans are the same as for new loan commitments and offer borrowers a choice of currency and interest rate basis.

HEAD: CPL CONVERSION TO SCL TERMS
GRAPHIC: CURRENCY SYMBOL AND CURRENCY MONTAGE

Currencies offered are USD, DEM, JPY, FRF, GBP, CHF, NLG - or any other currency of sufficient borrower demand that the Bank can fund itself sufficiently.

HEAD: CPL CONVERSION TO SCL TERMS GRAPHIC: INTEREST SYMBOL WITH LIBOR-BASED SCL SYMBOL FIXED RATE SCL SYMBOL

Borrowers may select: Libor-based, or fixed-rate SCL terms.

Lending rates are the same as for new LIBOR-based and fixed-rate SCLs.

REPAYMENT AND PREPAYMENT SYMBOLS TYPE OVER: SAME AS SCLs

Repayment and prepayment terms are the same as for new single currency loans.

PRO RATA GRAPHIC:

DISBURSED

CPL SYMBOL

AMORTIZATION LINE

UNDISBURSED

When a loan is converted to SCL terms it is not rescheduled. The amortization schedule is split pro rata between the disbursed and undisbursed portions.

HEAD: CONVERSION TO LIBOR-BASED SCL TERMS

CPL SYMBOL
CPL SYMBOL
CPL SYMBOL
LIBOR-BASED SYMBOL
UNDISBURSED PRO RATA LINE
UNDISBURSED PRO RATA LINE

If the undisbursed amount is converted to LIBOR-based SCL terms, the amortization schedule is split pro rata between the disbursed and undisbursed portions.

HEAD: CONVERSION TO FIXED-RATE SCL TERMS

CPL SYMBOL
CPL SYMBOL
CPL SYMBOL
FIXED-RATE SYMBOL
UNDISBURSED
PRO RATA LINE
(SHADOW CPL BOX)
UNDISBURSED 3 PRO RATA LINES

VERTICAL END DATE LINE

If the undisbursed amount is converted to fixed-rate SCL terms, the repayment terms for the undisbursed amount are determined by the length of the expected disbursement period, measured from the original currency pool loan approval date to the closing date.

HIGHLIGHT GRACE PERIOD

This feature of the fixed-rate SCL could enable you, in some cases, to extend the grace period for projects whose implementation has been significantly delayed.

BALLOON IN FINAL PAYMENT

However, the final repayment date for loans converted to single currency terms will not be later than the final repayment month in the original loan agreement.

TYPE OVER GENERIC BACKGROUND HEAD: OFFER OF CURRENCY CHOICE COVERSION TO SINGLE CURRENCY POOL TERMS

In order to offer borrowers currency choice for disbursed CPLs,

LETTERS S, C, P, PUSH FORWARD AND CIRCLE SYMBOL WITH DOTTED LINE FORMS AROUND LETTERS

the Bank created the single currency pool, or SCP product. SCP terms are only offered for conversion of existing currency pool loans. They are not offered for new loan commitments.

CURRENCY ICON AND SCP SYMBOL CURRENCIES: USD, JPY, DEM, CHF

Single currency pools are offered in USD, JPY, DEM, and CHF. These are the principal component currencies of the currency pool.

GRAPHIC:

CENTER: CPL SYMBOL (SHRINKING IN SIZE)
FOUR CORNERS: JPY CPL USD CPL
CHF CPL DEM CPL

SCPs are created by splitting the targeted currency pool into component pools that reflect borrower demand for the offered currencies.

CONVERSION OPTION 2 GRAPHIC

UNDISBURSED > SCL DISBURSED > SCP

Borrowers may select SCP terms for disbursed balances only if they have opted to convert undisbursed loan amounts to SCL terms.

CONVERSION OPTION 3 GRAPHIC

UNDISBURSED

> SCP

DISBURSED

Or they may convert whole loans - disbursed and undisbursed amounts - to SCP terms.

GRAPHIC:

CENTER: CPL SYMBOL (SMALL)

FOUR CORNERS: JPY (PIE) USD (PIE)

CHF (PIE) DEM (PIE)

Loans transferring from the currency pool into any of the four new SCPs will initially have a currency composition of 1 USD: 2 DEM: and 125 JPY on the date they enter the SCPs. They will immediately be pooled with the other loans that comprise that SCP.

GRAPHIC:

HEAD: EVOLUTION OF USD SCP

ASCENDING LINE

USD PIE TRANSFORMS FROM CPL

Because of this, the currency share of the designated currency of the SCP could be temporarily diluted on the second and third implementation dates as more loans join the SCPs.

GRAPHIC:

HEAD: TRANSFORMATION OF CURRENCY COMPOSITION

YEN SCP (PIE)

USD SCP (PIE)

TYPE:

CURRENCY SWAPS (2/3 USD)

REFINANCING MATURING DEBTS (33.5% > 16.5%)

RECALLS OF NON-DESIGNATED CURRENCIES (100% USD)

The currency composition of the SCPs will be transformed by the Bank through a series of internal and external currency swaps, refinancing of maturing debts, and recalls of non-designated currencies.

GRAPHIC:

HEAD: SCP CURRENCY COMPOSITION USD, DEM, JPY CIRCLES WITH PIES SHOWING 90%

COMPOSITION

TYPE BELOW: 90% BY JULY 1, 1999

SCPs will be multi-currency obligations initially. The Bank will undertake to achieve a currency composition that is at least 90% in the currency designated by borrowers by July 1, 1999; to maintain it at or above 90% thereafter, and to achieve 100% currency composition in the designated currency as soon as practical.

B-ROLL OF FOUR PROJECTS FORMS QUAD SPLIT TYPE OVER: EXCHANGE RISK IN EACH SCP IS SHARED EQUALLY

All SCP loans in a given SCP pool have the same currency composition. The exchange risk in each SCP is pooled, and all borrowers in the SCP share equally in the risk.

INTEREST ICON

While SCP terms offer borrowers a choice of currency, they do not offer a choice of interest rate basis.

TYPE OVER:

CPL SCP

FIXED RATE ORIGINAL FIXED RATE APPLIES CURRENCY SPECIFIC VARIABLE RATE

For converted fixed-rate currency pool loans, the original fixed interest rate applies.

For converted variable rate currency pool loans, a variable rate applies. This lending rate becomes a currency-specific lending rate as the currency composition of borrowers' obligations reaches 100% in the designated currency.

TYPE OVER:

HEAD: SCP LENDING RATE

SCP LOAN --- (to come)
IBRD COST BASIS --- (to come)
LENDING SPREAD .50

The variable rate is based on the semester average cost of the outstanding debt funding the SCP, plus a lending spread of 0.50%.

GRAPHIC SCP SYMBOL REPAYMENT AND PREPAYMENT ICONS TYPE OVER: SAME AS CPLs

Repayment and prepayment terms for single currency pools are the same as targeted currency pool loans.

GRAPHIC:

HEAD: AMORTIZATION SCHEDULES

CPL SYMBOL SCP SYMBOL

GRACE/REPAYMENT GRAPH GRACE/REPAYMENT GRAPH

If an entire loan is converted to SCP terms, each semester's repayment obligation is the same share of the overall loan as in the original amortization schedule.

GRAPHIC:

HEAD: AMORTIZATION SCHEDULE

GRACE/ 10,10,10,10,10/ TOTAL 50 USD

For example, let's say your \$50 million dollar currency pool loan has an amortization schedule that looked like this.

GRAPHIC:

GRACE/ 15, 15, 15, 15, 15/ TOTAL 75

You convert the entire loan into DEM SCP at year two.

VERTICLE LINE THRU BOTH SCHEDULES AT YEAR TWO

The DEM/USD exchange rate was DEM 1.5/10. The principal you owe is 75 DEM, and your principal repayments will look like this:

Since each installment measured in dollars was one-fifth of the total loan, each installment in DEM is also one-fifth of your loan.

GRAPHIC:

HEAD: AMORTIZATION SCHEDULES

PRO RATA

SCL SYMBOL UNDISBURSED GRACE/REPAYMENT

CPL SYMBOL ORIGINAL CPL GRACE/REPAYMENT

PRO RATA
SCP SYMBOL DISBURSED GRACE/REPAYMENT

If only the disbursed balance is converted to SCP terms, the SCP repayment obligation is determined on a pro rata basis.

TITLE GRAPHIC FADE TO BLACK

3C. THE PROCESS OF CONVERSION

TITLE GRAPHIC: IBRD LOAN PRODUCTS

PAGE FLIP TO SECTION TITLE:
"THE PROCESS OF CONVERSION"

B-ROLL MEMBER COUNTRY FLAGS

The offer of conversion is one of the largest financial undertakings the Bank has ever attempted. The Bank has set up a streamlined procedure to make the conversion exercise as admisistratively simple as possible. This section will walk you through the conversion process.

LETTER

In September, 1996, a letter was sent to IBRD borrowers making the offer of currency choice for their targeted currency pool loans.

BOARD OF DIRECTORS

The Bank's Board of Directors has established blanket authority for Bank Management to accept borrower conversion requests, so long as the terms requested are acceptable.

CPL LOAN AGREEMENT

Just like the other changes to your existing loans, conversion is achieved through an amendment of your Loan Agreement. This is a two-step process.

LETTER OF REQUEST ON WORD PROCESSOR

First, you prepare and sign a Letter of Request asking the Bank to amend the terms of your loan.

LETTER OF ACCEPTANCE ON WORD PROCESSOR

The Bank then prepares and signs a Letter of Acceptance. These two documents constitute an amendment to your loan agreement.

TYPE OVER CALENDAR GRAPHIC: REQUESTS FOR CONVERSION DUE ON OR BEFORE DECEMBER 1, 1997 JUNE 1, 1998

Requests for conversions to SCP terms must be received on or before December 1, 1997, or June 1, 1998 which is one month prior to conversion date.

LETTER OF REQUEST

The conversion process is initiated by the borrower when it sends the Bank an authorized Letter of Request. This is a standard form letter provided in the offer package to all IBRD borrowers.

TYPE OVER LETTER:

- REQUESTS AMMENDMENT OF LOAN AGREEMENT
- STATES CURRENCY AND CONVERSION PREFERENCE
- INDICATES RATIONALE FOR CHOICE

In the Letter of Request, the borrower:

- Formally requests the Bank to amend its loan agreement an convert to new loan terms,
- states the conversion and currency preference,
- and indicates the rationale for the choice.

With this letter of request, the Bank is authorized to implement the conversion process. A model Letter of Request is included in your study guide.

SIGNING OR SIGNATURE

The letter of request must be signed by the borrower and, if any, the guarantor. In addition, for the borrower's protection, each Annex must also be signed by the borrower.

TYPE ON ADDRESS:

IBRD FINANCIAL PRODUCTS AND SERVICES GROUP (TREFP) 1818 H ST N.W. WASHINGTON, DC 20433 USA Requests should be sent to the Bank's Financial Products and Services Group.

COMPUTER TRACKING SYSTEM SHOWING DEPARTMENTS

The request is reviewed by various departments in the Bank - Legal, Loan Accounting, Regional, and Treasury. The Bank will contact you if there are any questions on your applications. Conversion requests will be accepted so long as, in the Bank's judgment, requested terms are not unsuitable for the project being financed.

LETTER OF ACCEPTANCE

If the request is in order, a Letter of Acceptance is prepared signifying that the conversion request has been approved.

HANDS RECEIVE FINAL PACKAGE AND ATTACHMENTS

The original of the Letter of Acceptance and its attachments are mailed to the borrower and copies are sent to any guarantors or third parties.

And the conversion from mixed to single currency terms is complete.

TITLE GRAPHIC FADE TO BLACK

3D. SUMMARY

TITAL GRAPHIC: IBRD FINANCIAL PRODUCTS

CURRENCY MONTAGE

As you have now learned, the Bank has introduced a broader choice of currency and interest rate basis in its financial products.

TYPE: FOREIGN EXCHANGE RISK

Currency choice will give borrowers greater flexibility to manage their foreign exchange risk.

For new loans, the Bank now offers three loan products:

LIBOR-based Single Currency Loans.
Fixed-rate Single Currency Loans.
And variable-rate Targeted Currency Pool Loans.

CURRENCY POOL

For a limited time period, the Bank has also offered to convert existing Currency Pool Loans to single currency terms.

TYPE OVER BACKGROUND

Borrowers may convert their existing CPLs to:

Libor-based Single Currency Loans Fixed-rate Single Currency Loans And Single Currency Pool Loans

CALENDAR WITH DATES CIRCLED

The offer to convert existing loans is effective from September 1, 1996, through July 1, 1998.

AMORTIZATION SCHEDULE

Since World Bank loans have maturities of 15-20 years, the choice of financing terms is one of the most important choices a borrower will make.

SCALE

Selecting the appropriate loan terms requires a clear understanding of the inherent benefits and risks.

MONTAGE: PROJECTS

This distance learning program is intended to help borrowers select the best loan products to meet their needs.

World Bank staff are available to assist members in designing the best financial strategy for their development objectives.

WORLD BANK LOGO CREDITS

Video-recording

Mr. Wolfensohn:

I enclose a copy of the message they would like you to read - this will be put up on a teleprompter. I also enclose some background material.

Caroline

7/29/97

Attachment

DRAFT STATEMENT TO INTRODUCE DISTANCE EDUCATION PROGRAM ON "OFFER OF CURRENCY CHOICE FOR IBRD LOANS"

Greetings from Washington. I am delighted to welcome you to our distance education program on the Bank's loan products. I attach great importance both to the medium and to the message.

As far as the medium is concerned, this is one of the Bank's first uses of the distance education format. Through a carefully designed curriculum and the use of technology, learners and course leaders are brought together, even though you may be in different locations. You will be able to use the course materials to study in the comfort of your own office or home and to participate as part of a larger group in the live interactive sessions.

Our goal is for each of you to be able to learn at your own pace, within the structure of the program, while also benefiting from learning and sharing together. I am excited that distance education has the potential to be an important means to provide information and front-line support to you in a timely way. I hope you will agree.

As to the message, I am pleased that, after many years of offering only one product, the Bank now offers a wide range of currency and interest rate options, both for new loans and for existing loans. You will learn about these products in this course, and how they can fit into borrowers' debt management strategies.

As I told our Board when this initiative was approved, "We should use the Bank's tremendous intermediation capacity to deliver the full range of financial products our clients need."

Your feedback is crucial input to our future product development. Let's keep an open dialogue, so that the Bank can continue to offer products and services that you will find competitive and responsive.

CC: Jose Molina

CC: VIKAS SAHASRABUDHE

CC: FAREEBA MAHMOOD

(JOSE MOLINA)

(VIKAS SAHASRABUDHE @Al@WBHQB)

(FAREEBA MAHMOOD @A1@WBHQB)

The World Bank/IFC/MIGA
OFFICE MEMORANDUM

DATE: June 19, 1997 06:03pm

TO: Jane Holden (JANE HOLDEN)

FROM: Jan Wright, TREFP (JAN WRIGHT)

EXT.: 80744

SUBJECT: Distance Education Project Supporting the Offer of Currency Choice for IBRD Loans

As described in the attached EMs, Treasurer's Financial Products and Services Group has been collaborating with the Learning and Leadership Center to develop a distance education program. This program has two objectives (1) to promote understanding of the Bank's loan products and (2) to pilot distance education as a means to provide front-line support to borrowers and Bank staff.

As part of the video portion of the program package, we would like to include a brief (2-minute) introductory statement by Mr. Wolfensohn. Since he is known to be an ardent supporter of offering competitive financial products as well as harnessing technology to achieve our goals, he would be the perfect person to introduce the program.

I have drafted a possible statement for his consideration, which is also attached.

If he agrees to this, then the next step would be to schedule the actual filming session. Our producer, Bob Uth, said it should take no more than 30 minutes, but he would also want to preview the site ahead of time.

We would appreciate your checking whether Mr. Wolfensohn would agree to be part of this exciting project. If so, could you let us know two possible dates/times when the actual filming could take place?

Thank you.

The World Bank/IFC/MIGA
OFFICE MEMORANDUM

DATE: May 22, 1997 02:10pm EDT

TO: Christiaan Poortman

(CHRISTIAAN POORTMAN)
(ADIL KANAAN)

TO: Adil Kanaan

(JAN WRIGHT)

FROM: Jan Wright, TREFP

EXT.: 80744

SUBJECT:

Distance Learning Pilot on the Offer of Currency Choice for New and Existing IBRD Loans

Christiaan and Adil,

TREFP has been developing a distance learning program, in collaboration with LLC, on the Bank's offer of currency choice for new and existing IBRD loans. The program will be ready to pilot in September.

The program is intended for people who have a need to understand the IBRD's loan products and the offer of currency choice for existing currency pool loans. The course is targeted towards borrower and Bank staff with a wide range of experience levels in the subject matter. Learning outcomes include an understanding of IBRD's loan products (LIBOR-based single currency loans, fixed-rate single currency loans, currency pool loans), conversion alternatives for currency pool loans, risk management considerations to take into account in evaluating these alternatives, and the actual procedure by which a borrower can request conversion.

The program is structured to be conducted over a three-week period. Course resources include a study guide (text, readings, case examples, self-assessment tools), product videos, and interactive sessions with the instructors (live videoconferences, computer-based exercises, etc.).

We would like to pilot the program with two resident missions and hope that Bulgaria and Egypt could be our pilots. Both have the videoconferencing technology needed to support the program. For the initial pilot, there will be no charge to the country department. Subsequent training is expected to be offered on charge-back.

We are very excited about this product and hope it will not only promote the offer of currency choice, but also help demonstrate for the Bank how technology can be used to enhance front-line capacity in our resident missions and support our borrowers.

Please let us know if your team would be interested in

participating in this pilot. While I am on mission in Africa next week, please contact Jose Molina (x80743) for further information.

Best regards, - Jan

CC: Kenneth Lay CC: (KENNETH LAY) Inder Sud (INDER SUD) CC: Yvonne Jones (YVONNE JONES) CC: John Balafoutis VIKAS SAHASRABUDHE CC: (JOHN BALAFOUTIS) CC: (VIKAS SAHASRABUDHE @A1@WBHQB) FAREEBA MAHMOOD CC: (FAREEBA MAHMOOD @Al@WBHQB) Jose Molina CC: Hala Khattar (JOSE MOLINA) (HALA KHATTAR) CC: Claude Blanchi CC: (CLAUDE BLANCHI) GIANNI BRIZZI Marisa Fernandez-Palacios (GIANNI BRIZZI @Al@WBHQB) CC: (MARISA FERNANDEZ-PALACIOS)



LOAN PRODUCT

Spreadsheet

September 1996

LOAN PRODUCT

Spreadsheet



Prepared by:

Financial Policy and Projections Division FINANCIAL POLICY AND INSTITUTIONAL STRATEGY and

Financial Products and Services Group
OFFICE OF THE VICE PRESIDENT AND TREASURER

The IBRD LOAN PRODUCT Spreadsheet (LPS)

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This package contains a diskette and accompanying documentation of the IBRD Loan Product Spreadsheet and the Fixed-Rate SCL Lending Rate Calculator, educational programs that are distributed free of charge for the use of World Bank borrowers and staff. No other reproduction or use of these spreadsheets is permitted without the express written consent of the International Bank for Reconstruction and Development.

The IBRD Loan Product spreadsheet is an Excel© spreadsheet packaged as a self-extracting file using PKSFX, which is the property of PKWARE, Inc., Brown Deer, Wisconsin, U.S.A.

These programs and the accompanying documentation were prepared by the Financial Policy and Projections Division and the Financial Products and Services Group of the World Bank.

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The IBRD Loan Product Spreadsheet (LPS)

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The Fixed-Rate Lending Calculator

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The IBRD Loan Product Spreadsheet (LPS)



Introduction

The World Bank (IBRD) currently offers three loan products to provide borrowers flexibility to select terms that are consistent with their debt management strategy and well suited for their debt servicing capacity. These are currency pool loans (CPLs), LIBOR-based single currency loans (SCLs) amd fixed-rate SCLs. Borrowers may use these products alone or in combination to best suit their needs. The choice presents the Bank's borrowers with a number of factors to consider, such as currency, interest rate basis, grace period, final maturity and amortization pattern.

The IBRD Loan Product Spreadsheet (LPS) was developed in response to requests from IBRD borrowers and staff for a simple computer model which could serve as a tool in examining IBRD loan alternatives. This program allows you to model IBRD loan products under varying assumptions. Thus, you may compare various financing alternatives, consider different maturity structures, construct your own multicurrency obligations using a combination of IBRD loan products, perform sensitivity analyses of project debt service cash flows under different exchange and interest rate scenarios and also test the impact of the pace of disbursements, e.g., implementation.

The LPS is a tool for evaluating the debt service cash flows directly resulting from the choice of an IBRD loan product or combination of products. It also has the capability to model the sensitivity of other project cash flows to changes in exchange rates, under a common set of exchange rate assumptions.

The LPS is not meant to be an all-encompassing tool for evaluating IBRD loans. It allows you to compare various IBRD loan products using the same set of assumptions. You enter your own projected exchange rates and interest rates into the LPS; it does not predict exchange rates and interest rates for you. The LPS does not select the loan product most suitable for the project; the decision is made solely by the borrower.

Interspersed throughout this document are notes and helpful hints on the usage of the LPS. These are identified by the → sign in the left margin.

The LPS is distributed free of charge by the IBRD to IBRD borrowers and staff. The LPS is meant to be a training and analytical tool; it is not meant to supplant the Billing Statement prepared by the IBRD's Loan Department. Borrowers should refer to their Billing Statement for the exact amounts of debt service due on their loans.

For any questions and/or comments, call the help line at

(202) 458-1122

Features of the LPS has the following features:

- It is simple to use.
 - It is written in Microsoft Excel, one of the most widelyused spreadsheet packages in the world.
 - It can be used by anyone with a working knowledge of Microsoft Excel and the IBRD's loan products.
 - All data inputs are made into one worksheet.
 - User menus simplify the data entry process.
- It allows you to enter various combinations of IBRD loans. You may combine CPLs and up to four currency tranches of each type of SCL.
- In evaluating projects, you may combine the LPS outputs with the other cash flows in the project, in order to have a picture of the overall project cash

flow. The LPS allows you to enter up to six sets of cash flows in addition to the disbursements.

- It produces projected semi-annual cash flows of each loan tranche by currency, USD equivalent and local currency equivalent.
- The outputs in USD equivalent and local currency equivalent give you a common denominator with which to compare various loan alternatives.
- It is powerful, yet flexible enough to be modified for the advanced user's needs. All cells are write-protected with the exception of the data entry cells. Advanced users may disable the write protection in order to modify the spreadsheet.

System Requirements

In order to run the LPS, the following minimum equipment is required:

Hardware: a 486-based IBM-PC compatible

personal computer;

a minimum of 16 MB of RAM

Software: Windows 3.1 environment or higher;

a copy of Microsoft Excel®

(Release 5.0 or higher)

There are two system limitations that you should be aware of:

- Some of the menus will not work if you have two or more copies of the LPS open at the same time.
- The menus sometimes cause Windows 3.1 to run out of memory. We did not encounter this problem when we tested the LPS with Windows NT or Windows 95. There are two ways to minimize the problem:
 - 1. Make sure there are no other applications open when you run the LPS.
 - 2. If you still encounter problems, exit and restart Windows 3.1 before launching the LPS.

Learning How to Use the LPS

The LPS was designed to be simple, straightforward and easy to use. The model looks complex largely because of its size; the size was necessary in order to accommodate various combinations of loan products. In practice, you will probably use only a portion of the LPS outputs.

Rather than read this entire manual, you may wish to install the LPS (see Section 2 - "Installation Instructions"), and page through the worksheets to familiarize yourself with how the model is structured. You may also wish to skim through "Program Structure" found in Section 3 (page 7) to familiarize yourself with the way the LPS is structured. Refer back to this manual if you need more detailed information on a topic. All data is entered into the Inputs worksheet, and the data entry cells are shaded in yellow. Do not worry about accidentally deleting any formulae; they are write-protected.

The LPS contains a menu-driven system to simplify the data entry process, which can be accessed by pressing "Control-M". The menus will take you through the entire data entry process. Thus, you do not have to be very familiar with the LPS in order to use it. (You can also enter the data directly into the yellow-shaded cells, if you prefer not to go through the menus.) 

Installation

Due to the large size of the LPS program, it comes in a "zipped" file in the diskette. The file must be unzipped in the hard drive in order to access it. To install the LPS, do the following steps:

- 1. Insert the diskette into the floppy drive. (This is usually drive A:\).
- 2. Copy the file "LPS.EXE" from the diskette into the hard drive.
- 3. Open the LPS.EXE file which was copied into the hard drive.
- An Excel® spreadsheet called LPS.XLS will be created.
- Note: It is advisable to save this file under a different name, so that you will have a copy of the original file in case the working copy is subsequently altered or damaged.

Write Protection of the LPS

Nost of the LPS is write-protected, so that only the cells shaded in light yellow in the "Inputs" worksheet may be changed. This prevents the accidental overwriting or erasure of the formulae. If you need to make changes to the LPS (e.g., to analyze conversions of existing Currency Pool Loans (CPL)), you will have to disable the write protection first.

To disable the write protection, use the Excel command "Tools - Protection - Unprotect Sheet".

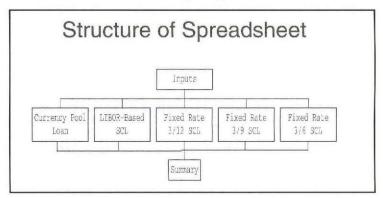
Inserting rows or columns into the "Inputs" worksheet (see Section 3 - "Program Structure") will invalidate the menu-driven data entry system (see Section 4 - "Data Entry"), since the menus are linked to the data entry cell locations. Changes to any of the other worksheets will not affect the menu system.

Note: The LPS column widths may not be wide enough to accommodate certain local currency amounts, resulting in overflow errors. (If this occurs, the local currency amounts will be displayed as "###,###.".) In order to widen the column widths, the write protection has to be disabled.

7
D
0
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)ESC
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0
Z



Program Structure The LPS is divided into seven worksheets, as shown in the following diagram:



Inputs

This is where all inputs are entered. For each SCL product, you may enter up to four currency tranches. The Input worksheet feeds into the next five worksheets.

Currency Pool Loan (CPL)

This worksheet produces the projected future semiannual cash flows of the currency pool loan component of the loan, in USD equivalents and currency pool units (CPU). (This document will define a CPU as a synthetic currency unit whose composition is equal to that of the IBRD's currency pool - 1 CPU is composed of 1 USD, 2 DEM and 125 JPY.)1

- The format of the CPL sheet is slightly different from that of the SCLs. Unlike the SCLs which can have multiple currency and interest rate tranches, a currency pool loan has only one tranche. The CPL worksheet has four schedules:
 - At the bottom of the worksheet is the amortization schedule in U.S. dollars equivalent that would appear in the Loan Agreement.

¹ The DEM component of the currency pool is managed as a DEM equivalent and amounts of NLG and CHF may be substituted for DEM. The LPS assumes that the DEM group is composed of 100% DEM.

- Above the original amortization schedule is the schedule in Currency Pool Units. This schedule is developed from the original amortization schedule and the timing and magnitude of actual disbursements. The IBRD's Loan Department keeps track of the loan balances and interest accruals in CPUs.²
- Above the schedule in Currency Pool Units is a schedule in local currency equivalent, which allows you to model your IBRD obligation in your own local currency.
- Based upon the schedule in CPUs, the IBRD's Loan Department bills the currency equivalent of the CPU amount which is due for that period. The amortization schedule in USD equivalents at the time of billing is at the top of the Currency Pool Loan worksheet.
- Note: If you wish to look at your projected debt service obligations denominated in other currency units, convert the USD amounts given per this schedule to the currency of your choice. (In order to modify the LPS, you need to disable the write protection. Refer to Section 2 "Write Protection of the LPS".)
- Single Currency Loans (SCLs)

For the following SCL products, the individual tranches are given in original commitment currency amounts, USD equivalent and local currency amounts, and summarized in USD and local currency equivalents.

² Please refer to: <u>Pool Unit Approach to Currency Pool Loans</u>, Loan Department, The World Bank, Washington, D.C., 1995. This publication gives a detailed exposition of how the IBRD calculates its billing statements.

1. LIBOR-Based SCL

This worksheet produces the projected semiannual cash flows of the LIBOR-based SCL component of the loan.

2. Fixed-Rate 3/12 SCL3

This worksheet produces the projected semiannual cash flows of the fixed-rate 3/12 year SCL component of the loan.

3. Fixed-Rate 3/9 SCL

This worksheet produces the projected semiannual cash flows of the fixed-rate 3/9 year SCL component of the loan.

4. Fixed-Rate 3/6 SCL

This worksheet produces the projected future semiannual cash flows of the fixed-rate 3/6 year SCL component of the loan.

Summary

This worksheet totals all the projected future semiannual cash flows of the various loans, in USD and local currency equivalents. It also calculates the project net present value (NPV), if you chose to enter the other project cash flows.

³ In the Fixed-Rate SCL product, each semester's disbursements is grouped into a "Disbursed Amount". Each Disbursed Amount has a grace period of three years from the rate-fixing date and a final maturity that is determined by the expected disbursement period of the entire loan. Fixed-rate SCLs are classified into three categories: loans expected to disburse in 0-3 years (fast-disbursing loans), loans expected to disburse over more than 6 years (slow-disbursing loans). For each category, Disbursed Amounts have a final maturity, including the grace period, of 12, 9 and 6 years, respectively. The 3/12 year fixed-rate SCL is for a fast-disbursing loan. (Refer to: Major Terms and Conditions of IBRD Loans, Financial Products and Services Group, The World Bank, Washington, D.C., September 1996).

Program Inputs

he following variables must be entered:

- country category, which maps the standard country terms⁴
- amount of the CPL, in USD equivalents
- amount of each SCL loan tranche, in currency of commitment
- grace period of each loan tranche
- final maturity of each loan tranche
- type of loan amortization (annuity or level repayment of principal)
- schedule of disbursements for each loan tranche
- projected foreign exchange rates
- currency pool composition (e.g., 1 USD : 2 DEM : 125 JPY)
- projected currency pool lending rates
- projected LIBOR-based SCL lending rates
- projected fixed-rate SCL lending rates
- annual interest waiver
- commitment fee waiver
- other project cash flows (this is optional)

You may run sensitivity tests on the above variables. (Please refer to Section 4.0, "Entering Data Using the Menu System" and "Entering Data Directly Into the Entry Cells", respectively, for the details of how to enter the various inputs.)

Program Outputs

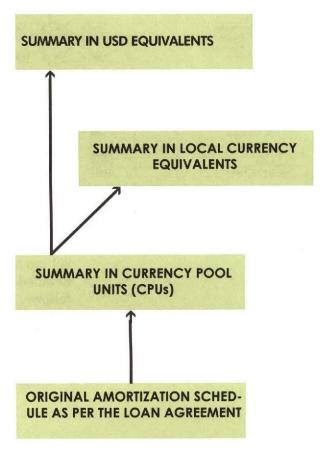
As mentioned in Section 3 - "Program Structure", LPS outputs are grouped into six worksheets; one for each loan product and one summarizing all the loan tranches. The output worksheets are the following:

Worksheet Name	Contents
Pool	Currency Pool Loan
LIBOR	LIBOR-Based SCL
Fixed12	3/12 Fixed-Rate SCL
Fixed9	3/9 Fixed-Rate SCL
Fixed6	3/6 Fixed-Rate SCL
Summary	Summarizes all the project's loans, by USD equivalents and local currency. Also calculates the project's NPV, inclusive of other project net cash flows, in USD equivalents and local currency.

⁴ The World Bank classifies its borrowers into five categories, depending on per capita income, creditworthiness and, exceptionally, other factors. These categories determine the country standard (cont'd)

1. Currency Pool Loan Outputs

The output worksheet for the **CPL** is based on the process by which the IBRD prepares its Billing Statements⁵ and is presented in the following diagram:



⁽cont'd 4) repayment terms. For more information on a country's standard terms, contact your IBRD Disbursement Officer or refer to: Major Terms and Conditions of IBRD Loans, Financial Products and Services Group, The World Bank, Washington, D.C., September 1996.

⁵ Refer to Pool Unit Approach to Currency Pool Loans.

The following exhibit shows excerpts of an output worksheet of a CPL in USD equivalents.

	AB	C	D	E	Т	F		G		Н		1		J		K		1		M	Т	N
1	1		Year		1	•			2			•	3			- 1	1	- In			5	14
2			Semester	OCCUPATION OF	1 50	2	100	3		4		5		6	U.	7	100	8	1000	9	NO.	10
3										- 101.5		11100000	_	V701				***		1000		
4	SL	MMARY OF POOL LOAN (in USD eq	uivalents)																		
5																						
-	LOA	N BALANCES							-													
7		Current Disbursements		\$ 5.00	\$	5.00	\$	5.00	\$	5.00	S	5.00	\$	5.00	\$	5.00	\$	5.00	8	5.00	\$	5,00
8		Cumulative Disbursements		\$ 5.00	8	10.00	8	15.00	S	20.00	S	25.00	\$	30.00	\$	35.00	\$	40.00	S	45.00	\$	50.00
9		less: Cumulative Repayments		\$ -	\$		S		\$	-	S	-	\$	-	\$	4	8	-	S	-	8	-
10		Outstanding Balance		\$ 5.00) \$	9.88	S	15.09	\$	19.12	S	23.64	\$	28.18	\$	33.58	\$	38.83	S	43.83	\$	48.83
11																	1	P.C. C. C. C.		10.00		
12		Original Loan Amount	\$50.00			IRR:		6.44%			aver	age life:	14	14.01								
13																						
	SUM	MARY OF DEBT SERVICE																= 34				
15																						
16	TO	TAL DEBT SERVICE (A + B + C)		0.143	0	0.2999		0.4679		0.5966		0.7417		0.8873		1.0616		1.2308		1.3918		1.5528
17																						
18	A.	Principal Repayment		0.0	0	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
19																						
20	B.	Total Interest		0.083	-	0.2467		0.4210		0.5560		0.7073		0.8592		1.0397		1.2152		1.3825		1.549
21		Interest Due		0.086		0.2560		0.4367		0.5768		0.7337		0.8913		1.0785		1.2606		1.4341		1.6076
22	-	Less: Interest Waivers		-0.003	1	-0.0092		-0.0157		-0.0208		-0.0264	_	-0.0321		-0.0389		-0.0454		-0.0517		-0.0579
24	-	Cumulative Interest Paid		0.000		0.0003		0.004														7/00/100 to Co.
25	-	Cumulative interest Paid		0.083	ь	0.3304		0.7514	-	1.3073		2.0146		2.8738		3.9135		5.1287		6.5112		8.0609
26	C.	Commitment Fee		0.059	4	0.0531		0.0469		0.0406	-	0.0344		0.0281	_	0.0219	-	0.0156		0.0004		0.0021
27	-	Communicate 1 cc		0.039	4	0.0331		0.0409		0.0400		0.0344		0.0281		0.0219		0.0156		0.0094		0.0031
28	+	Net Cash Flow	0	4.857	0	4,7001		4.5321		4,4034		4.2583	-	4.1127	_	3,9384	-	3.7692		3.6082		3.4472

All output reports follow this basic format. A detailed explanation of the various line items follows. The columns, rows, and cell locations in the following refer to the above example.

The output summarizes the cash flows by semester.

Row 1 shows the year, and Row 2 shows the semester.

Note: IBRD borrowers can make compensating maturity adjustments within their overall portfolio of loans from the IBRD. For example, a decrease in the grace period or final maturity for one loan can be used to increase that of another CPL or LIBOR-based SCL loan in the same fiscal year, if there is a strong project justification. For each additional year in grace period, the final maturity must be reduced by two years. If the final maturity for one loan is shorter than the standard country terms (e.g., a fixed-rate SCL), the final maturity for another loan could be extended, provided the weighted average final maturity does not exceed the standard final maturity for the country.

Although this flexibility to trade off final maturity between loans implies that the maximum maturity for an IBRD CPL or LIBOR-based SCL is uncertain, the LPS only allows for maturities of up to 25 years. For loans whose final maturities are extended beyond 25 years, the LPS truncates the amortization schedule at that point.

The first group of data is the Loan Balances.

- Current Disbursements (row 7) represents the disbursements made in the current semester.
- Cumulative Disbursements (row 8) is a running balance of disbursements through each semester.
- Cumulative Repayments (row 9) is a running balance of principal repayments through each semester.
- The Outstanding Balance (row 10) represents the principal outstanding as of the end of each semester.
- The Original Loan Amount (cell D12) is the original currency amount committed, at the exchange rate prevailing at the time of loan negotiation.
- IRR (cell G12) represents the IRR obtained from the total net cash flows of the loan over the life of the loan (disbursements and debt service). Due to the simplifying assumptions made by the LPS with regard to the timing of the cash flows, calculating an IRR using the semiannual cash flows produced by the LPS will overstate the IRR. The LPS IRR calculation compensates for this by calculating the IRR based on quarterly cash flows. (The cash flows at the bottom of the output worksheets are used for this purpose.) Please refer to Section 3 "Simplifying Assumptions" (page 20), for more details.
- Note: If you combine the semiannual cash flows produced by the LPS with other cash flows produced by a different model and calculate an IRR, the IRR will be overstated. Use the quarterly cash flows for this purpose, rather than the semiannual cash flows.
 - Average Life (cell J12) shows the weighted average maturity, calculated by weighting the principal repayments in the currency committed by the semester of repayment.
- → Note: The average life shown in the schedules in USD equivalents and local currency equivalents are

also calculated using the currency committed. Using the principal repayments in USD equivalents or local currency equivalents would distort the average life, due to the effect of foreign exchange adjustments.

The second group of data is the **Total Debt Service**.

- The debt service comprises three main components:

 Principal Repayments (row 18), Total Interest (row 20), and the Commitment Fee (row 26).

 Total Interest is divided into the Interest Due (row 21), which represents the interest accrual for the semester, and the Interest Waiver (row 22), which represents the discretionary waiver of a portion of the interest granted to borrowers who service their debt in a timely fashion. (This annual waiver is granted when the IBRD's Board of Executive Directors determines that the IBRD's financial condition permits it to do so.)
- Net Cash Flow is calculated as the sum of disbursements less the sum of debt service for each semester.

Following the Summary of Pool Loan (in USD equivalents) is the Schedule in Local Currency Equivalent and the Loan Balance and Debt Service in CPUs. A sample schedule in CPUs follows.

- 1	4 В	С	D	E	F	G	Н	1	J	K	L	M	N
56	L	DAN BALANCE AND DEBT SE	ERVICE IN C	PUS									
57	T												
58	LOA	N BALANCES											
59		Current Disbursements		1.40	1.43	1.40	1.50	1.54	1.57	1.55	1.53	1.53	1.53
60		Cumulative Disbursements		1.40	2.83	4.23	5.73	7.27	8.83	10.38	11.91	13.45	14.98
61		less: Cumulative Repayments		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62		Outstanding Balance		1.40	2.83	4.23	5.73	7.27	8.83	10.38	11.91	13.45	14.98
63													
64 65													
66	T	OTAL DEBT SERVICE (A + B)		0.0234	0.0707	0.1181	0.1666	0.2174	0.2693	0.3213	0.3728	0.4242	0.4755
67										-			
68	A.	Principal Repayment			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69		100 N											
70	B.	Total Interest		0.0234	0.0707	0.1181	0.1666	0.2174	0.2693	0.3213	0.3728	0.4242	0.4755
71		Interest Due		0.0242	0.0733	0.1225	0.1728	0.2255	0.2793	0.3334	0.3868	0.4400	0.4932
72		Less: Interest Waivers		-0.0009	-0.0026	-0.0044	-0.0062	-0.0081	-0.0101	-0.0120	-0.0139	-0.0159	-0.0178
73													
74		Cumulative Interest Paid		0.0234	0.0940	0.2121	0.3788	0.5961	0.8654	1.1868	1.5596	1.9838	2.4593
75													
76		Net Cash Flow	0	1.3735	1.3617	1.2845	1.3318	1.3193	1.2979	1.2240	1.1612	1.1099	1.0586
77													
78		\$ per CPU		3.5794	3.4907	3.5649	3.3370	3.2538	3.1905	3.2354	3.2593	3.2593	3.2593

The structure of the output worksheet follows the process by which the IBRD prepares its Billing Statement. The Loan Department keeps track of the loan balances, and accrues interest in CPUs. Disbursements are calculated in CPUs, based on exchange rates at the time of disbursement. Principal repayments are computed by multiplying the outstanding amount in CPUs by the maturity

repayment ratio (MRR). The MRR is equal to the cumulative disbursements (at historical USD equivalents) less the cumulative USD equivalent amounts billed as of the billing date (referred to in the Loan Department document as "withdrawals outstanding"), divided by the amount in USD equivalent to be billed in the current billing date as per the amortization schedule. The **Original** Amortization Schedule in the output worksheet shows the MRR for each semester (row 95).

	AB	C	D	E	F		G	Н		- 1		J	K	L	M	N	0
80	OI	RIGINAL AMORTIZATION S	CHEDULE	IN USD (as p	er Loai	Agre	rement)										
81																	
82	LOA	AN BALANCES											line.				
83		Current Disbursements		\$ 5.00	\$ 5.	00 \$	5.00	\$:	5.00	\$ 5.00	\$	5.00	\$ 5.00	\$ 5.00			\$ -
84		Cumulative Disbursements		5.00	10	.00	15.00	2	20.00	25.00)	30.00	35.00	40.00	45.00		50.00
85		less: Cumulative Repayments		0.00	(.00	0.00		0.00	0.00	1	0.00	0.00	0.00	0.00		0.97
86		Outstanding Balance		5.00	10	.00	15.00	2	20.00	25.00)	30.00	35.00	40.00	45.00	50.00	49.03
87																	
88		Original loan amount	\$50.00														
89																	
90		Principal Repayment		0.00	(.00	0.00	1	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.97
91																	
92		Annuity repayment factors		0.0000	0.0	000	0.0000	0.	0000	0.0000)	0.0000	0.0000	0.0000	0.000	0.0000	0.0195
93		Level repayment amounts		0.0000	0.0	000	0.0000	0.	0000	0.0000)	0.0000	0.0000	0.0000	0.000	0.0000	1.6667
94																	
95		MRR				0	0)	0	- 0)	0	C	(0	0.01946716

The Loan Balance and Debt Service in CPUs schedule does not contain a calculation of the commitment fee, because the commitment fee on the undisbursed amount is calculated only in U.S. dollars equivalent. Thus, the total amount to be billed equals the sum of principal repayments and interest in CPUs, plus commitment fee in USD equivalent, all converted at the prevailing exchange rate into the currency in which the borrower is billed.

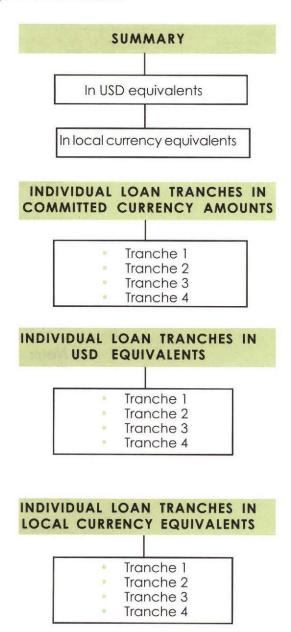
Note: The LPS assumes that all CPL bills are in U.S. dollars. If you want to look at your projected cash flow for CPLs assuming a different currency of billing, convert the USD equivalent amounts calculated by the LPS into the currency of your choice, using your projected exchange rates. If you wish to modify the LPS, remember to disable the write protection first (see Section 2 - "Write Protection of the LPS", page 5.)

The schedule in CPUs also contains a line item showing the USD equivalent of one CPU for each semester (row 78). This USD equivalent for the CPU is calculated using the projected exchange rates for USD, DEM and JPY which were entered in the "Inputs" worksheet. Thus, you can see how future movements in the USD, DEM and JPY exchange rate will affect the value of a CPU.

Note: The LPS shows that while cumulative principal repayments in CPUs will equal cumulative disbursements in CPUs, the corresponding amounts in USD equivalent will, in most cases, not be equal due to the changing value of the CPU per USD over time.

2. Single Currency Loan Outputs

The worksheets for the SCL loan products are organized as follows:



The following is an excerpt from an output worksheet summarizing a LIBOR-based SCL in USD equivalents:

	AB	С	D	E	F		G	Н		J	K
1			Year		i			2		3	
2			Semester	SOLEC LOSS	2	TO STATE OF	3	4	5	6	7
3											
4	SU	JMMARY OF ALL LIBOR-B	ASED SCLS								
5		(IN USD EQUIVALENTS)								*	
6	LOA	N BALANCES									
7	T	Current Disbursements		\$ 2.82	\$ 2.77	\$	2.80	S 2.64	\$ 2.52	\$ 2.47	\$ 2.50
8		Cumulative Disbursements		S 2.82	\$ 5.59	S	8.39	\$ 11.03	\$ 13.55	\$ 16.02	\$ 18.52
9		less: Cumulative Repayments		S -	\$ -	S	14	S -	\$ -	\$ -	\$ -
10		Outstanding Balance		\$ 2.82	\$ 5.54	S	8.40	\$ 10.57	\$ 12.60	\$ 14.80	\$ 17.53
11											
12		Original Loan Amount	\$ 35.03		IRR:		4.49%		average life	: 12.78	
13											
	SUM	IMARY OF DEBT SERVICE									
15											
16	TO	OTAL DEBT SERVICE (A + B + C))	0.0649	0.1063		0.1526	0.1893	0.2286	0.2710	0.3251
17											
18	A.	Principal Repayment		0.00	0.00		0.00	0.00	0.00	0.00	0.00
19											
20	B.	Total Interest		0.0226			0.1176	0.1594	0.2026	0.2492	0.3061
21		Interest Due		0.0243	0.0733	_	0.1263	0.1710	0.2168	0.2662	0.3264
22		Less: Interest Waivers		-0.0018	-0.0052		-0.0088	-0.0116	-0.0142	-0.0170	-0.0203
23											
24		Cumulative Interest Paid		0.0226	0.0907		0.2082	0.3677	0.5703	0.8195	1.1256
25											
26	C.	Commitment Fee		0.0423	0.0382		0.0350	0.0299	0.0254	0.0218	0.0190
27	_										
28		Net Cash Flow	0	2.7520	2.6652		2.6481	2.4530	2.2911	2.1960	2.1789

The **Summary in USD Equivalents** is immediately followed by the **Summary In Local Currency Amounts**, which has an identical format, except that the amounts are in local currency, rather than USD equivalents. After the two Summary Schedules come the individual tranche schedules in the currencies originally committed, USD equivalents, and local currency equivalents.

Following the Schedules in the Original Currency of Commitment are the Schedules in USD and Local Currency Equivalents. The values in the tables are calculated using one of two exchange rates, as appropriate:

- (a) the historical exchange rate, or
- (b) the current exchange rate.

The following table shows the exchange rates used in each of the line items in these tables:

Line Item	Exchange Rate
Current disbursements	Current
Cumulative disbursements Cumulative repayments	Historical Historical
Outstanding balance	Current
Principal repayment Total interest	Current Current
Cumulative interest paid	Historical
Commitment fee	Current
Net cash flow	Current

- Note: The schedules in USD and local currency equivalents demonstrate that the total principal payments could turn out to be different from the total amount disbursed, when measured in USD or local currency equivalents. The differences between cumulative principal repayments and cumulative disbursements are due to changes in exchange rates over the life of the loan.
- Note: While the LPS does not forecast interest and exchange rates, it enables you to test the sensitivity of the project cash flows under varying interest and exchange rate assumptions. The LPS, for example, may be used to determine the break-even exchange rate for a project.

Other Net Cash Flows

The LPS has a limited capability to combine the disbursement and LPS-generated debt service cash flows with other net cash flow streams. You can enter up to six sets of project cash flows representing various project revenues and expenses. At the bottom of the **Summary** worksheet are schedules showing the other project cash flows in the original currency of denomination, in USD equivalents and in local currency equivalents. A project NPV is calculated, based on a hurdle rate⁶ you enter. A sample of the schedules follows.

⁶ The hurdle rate is the project's minimum required rate of return. A zero or positive NPV would mean that the project would meet or exceed its required rate of return.

-	SUMMARY OF PROJE	CT CASH FI	LOWS	of the total date	CONTRACTOR OF THE PARTY OF THE		0749 M N. H.C.		MISS HA	De Gerelle		
Othe	er Project Net Cash Flows											
3	cash flow # 1	FRF	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	10,0000	10.00
7	cash flow #2	USD	5.0000	5.0000	5.0000	5.0000	5,0000	5.0000	5.0000	5.0000	5.0000	5.00
2	cash flow #3	DEM	-5.0000	-5.0000	-5.0000	-5.0000	-5.0000	-5.0000	-5.0000	-5.0000	-5.0000	-5.00
10	cash flow #4	Local Currency	100.0000	100.0000	100.0000	100.0000	100.0000	100,0000	100,0000	100,0000	100.0000	
9	0	none	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	100.00
9	0	none	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00
7	- U	none	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00
	currency exchange rates / US\$											
	FRF		4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4,94	4.
	USD		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
	DEM		1.44	1.50	1.40	1.60	1.65	1.68	1.57	1.50	1.50	1
	Local Currency		25.00	25.63	26.27	26.92	27.60	28.29	28.99	29.72	30,46	31.5
	none		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
	none		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Sun	nmary of Project Cash Flows (i	n USD Equivaler	nts)									
Othe	ar Project Net Cash Flows		5.5278	5.5691	5.2358	5.5894	5,5935	5,5592	5.2645	5.0317	6.9739	6.89
1	cash flow # 1		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0243	2.02
	cash flow #2		5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000	5.00
	cash flow #3		-3.4722	-3.3333	-3.5714	-3.1250	-3.0303	-2.9762	-3.1847	-3,3333	-3.3333	-3.33
	cash flow #4		4.0000	3.9024	3.8073	3.7144	3.6238	3.5354	3,4492	3.3651	3.2830	3.20
	0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000
	0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000
Fine	ancing Cash Flows		13.8013	12.6747	12.7512	11.8968	8.5580	8.3618	8.4246	6.2673	5.1965	4.53
Net	Project Cash Flow	0	19.3291	18.2438	17.9870	17.4862	14.1515	13.9211	13,6891	11.2991	12.1704	11.42
П	Project Hurdle Rate :	10.00%				Project NPV:	\$ 125.68					
	nmary of Project Cash Flows (i	n Local Currenc	y Equivalents)									
Othe	ar Project Net Cash Flows		138.1944	142.7083	137.5223	150.4793	154.3544	157.2439	152,6294	149.5286	212.4269	215.23
	cash flow # 1		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	61.6601	63.20
	cash flow #2		125.0000	128.1250	131.3282	134.6114	137.9767	141.4261	144.9617	148.5858	152.3004	156.10
	cash flow #3		-86.8056	-85.4167	-93.8058	-84.1321	-83.6222	-84.1822	-92.3323	-99.0572	-101.5336	-104.07
	cash flow #4		100.0000	100,0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000	100.00
	0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00
-	0		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00
Fine	encing Cash Flows		345.0320	324.7895	334.9176	320.2880	236.1600	236.5165	244.2482	186,2473	158.2856	141.44
Net.	Project Cash Flow	0	483.2264	467,4979	472.4399	470.7672	390.5145	393.7604	396.8776	335.7759	370.7125	356.68

The LPS treats the other project net cash flows in a simplified, abstract way. However, since all the cash flow streams are valued using the same set of exchange rate assumptions, it gives you a tool to measure the overall sensitivity of the project to changes in exchange rates. This feature is optional, since some projects do not generate a financial return that is easy to measure.

A positive NPV implies that based on the assumptions you entered, the project will generate a return in excess of your hurdle rate. However, due to changes in exchange rates a project could produce a positive NPV measured in USD while simultaneously producing a negative NPV measured in local currency, or vice-versa.

Simplifying Assumptions

The LPS makes certain simplifying assumptions in its calculation of the cash flows. These simplifications do not materially affect the usefulness of the LPS outputs.

- The LPS does not use the actual day count. The IBRD accrues interest daily; this means that two semesters will not have an equal number of days (i.e., one may have 181 days while the other may have 184 days). The LPS assumes that the semesters are of equal length.
- The LPS assumes that bills are calculated and paid at the end of each semester. Actually, the bills are sent out two months prior to the due date; the accrual for the last two months of the semester is estimated. A subsequent bill is adjusted to reflect the difference between the estimated and actual accrual.
- The LPS assumes that the currency pool is made up of 100% USD, DEM and JPY. Actually, (a) 90% of the pool is maintained in these currencies, and they currently comprise 97% of the pool; and (b) the DEM portion of the currency pool is managed in DEM equivalent and comprises DEM, CHF and NLG.
- The LPS assumes that disbursements are made evenly throughout the semester. Accordingly, it accrues three months' worth of interest for each semester's disbursements. In fact, disbursements may occur at any time within the semester. Thus, if actual disbursements occur unevenly over the semester, the interest accrual calculated by the LPS for the semester of disbursement could differ substantially from the actual amount accrued.
- For fixed-rate SCLs, the LPS assumes that the current semester's disbursements will accrue three months' worth of interest at the current semester's prevailing LIBOR-based SCL lending rate, and the interest rate will be fixed at the beginning of the succeeding semester.
- Since the LPS reflects cash flows in discrete (semiannual) intervals whereas disbursements occur continuously throughout the semester, solving for the IRR using the semiannual cash flows will overstate the IRR. A simple IRR calculation will not recognize the time value of money benefit that

- accrues to the borrower due to the timing of the disbursements. The LPS adjusts for this when it calculates the IRR.
- Note: The IRR calculated by the LPS depends on the exchange rate and interest rate assumptions that were entered. A lower IRR calculated by the LPS does not necessarily imply that a given financing alternative would be the cheapest one.
- In theory, delays in project implementation could result in cumulative repayments as per the amortization schedule exceeding cumulative disbursements (i.e. negative amortization). In order to prevent the possibility of the principal amount billed exceeding the cumulative amount disbursed, the IBRD follows a different billing procedure in these cases. As programming these alternative procedures would introduce additional complexity into the LPS, the LPS is not set up to handle this situation. The LPS assumes a normal disbursement pattern; i.e. negative amortization will not occur.
- Note: The LPS will produce nonsensical results if you enter a disbursement pattern that results in cumulative repayments exceeding cumulative disbursements in any given semester. Recheck the robustness of your cash flow projections if this happens.
- The LPS assumes that the Commitment Fee begins accruing from the first day of the period for which the loan is modeled. Actually, the Commitment Fee begins accruing 60 days after signing of the original loan contract.
- Other project net cash flows are assumed to occur evenly over the semester.



The LPS offers two ways of data entry:

- (a) Entering the data directly into the entry cells; and
- (b) Entering the data using the menu system.

You should use the method you are most comfortable with.

The menu system has two advantages:

- You do not have to be familiar with the structure of the "Inputs" sheet. If you go through the entire data entry process without exiting before the data entry procedure is completed, the menu will guide you through the entire process. You do not have to worry about omitting any of the variables, as the menus will go through all the needed steps.
- Since the menu system has an option to blank out all the variables before you begin data entry, you do not have to worry about inadvertently including data left over from a previous analysis.

The main disadvantage of the menu system is it is slow on 486 computers. As you become more familiar with the LPS, you may find that entering the data directly into the cells is quicker and more efficient for you.

You cannot use the menu system if you have two or more copies of the LPS open at the same time.

→ Note: When using a Pentium PC, we preferred to use the menus to do the initial data entry, and go directly to the data entry cells to change certain variables when doing sensitivity analysis. The next two sections describe the two methods of data entry. Since this manual was written to be a handy reference, the following two sections were written so that they can be read independently of each other; some of the information in the two sections is duplicated.

Information on IBRD lending rates can be obtained from the IBRD Web page, at

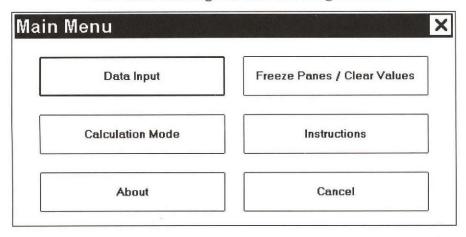
http://www.worldbank.org

Entering Data Using the Menu System

1. The Main Menu

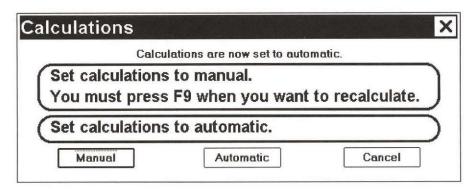
To access the menus, either click anywhere on the menu box in the upper left-hand corner of the LPS, press "Control-M", or press on the Toolbar "Tools - Loan Products".

The main menu gives the following choices:



The Data Input is the bulk of the menu system and will be dealt with last. The other choices are as follows:

2. Calculation Mode

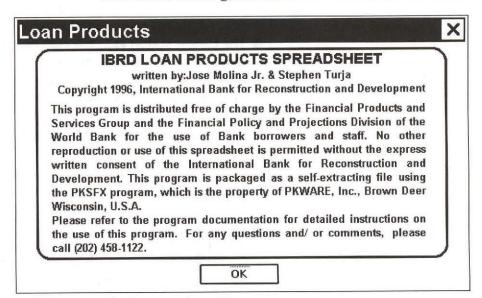


This allows you to have the LPS recalculate everytime a cell is changed (automatic), or recalculate only if "F9" is pressed (manual). The LPS automatically performs a recalculation every time the menus are exited.

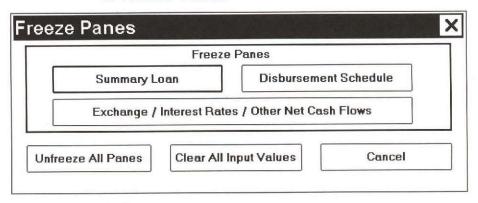
→ Note: Use manual recalculation to speed up the data entry process.

3. About

The About menu gives basic information on the LPS.



4. Freeze Panes

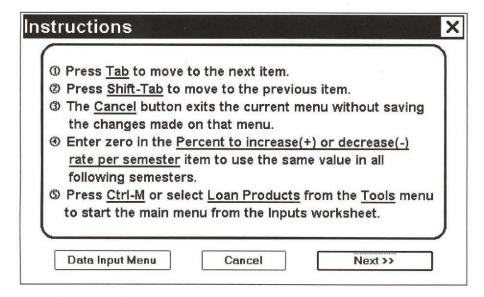


The Freeze Panes menu freezes and unfreezes certain rows and columns. The frozen cells are the row names on the leftmost rows of the LPS, and the year and semester headings across the top.

Note: This feature is useful when you are entering data directly into the input cells. It's easier to enter data when you can see the row names and column headings. This menu also enables you to unfreeze the panes and clear all data inputs.

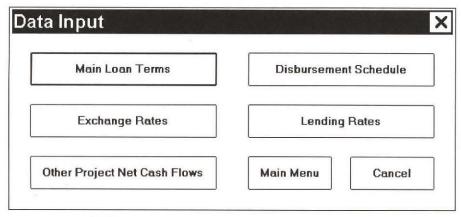
Note: Clear all input values before beginning analysis of a new project, to avoid inadvertently leaving data from a previous analysis on the LPS.

5. Instructions



The Instructions menu contains general instructions for moving about the menu screens. You can move the cursor about the menus either by using the "Tab" key or by clicking with the mouse on the menu cell.

6. Data Input



This is the menu used for entering data into the LPS. When entering data for the first time, click "Main Loan Terms". The menu system will take you sequentially through the full data input process. The data is divided into five main groups:

1. Main Loan Terms

The LPS allows you to model the possibility of combining a CPL, LIBOR-based SCL and fixed-rate SCL to finance an IBRD project. You can have up to four tranches for each type of SCL, (e.g., if you want to create your own currency basket using a combination of SCLs). This section contains the terms of each loan tranche you create, such as the loan amount, currency, and repayment schedule. This will be explained in more detail in the sections on the sub menus making up the Main Loan Terms.

2. Disbursement Schedule

This section contains the projected disbursement profile, by semester, for each loan tranche created under the Main Loan Terms section.

3. Exchange Rates

This section contains the projected exchange rates, by semester, over the life of the loan.

4. Lending Rates

This section contains the projected lending rates, by semester, over the life of the loan.

5. Other Project Net Cash Flows

This section is optional. It allows you to enter up to six cash flows which represent other project net cash flows, and calculate a project NPV based on a hurdle rate you enter.

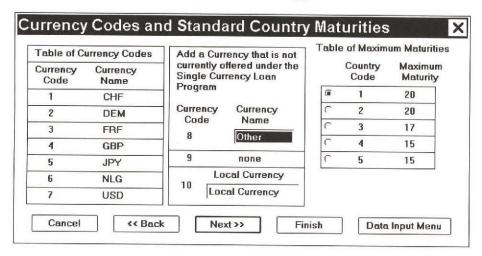
The data entry process can be exited at any point, and re-entered via selecting the appropriate choice in the Data Input screen.

Note: It is not advisable to exit the menu system for the data entry process before the end because the menus are programmed to bring up the appropriate data entry menus based on what was entered in the Main Loan Terms menu. For example, assume you create 2 loans: a DEM and a JPY LIBOR-based SCL. LPS will only show the menus for LIBOR-based SCL Disbursements, DEM and JPY exchange rates, and DEM and JPY LIBOR-based SCL Lending rates.

The unnecessary menus, including in this case those for CPL and fixed-rate SCL disbursements, exchange rates other than DEM and JPY, and CPL and fixed-rate SCL lending rates, are bypassed.

6 (a) Currency Codes and Maximum Loan Maturity.

pon selecting "Main Loan Terms", the following screen will appear:



The Table of Currency Codes contains the numeric currency codes used to represent the currencies offered under the SCL program. Each currency is assigned a numeric code: '1' is for CHF, '2' is for DEM, and so on. If you want to examine an SCL denominated in a currency other than the seven currencies currently offered under the SCL program, enter the currency name in the cell for currency code '8'.

The following table summarizes the currency symbols used by the LPS.

CURRENCY SYMBOLS USED

<u>Symbol</u>	Currency
CHF	Swiss francs
DEM	Deutsche mark
FRF	French franc
GBP	Pounds sterling
JPY	Japanese yen
NLG	Netherlands guilders
USD	U.S. dollars

Note: The currency codes are used for entering currencies in which SCLs are committed when you are entering the data directly into the data entry cells (see section 4 - "Entering Data Directly Into the Inputs Sheet"). You do not have to enter the currency codes when creating loan tranches using the menu system. This table is displayed in this menu for your information only.

You should also enter the name of the local currency (i.e., the borrower's national currency) in the space provided.

Note: The IBRD classifies its borrowing countries into one of five categories, depending principally on the country's per capita income, creditworthiness and, exceptionally, other factors For determining lending terms, countries are assigned by per capita GNP to income categories 1 through 5. For more information on your standard country repayment terms, contact your IBRD Disbursement Officer.

Click the bullet corresponding to the code and maximum maturity that corresponds to the borrower's standard country terms.

Click on Next > > to go to the next screen.

Note: When the menu system moves to the next screen, the LPS is immediately updated with the data in the previous screen. It does not update the LPS at the end of the data entry process, unlike other software packages.

Clicking on < < Back will bring you back to the previous screen. Clicking on Data Input Menu will put you back in the Data Input menu.

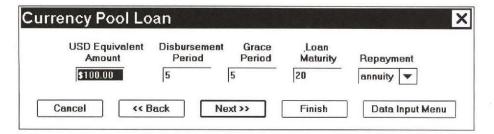
- Note: The Data Input Menu button is useful when you are updating a few variables, rather than entering a whole new set.
- Note: Clicking on the **Data Input Menu** button will update the LPS with the data that is currently on the menu screen. If you want to exit without updating the LPS, use the **Cancel** button, rather than the **Data Input Menu** button.

6 (b) Loan Terms For Individual Tranches.

The menu system will then bring up screens for each loan product offered by the IBRD:

- Currency Pool Loan
- LIBOR-Based SCL
- Fixed-Rate 3/12 Year SCL
- Fixed-Rate 3/9 Year SCL
- Fixed-Rate 3/6 Year SCL

The Currency Pool Loan screen looks as follows:



If you don't want to create a CPL loan tranche, click on **Next** > > to go to the next screen. This will bypass the **Currency Pool Loan** input screen. Otherwise, enter the following data in the corresponding cells:

USD Equivalent Amount:	The USD equivalent amount committed.
Disbursement Period:	The estimated disbursement period (in 0.5 years).
Grace Period:	The grace period (in 0.5 years).
Loan Maturity:	The final maturity (in 0.5 years).
Repayment:	The method of principal repayment (annuity or level).

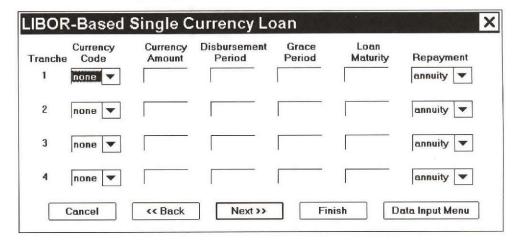
Clicking on the arrow underneath the **Repayment** label will show the choice of principal repayment method. Click on your choice.

Note: Whenever you see an arrow in a menu screen, it means that you are given a choice. Click on the arrow to display the choices, and click on your choice.

The next screen is the **LIBOR-Based SCL** screen. This looks similar to the **Currency Pool Loan** screen, with three differences:

- You can create up to four LIBOR-Based SCLs.
- You are given a choice of currency codes for each tranche.
- You enter the currency committed, rather than the USD equivalent amount.

If you don't want to create a LIBOR-based SCL, click on Next >>.



The next screens will be for the **Fixed-Rate 3/12 Year SCLs, Fixed-Rate 3/9 Year SCLs,** and the **Fixed-Rate 3/6 Year SCLs**, respectively. They differ from the **LIBOR-Based SCL** screen in that they have no **Grace Period, Loan Maturity** and **Repayment** entry cells.

Note: These cells are not needed because the Fixed-Rate SCL product has different repayment terms than other IBRD loan products. The amortization schedule is based on the expected and actual timing of disbursements, the amortization pattern is level repayment of principal for each Disbursed Amount, and each Disbursed Amount has its own three-year grace period and amortization schedule beginning after the rate-fixing date.⁷

⁷ Refer to Major Terms and Conditions of IBRD Loans.

Currency Tranche Code	Currency Amount	Disbursement Period
1 none -		
2 none ▼		
3 none ▼		
4 none ▼		

Currency Tranche Code	Currency Amount	Disbursement Period
1 none -		
2 none ▼		
3 none ▼		
4 none ▼		

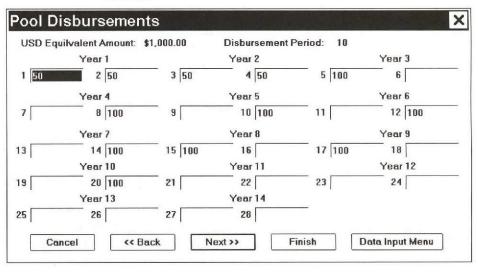
Currency Tranche Code	Currency Amount	Disbursement Period
1 none 🔻		
2 none 🔻		
3 none 🔻		
4 none 🔻		

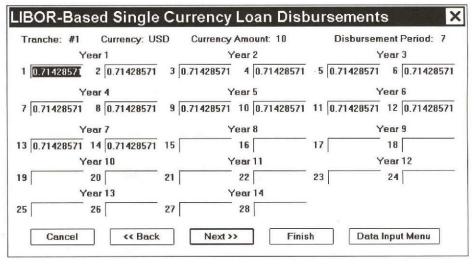
If you don't want to create a fixed-rate SCL, click on Next >>.

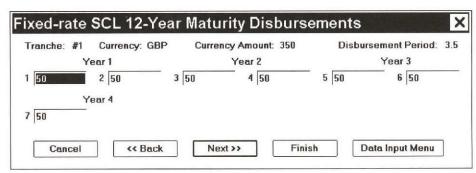
6 (c) Disbursement Schedule.

The next group of screens is for the project disbursements. Input screens for the loan tranches created in the previous set of menus (Section 6 (b), "Loan Terms for Individual Tranches") will appear. Unnecessary screens are skipped. (For example, if you did not create a LIBOR-Based SCL Tranche, the input screen for LIBOR-Based SCL disbursements will be bypassed.)

These screens allow you to enter the anticipated disbursements by semester. At the top of the screen, the amount, disbursement period, and (in the case of SCLs) the currency are displayed. (These items were entered in the previous set of menus.) The data displayed on the top of the screen allows you to check whether the breakdown of disbursements is consistent with the amount entered in the **Main Loan Terms**.





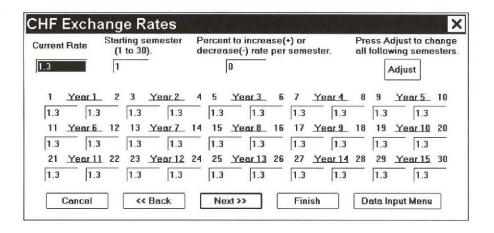


The LPS menus allow you to enter disbursements for up to 14 years for CPLs, LIBOR-based SCLs and 3/6 Fixed-rate SCLs. It allows you to model delays in project disbursements for Fixed-rate SCLs of up to 3 years for the 12-year and 9-year SCLs, respectively. Thus, the LPS accepts disbursements periods of up to 6 years and 9 years for 12-year and 9-year SCLs, respectively. However, since these delays are not expected to be a common occurrence, the menus only accept disbursements that fall within the normal disbursement period. Disbursements falling outside the normal period for all loan products have to be entered directly into the spreadsheet cells.

6 (d) Foreign Exchange Rates

Rollowing the disbursements, the screens for projected exchange rates per semester appear, for the currencies involved in the loan tranches that were created (USD, DEM and JPY if a Currency Pool Loan tranche was created, all SCL currencies, and the local currency). To avoid memory problems when running the LPS in Windows 3.1, the Exchange Rate and Interest Rate variables are split into two screens. Sample Exchange Rate screens follow.

All exchange rates should be entered in terms of currency units per USD.

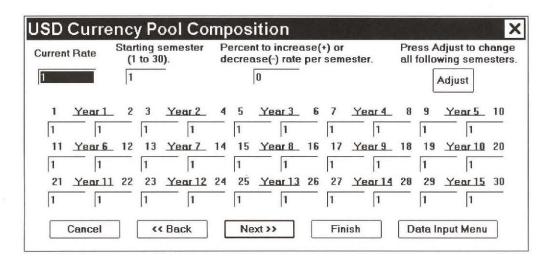


Yea Semes	AMAZON	Starting semester (31 to 50)			Percent to increase(+) or decrease(-) rate per semester.					Press Adjust to change all following semesters				
1.3		[31	_			0					-	Adjust	
31	Year 16	32	33	Year 17	34	35	Year 18	36	37	Year 19	38	39	Year 20	40
1.3	1.3	- 15	1.3	1.3	- 1	1.3	1.3		1.3	1.3		1.3	1.3	
41	Year 21	12	43	Year 22	44	45	Year 23	46	47	Year 24	48	49	Year 25	50
1.3	1.3		1.3	1.3		1.3	1.3		1.3	1.3		1.3	1.3	
Cancel << Back		Next >>			Finish		Data Input Menu							

You can either enter the projected exchange rate for each semester, or have the LPS incorporate an assumed percentage appreciation/depreciation in the projected exchange rates. To use this feature:

- Enter the exchange rate in the appropriate cell preceding the semester when the percentage change will begin.
- 2. Enter the semester from which the percentage change should be applied.
- 3. Enter the amount of percentage change per semester.
- 4. Click the "Adjust" button.
- Note: The "Adjust" button may be used as often as desired. For example, assume that the CHF is projected to depreciate by 1% per semester through semester 10, and then appreciate by 2% beginning in semester 11. To effect this in the LPS, first enter "1" under the starting semester and 1% in the percentage increase, and click "Adjust". This will increase the CHF exchange rate by 1% per semester. Then enter "11" under the starting semester and "-2" in the percentage increase, and click "Adjust". This will implement the 2% per semester appreciation beginning in semester 11.

The next group of CPL screens prompts for the currency pool weights. A sample screen is as follows:



Similar to the exchange rate screens, these screens are also split into two. Enter the current weight in the Currency Pool for the currency displayed on the screen. In this example, it would be '1' for USD, given that the current weights are 1 USD: 2 DEM: 125 JPY.

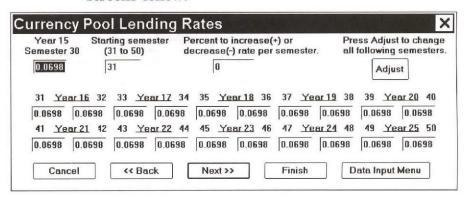
- Note: When you select "Clear Values" in the Main Menu, LPS automatically enters the current weights of 1 USD: 2 DEM: 125 JPY into these screens. Do not use "Clear Values" as a shortcut to enter the CPL weights, as this will wipe out all your work.
- Note: In most cases, the currency pool ratios are expected to remain unchanged and hence, "0" should be entered in the "Percent to increase..." cell.
 - 6 (e) Lending Rates.

The final set of data to be entered are the projected lending rates, along with the interest and commitment fee waivers. These consist of:

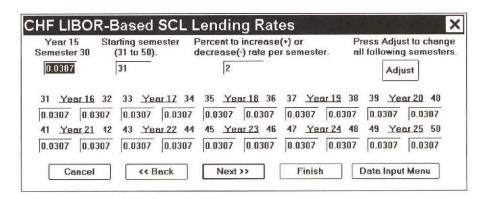
- Currency Pool Lending Rates
- LIBOR-based SCL Lending Rates
- Fixed-Rate SCL Lending Rates
- Interest Waiver
- Commitment Fee Waiver

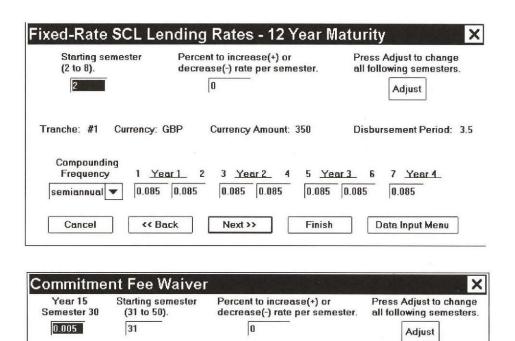
Similar to the data entry screens for the foreign exchange rates, these screens are split into two, and they also have the capability to apply a percentage increase/decrease by clicking the "Adjust" button. The rates should be entered as decimals; for example, 9.375% should be entered as ".09375".

For LIBOR-based SCLs, the annuity-type amortization schedule is developed using the previous six-months' average LIBOR-based SCL lending rate. This figure should be entered in the cell in the upper left-hand cover of the data entry screens for LIBOR-based SCLs. Samples of the screens follow:



6 month verage Rate	Starting (1 to 30		Percent to decrease(-				ss Adjust to chang following semester
0.0228	1	_	2				Adjust
11 <u>Year 6</u> 0.0254 0. 21 <u>Year 1</u>	0232 0.0 _ 12 13 0256 0.0 1 22 23	Year 2 234 0.0237 Year 7 1 259 0.0262 Year 12 2 286 0.0289	0.0239 4 15 Ye 9 0.0264 4 25 Ye	0.0242 ar 8 16 0.0267 ar 13 26 0.0295	0.0244 17 <u>Ye</u> 0.0269	0.0246 ar 9 18 0.0272 ar 14 28 0.0301	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$





Year 16 32 33 Year 17 34 35 Year 18 36 37 Year 19 38 39 Year 20 40

45 Year 23 46

0.005

0.005

0.005

0.005

Finish

0.005

0.005

0.005

0.005

Data Input Menu

0.005

47 Year 24 48 49 Year 25 50

6 (f) Other Project Net Cash Flows.

0.005

0.005

Next >>

0.005

0.005

<< Back

41 Year 21 42 43 Year 22 44

0.005

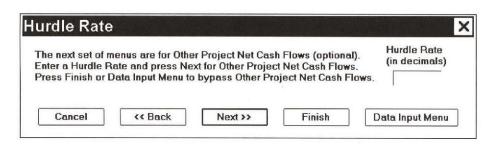
0.005

Cancel

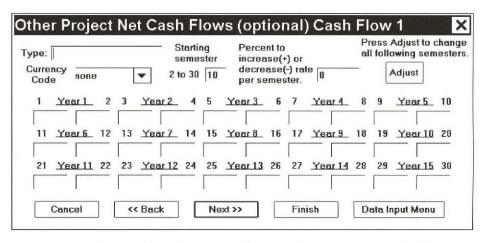
0.005

0.005

A fter entering the lending rates, you are given the option of entering up to six sets of other project cash flows, if you want to analyze the sensitivity of your project cash flows to exchange rate changes. The first screen to appear will be as follows:



If you want to enter other project net cash flows, you must first enter the hurdle rate in decimals. (The hurdle rate is the project's required rate of return; i.e., the discount rate that will produce a positive NPV.) If you want to bypass this section, select "Finish".



The **Type** is the label you will use to identify this cash flow (e.g., "Cash Flow # 1"). The **Currency Code** is the currency in which the cash flow is denominated.

If you create a Net Cash Flow denominated in a currency other than the ones in which the IBRD loans are denominated (e.g., your project is paying its debt service in USD and generating its revenues in local currency), the LPS will bring up the input menus for those currencies after you have gone through the six Other Net Cash Flow input screens.

Entering Data Directly Into the Entry Cells

All inputs are done into the "Inputs" worksheet. Input cells are shaded light yellow. Unless the write protection is disabled, only the light yellow shaded cells may be updated. (See section 2 - "Write Protection of the LPS".) The following is an outline of how the Inputs worksheet is structured, beginning at the upper left-hand corner of the worksheet and proceeding downwards. The data inputs are divided into six main groups.

1. Introduction

The "Inputs" worksheet is divided into the following groups. The succeeding sections will give more detail on how to enter data into each of the entry groups.

1 (a) Currency Codes.

The Table of Currency Codes contains the numeric currency codes used to represent the currencies offered under the SCL program. Each currency is assigned a numeric code; '1' is for CHF,

'2' is for DEM, and so on. The LPS also gives you the possibility to add another foreign currency of your choice under currency code '8'.

- Note: Use this when you are creating an SCL tranche in a currency not currently offered under the SCL program. The IBRD currently offers 7 currencies under SCL terms: CHF, DEM, FRF, GBP, JPY, NLG and USD. The IBRD will lend in other currencies if there is sufficient demand and the currency requested is one in which the IBRD can efficiently fund itself.
- Note: Currency code '9' is a dummy variable corresponding to 'none', and should be entered for all unused tranche fields. (If no currency exchange rate were entered, in the output worksheets LPS would divide by zero when calculating the amounts in USD and local currency equivalents, resulting in error messages in the output worksheets. The simplest way to correct this was to introduce a dummy variable with an exchange rate equal to '1'.)

1 (b) Maximum Loan Maturities.

The IBRD classifies its borrowing countries into one of five categories, depending principally on the country's per capita income, creditworthiness and, exceptionally, other factors. For determining lending terms, countries are assigned by per capita GNP to income categories 1 through 5. For more information on your standard country repayment terms, contact your IBRD Disbursement Officer.

The LPS prompts the user to enter the borrower country's category ('1' through '5'). Based on the category, the LPS will look up the maximum allowable maturity, as given by the standard country repayment terms for that country.

1 (c) Summary Loan Information.

This section contains the summary information describing each loan tranche. The LPS allows you to enter any or all of the following products:

- Currency Pool Loan
- LIBOR-Based SCL
- Fixed-Rate 3/12 Year SCL
- Fixed-Rate 3/9 Year SCL
- Fixed-Rate 3/6 Year SCL

You may enter up to four tranches per SCL product. Thus, the LPS can model a maximum of seventeen tranches (1 CPL and four per SCL). In practice, most IBRD loans will only have one or two tranches.

For each product and tranche, the following has to be entered:

- amount committed in USD equivalent (for CPLs)
- amount committed in currency (for SCLs)
- disbursement period (years)
- grace period (years)
- final maturity (years)
- amortization type (annuity or level principal repayment)

1 (d) Disbursement Schedule.

This section contains the anticipated disbursement schedule of each tranche by semester, in USD equivalents for CPLs and in the currency of commitment for SCLs.

1 (e) Foreign Exchange Rates.

This section contains:

- the current and projected exchange rates for the offered currencies you select, as well as for the local currency.
- the weights for the three main currencies (USD, DEM and JPY) in the currency pool.⁸

1 (f) IBRD Lending Rates.

This section contains the projected IBRD lending rates for the loan tranches entered in the Main Loan Terms section.

⁸ These weights are currently 1 USD:2 DEM:125 JPY.

1 (g) Other Project Net Cash Flows.

This section, which is optional, allows you to enter up to six other net cash flows to calculate a project NPV, assuming a hurdle rate you enter.

The next sections discuss the data entry process in more detail.

2. Table of Currency Codes and Table of Maximum Maturities

The following is a printout of the Table of Currency Codes (columns D and E), Table of Maximum Maturities (columns G and H) and the input cell for the Country Category (cell E27).

	АВ	С	D	E	F	G	Н
13		4	Table of Currenc	y Codes			
14				Ситтепсу		Tab	ole of
15			Currency Code	Name		Maximum	Maturities
16			1	CHF		Country	Maximum
17			2	DEM		Category	Maturity
18			3	FRF		1	20
19			4	GBP		2	20
20			5	JPY		3	17
21			6	NLG		4	15
22			7	USD		5	15
23			8	Other			
24			9	none			
25			10	Local Currency			
26							
27			Country Category:	1			
28		Maxi	mum Allowed Maturity:	20			

The currency codes should be used when entering individual SCL tranches. The numerical currency code in the left-hand column corresponds to the currency in the right-hand column. Note that currency code '8' is for 'Other'. You may add one currency to the seven currently offered by the IBRD. If this currency code is used, enter the currency name in the right-hand column (cell E23).

3. Summary Loan Information

The following is a copy of the input area for the **Summary Loan Information**.

	AE	3 C	D	E	F	G	Н	1	J	K	L		
30					SUMMARY LOAN INFORMATION								
31	1		t	LOAN	W THE SHARE	Repayment							
32				Currency	USD		Disb.	Grace	Repayment	Final Loan	(1=annuity		
33				Amount	Amount	% of Total	Period	Period	Period	Maturity	2=level)		
34	1	Γotal			\$135.06	100.0%	5.999			18.074			
35	+	1											
36		Currence	y Pool Loan	50.00	\$50.00	37.0%	5	5	15	20	1		
37	Ŧ		,					- 36					
38	I	LIBOR-	Based SCL		\$35.03	25.9%	6.285	5.571	13.287	18.858			
39		Code											
40		7	USD	10.00	10.00	7.4%	7	5	15	20	1		
41		2	DEM	14.54	10.03	7.4%	6	5	15	20	2		
42		5	JPY	530.00	5.00	3.7%	6	7	9	16	1		
43		1	CHF	11.80	10.00	7.4%	6	6	12	18	2		
44													
45	I	Fixed-rate SCL											
46		12-Year Maturity			\$20.03	14.8%	2.7489669			14.4993113			
47		Code											
48		2	DEM	14.54	10.03	7.4%	2	3	9	14	2		
49		7	USD	10.00	10.00		3.5	3	9	15	2		
50		9	none		0.00			3	9	12	2		
51		9	none		0.00	0.0%		3	9	12	2		
52					***					1-			
53	Н	100000000000000000000000000000000000000	r Maturity		\$10.00	7.4%	6.5		-	15	-		
54	1	Code		1.040.00	10.00	77 400		2	-	15	-		
55		5	JPY	1,060.00	10.00	7.4%	6.5	3	6	15 9	2 2		
56	+	9	none		0.00			3	6	9	2		
57	1	9	none	Taken and the same	0.00	0.0%		3	6	9	2		
58 59	Н	9	none		0.00	0.0%		3	0	9			
60	Н	6 Van	a Matanita		\$20.00	14.8%	11		-	17			
61	H	6-Year Maturity Code			\$20.00	14.0%	11		-	11			
62	H	4	GBP	6.50	10.00	7.4%	8	3	3	14	2		
63	H	7	USD	10.00	10.00			3	3	20	2		
64	H	9	none	10.00	0.00			3	3	6	2		
65		9	none		0.00			3	3	6	2		
66	H	-	none		0.00	0.070							

For the CPL (if any), the following should be entered:

- total amount committed, in USD equivalent
- the expected disbursement period (in years)
- the grace period (in years)
- the final maturity (in years)
- principal amortization method (`1' for annuity type, '2' for level principal repayment)⁹

^{9 &}quot;Annuity type" is the type of principal amortization wherein the size of the principal repayments increase over time, while interest payments decrease. Total debt service is relatively level over the period. The discount rate used for establishing the annuity schedule is the CPL rate for CPLs and the previous six-months' average LIBOR-based SCL rate for LIBOR-based SCLs. "Level principal repayment" means principal is repaid in equal installments. Since the loan amortizes faster under this method than under the annuity method, interest payments and total debt service decrease over time.

The disbursement period, grace period, and final maturity data may be entered either in integers or in increments of 0.5 years.

Note: While the LPS does not specify the units of denomination, for large loans it is advisable to enter amounts in millions, in order to make the outputs more readable. Entering the exact amounts does not really add value to the outputs, due to the simplifying assumptions made by the LPS.

The inputs for the **LIBOR-Based SCL** Summary Loan Information are similar to those of the CPL, with the following exceptions:

- For each tranche, the currency code of the currency in which the tranche is denominated should be entered in the "Code" column (Column C see also the Table of Currency Codes). For the unused lines, the currency code '9' (for 'none') should be entered.
- The currency amount committed (for SCLs) should be entered under the column "Currency Amount" (Column E).

The inputs for **Fixed-Rate SCLs** are identical to those of the **LIBOR-based SCL**, except that the grace period, loan maturity and principal amortization method need not be entered.

- → Note: The Grace Period and Repayment Period of the Fixed-Rate SCLs are for each Disbursed Amount, not for the entire loan.
- Note: The LPS calculates the weighted average final maturity of the loans at the "Total" line (Cell K34). This feature is useful when you are looking at trading off maturities between loans.¹¹⁰

¹⁰ IBRD borrowers can make compensating maturity adjustments within their overall portfolio of loans from the IBRD. For example, a decrease in the grace period or final maturity for one loan can be used to increase that of another CPL or LIBOR-based SCL loan in the same fiscal year, if there is a strong project justification. Under current policy, for each additional year in grace period, the final maturity must be reduced by two years. If the final maturity for one loan is shorter than the standard country terms (e.g., a fixed-rate SCL), the final maturity for another loan could be extended, provided the weighted average final maturity does not exceed the standard final maturity for the country.

4. Disbursement Schedule

Immediately below the Summary Loan
Information is the Disbursement Schedule,
where the projected disbursements per semester are
entered in USD equivalents and currency of
commitment, for CPLs and SCLs, respectively. The
following is a sample of the input area for the
Disbursement Schedule.

E	3 C	D	E	F	G	Н	1	J	K	L	M
			DISBURSI	EMENT S	CHEDU	LE		"			
68			(in current	cy of con	mitmen	t)					
69											
70											
71			YEAR	1		2		3		4	
72			SEMESTER	1	2	3	4	5	6	7	8
73											
74	Curren	cy Pool Loan		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
75											
76	LIBOR	R-Based SCLs									
77		USD		0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.7
78		DEM		1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.2
79		JPY		44.17	44.17	44.17	44.17	44.17	44,17	44.17	44.1
80		CHF		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.9
81											
82 F	Fixed-	rate SCLs									
83	12-5	ear Maturity									
84		DEM		3.64	3.64	3.64	3.64		SA STATE OF		
85		USD		2.00	2.00	1.50	1.50	1.00	1.00	1.00	
86		none									
87		none									
88											
89	9-Y	ear Maturity									
90		JPY		84.20	21.20	106.00	106.00	95.40	116.60	159.00	106.00
91		none			April 1						
92		none			The said		The River				
93		none					A STATE OF				
94											
95	6-Y	ear Maturity									
96		GBP		0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.4
97		USD		0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.3
98		none					DANGE B.	T IEI			
99		none					THE REAL PROPERTY.	JUNE 1			
100											

Enter the anticipated disbursements per semester, in USD for CPLs, and in the currency of commitment for SCLs. The LPS gives you complete flexibility to enter any type of disbursement pattern.

The LPS allows you to enter up to fourteen years' worth of disbursements. The shaded areas for Fixed-rate areas cover the areas within which disbursements are not expected to occur (beyond 3.5 years and 6.5 years for 12-year and 9-year SCLs, respectively). However, you can model delays of up to three years in implementation, i.e., you can enter disbursements for up to 6 years and 9 years for the 12-year and 9-year SCLs, respectively, even if some of the areas are shaded.

In addition, at the end of the row where disbursements are entered the LPS sums up the individual disbursements entered and gives an error message if the sum of disbursements differs from the original amount committed (as entered in the Summary Loan Information). It also displays the amount of the discrepancy (if any) between the sum of the individual disbursements and the currency amount committed. To illustrate, the Summary Loan Information (page 43, "Summary Loan **Information**") has nothing entered in the third SCL Fixed-Rate Loan (6-Year Maturity) (row 64), while the Disbursement Schedule has data entered in it. Since the Summary Loan Information has no data entered for the third row under "Fixed-rate SCL...6-Year Maturity", the "Total" column (column AJ) in the "Disbursement Schedule" gives an error message. Column AK shows that there is a discrepancy of 0.92 between the Summary Loan Information and the Disbursement Schedule.

	AF	AG	AH	Al	AJ	AK	AL	AM
65								
66								
67						Sum o	f disbursem	ents
68							tal amount	
69							d. If this an	
70						does r	not equal ze	ro, pls.
71	14		1	5	TOTAL	reched	ck inputs.	
72	27	28	29	30				
73								
74			1		50.00		0.00	
75								
76								
77					10.00		0.00	
78					14.54		0.00	
79	1				530.00		0.00	
80				ALC: SI	11.80		0.00	
81								
82								
83		Market Street						
84					14.54		0.00	
85					10.00		0.00	
86					0.00		0.00	
87		ALC: Sur-		ELSE!	0.00		0.00	
88		13314 6	- TALL					
89	AD WAY	Marin De	Aug. To 1					
90					1,060.00		0.00	
91					0.00		0.00	
92					0.00		0.00	
93				and the same	0.00		0.00	
94								
95								
96					6.50		0.00	
97	0.36	0.36			10.00		0.00	
98	0.23	0.23			ERROR		0.92	
99				MARKET STATE	0.00		0.00	
100	HENRY.							

5. Exchange Rates

Immediately following the Disbursement Schedule is the input area for Exchange Rates. The data cover the current and the future semesters, going out to the maturity of the loan or 25 years, whichever is less. The exchange rates for CPL, SCL and local currencies, as well as the currency pool composition, are entered here. The current exchange rates (i.e., those prevailing at the time of negotiation) should be consistent with the exchange rates that are used to calculate the USD equivalent amount committed (as entered in the Summary Loan Information.) The following is a sample of the input area for Exchange Rates.

P	ВС	D	E	F	G	Н	1	J	K	L	M
103	EXCHA	NGE RATES									
104											
105		YEAR	current	1		2		3		4	
106	code	Semester	rates	No Wale	2	3	4	5	6	7	8
107	1	CHF	1.18	1.17	1.17	1.20	1.25	1.40	1.45	1.45	1.50
108	2	DEM	1.45	1.44	1.50	1.40	1.60	1.65	1.68	1.57	1.50
109	3	FRF				AND THE PERSON					
110	4	GBP	0.65	0.65	0.66	0.70	0.75	0.80	0.85	0.75	0.70
111	5	JPY	106.00	105.00	108.00	110.00	115.00	120.00	125.00	130.00	135.00
112	6	NLG									
113	7	USD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
114	8	AUD							THE STATE OF		
115	9	none	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
116	10	peso	25.00	25.00	25.63	26.27	26.92	27.60	28.29	28.99	29.72
117											
118							*				
119	CURRENC	CY POOL									
120	COMPOSI	TION									
121	US	SD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
122	DI	EM	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
123	JP	Y	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00

6. Lending Rates

The final group of information that needs to be entered is the projected lending rates for the CPL, LIBOR-Based SCL and Fixed-Rate SCL products for each semester. Note that these are not the base rates; these are the IBRD's lending rates, inclusive of the cost spread, risk spread (for Fixed-Rate SCLs only) and lending spread.

Note: The LIBOR-based SCL lending rates would be calculated by adding the IBRD's cost spread and lending spread to your user's projection of LIBOR. You should also be conscious of the day count and compounding conventions being used in each of the currencies.

A sample of the **Lending Rates** input area follows:

A	В	C D	E	F	G	Н	1	J	K
125		LENDING RATES							
126			1						
127 128		(inclusive of lending, cos	t & risk spreads)						
129	CU	RRENCY POOL							
130		urrency Pool Rate	6.94%	6.94%	6.94%	6.94%	6.94%	6.94%	6.94%
134						*			
135	LIB	OR-Based SCL Rates	6-month						
136	C	ode currency	average						
137		1 CHF	2.28%	2.30%	2.33%	2.35%	2.37%	2.40%	2.42%
138		2 DEM	3.50%	3.57%	3.64%	3.71%	3.79%	3.86%	3.94%
139		3 FRF		The Party of the	made in				
140		4 GBP	6.45%	6.52%	6.58%	6.65%	6.71%	6.78%	6.85%
141		5 JPY	1.12%	1.14%	1.17%	1.19%	1.21%	1.24%	1.26%
142		6 NLG							
143		7 USD	5.75%	5.86%	5.97%	6.09%	6.21%	6.34%	6.46%
144		8 Other	A STATE OF THE PARTY		to became in	MICH NEW YORK			
145									
146	FIX	ED-RATE SCL Rates	compounding	(1 if annual,					
147	1	2-Year Maturity	frequency	2 if semian	nual)				
148		DEM		4.50%	4.57%	4.64%	4.71%	4.78%	4.85%
149		USD	2	7.22%	7.33%	7.44%	7.55%	7.66%	7.78%
150		none	1						
151		none	1						
152	10.1	(1.083d)*5							
153	9	-Year Maturity							
154		JPY	2	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
155		none	1						
156		none	1			The same			
157		none	1	N. CHARLE	Talkas St		STREET SE		
158									
159	6	-Year Maturity							
160		GBP	2	5.85%	5.88%	5.91%	5.94%	5.97%	6.00%
161		USD	2	6.50%	6.57%	6.63%	6.70%	6.76%	6.83%
162		none	1						
163		none	1		grand .				
164									
165	IN	TEREST WAIVER		0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
166				10			22.000 400000	200000000000000000000000000000000000000	
167	CO	MMITMENT FEE		0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
168	(Contractual Commitment Fee		0.75%	0.75%	0.75%	0.75%	0.75%	0.75%
169	(Commitment Fee Waiver		0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

The data are grouped as follows:

Currency Pool Lending Rate
 This is the projected lending rate for the IBRD's
 Currency Pool Loan product, expressed in semi-annual terms.

- All LIBOR-based lending rates should be entered in terms of their respective prevailing market conventions. This would be Actual/360 day count basis for all currencies currently offered with the exception of GBP, which is quoted on an Actual/365 day count basis. The first column is the average LIBOR-based lending rate for the previous six months. This is the discount factor used in developing the amortization schedule of the LIBOR-based SCL product. The remaining columns contain the projected LIBOR-based lending rates for each of the semesters during which the loan is outstanding.
- Fixed-Rate SCLs accrue interest during the semester of disbursement at the LIBOR-based SCL lending rate. Therefore, the LIBOR-based rates should be entered if there is a Fixed-Rate SCL tranche, even if no LIBOR-Based SCL was created in the "Summary Loan Information" section.
- Fixed-Rate SCL Lending Rates
 Market conventions for quoting rates and accruing interest differ across swap markets. Thus, the LPS allows you to enter the projected Fixed-rate SCL Lending Rates assuming either annual or semi-annual compounding. Under the "Compounding Frequency" column, enter either '1' for annual or '2' for semi-annual compounding. The LPS converts all

fixed-rate SCL lending rates to a semi-annual basis

and performs its calculations accordingly.

The following table summarizes the currencies currently offered under the SCL program, along with the compounding convention normally used for these currencies in the swap markets.

¹¹ Actual/360 basis means that interest is accrued by multiplying the interest rate by the actual number of days in the interest period, divided by 360. To illustrate, a USD 10 million 10% LIBOR-based loan would pay USD 10 million x 10% x 365/360 = USD 1,013,889 in interest for one year. Assume that the first semester has 181 days, while the second semester has 184 days. The first semester's interest would be USD 10 million x 10% x 181/360 = 502,778, and the second semester's interest would be USD 10 million x 10% x 184/360 = 511,111.

Currency	Compounding Convention
CHF	annual
DEM	annual
FRF	annual
GBP	semi-annual
JPY	semi-annual
NLG	annual
USD	annual or semi-annual

Fixed-rate sub-loans accrue interest at the current LIBOR-Based SCL lending rate in the semester of disbursement, and at the Fixed-Rate SCL lending rate from the rate-fixing date through maturity. Thus, in the LPS the fixed-rate SCL disbursements of semester 1 accrue interest at the LIBOR-Based **SCL** lending rate applicable to semester 1, and at the fixed-rate SCL lending rate from semester 2 through maturity. The fixed-rate SCL lending rate of semester 3 would apply to the disbursements of semester 2, and so on. Therefore, you should enter fixedrate SCL lending rates for every semester following the semesters in which disbursements occur. (For example, if there are seven semesters of disbursements, rates should be entered through semester eight.)

Interest Waiver

This is the discretionary annual waiver of interest that the IBRD grants to borrowers that have serviced all of their IBRD debt within 30 calendar days of the due date for all payment dates occurring during the preceding six months. The amount of this waiver is determined annually. Since its introduction in FY92, it has been 25 basis points each year, with the exception of FY93, when it was 35 basis points. This feature also enables the user to assess the financial impact of failure to service its IBRD debt in a timely fashion.

Commitment Fee

This is calculated as the difference between the contractual 0.75% commitment fee and the 0.50% 1989 commitment fee waiver that the IBRD has granted since July 1989. Unlike the interest waiver, this annual waiver is provided unconditionally to all borrowers as long as the IBRD determines that its financial condition allows it to do so. However, the IBRD retains the right in its loan agreements to charge the full 0.75% commitment fee if necessary.

7. Other Project Net Cash Flows

You have the option of entering up to six sets of other project cash flows, if you want to analyze the sensitivity of your overall project cash flows to exchange rate changes. The input area for this is immediately below the one for **Lending Rates**.

A sample of the **Other Project Net Cash Flows** input area follows.

	AB C	D	E	F	G	Н		J	K	L	М	N	0
171 172 173	ОТН	ER PROJEC	T NET CAS	SH FLO	ws (C	PTIO	NAL)				Hurd	le Rate:	10%
174													
175	code	type of cash flow	currency										
176	3	cash flow # 1	FRF									10.00	10.00
177	7	cash flow #2	USD	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
178	2	cash flow #3	DEM	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00	-5.00
179	10	cash flow #4	Local Currency	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
180	9		none										
181	9		none										

The **Hurdle Rate** represents the project's required rate of return; i.e. the discount rate that will produce a positive NPV. You can enter up to six sets of cash flows. For each cash flow, enter the currency code for the currency in which the cash flow is denominated, a label for each cash flow, and the projected cash flows by semester in the currency of denomination.



Introduction

While the LPS was designed mainly to evaluate loan alternatives for new loans commitments, it can also be used to evaluate the IBRD's offer of currency choice for existing CPLs¹². For a limited period, IBRD borrowers may amend the terms of their existing CPLs to reflect the offered currency of their choice by:

- Converting undisbursed loan amounts to SCL terms; and
- Converting disbursed loan balances and undisbursed loan amounts (to the extent not converted to SCL terms) to one of four new single currency pools (SCPs).

To do this, the LPS needs to be modified, so that the terms of the remaining life of the loan (following conversion) can be modified and sensitivity tests can be performed. In order to do the adjustments, in some cases the principal repayment schedules produced by the LPS will have to be modified. To make these adjustments, the worksheet protection must be turned off. (Section 2 - "Write Protection of the LPS".)

The first part, "Conversions of Outstanding Currency Pool Loans into SCPs/SCLs Denominated in US Dollars" gives detailed instructions on how to adapt the LPS to analyze any type of conversion. The second part, "Conversion of the Undisbursed Amounts to SCLs Denominated in Non-USD Currencies" describes how to effect conversions into other currencies in the LPS.

¹² For more information, refer to: Offer of Currency Choice for Existing IBRD Currency Pool Loans, Financial Products and Services Group, The World Bank, Washington, D.C., September 1996.

The relevant figures to analyze in a conversion are the future cash flows, not the past ones. The LPS will produce the correct future cash flows for the conversion. However, without some manual adjustments, the historical data will not be accurate. This is because the LPS performs all its calculations from time = 0, when in fact the adjustments will change the cash flows somewhere during the life of the loan. Thus, when the adjustments are implemented the LPS assumes that they are effective from time = 0. This does not affect your analysis, since we are only concerned with the future cash flows.

There are three possible choices into which one can convert an existing **CPL**. The choices are slightly different for **Disbursed Amounts**, as opposed to **Undisbursed Balances**.

Single Currency Pool (SCP)

This is one of four new pools whose currency composition would be shifted over time to either USD. JPY, DEM, or CHF. While this currency transformation would take time because of the large volume of debt funding the existing loans that need to be transformed, the IBRD intends to shift the currency composition of each new pool to 100% in the designated currency as soon as practicable. To ensure a large degree of currency certainty, the IBRD would undertake to reconfigure the currency composition of each of the new pools to at least 90% of the designated currency by July 1, 1999 and maintain it at or above the 90% thereafter, subject to its having access to funding and swaps in the necessary currencies. This is the only choice available for disbursed CPL balances. (Undisbursed CPL amounts of loans for which the Disbursed Balance is converted to SCP terms may be converted into either SCP or SCL terms.)

LIBOR-Based SCL

Undisbursed Amounts may be also converted into one or more LIBOR-Based SCLs.

Fixed-Rate SCL Undisbursed Balances may be converted into one or more Fixed-Rate SCLs.

The following table summarizes the choices available for converting existing currency pool loans to either SCP or SCL terms.

	Disbursed Balances	Undisbursed Amounts
Single Currency Pool	Yes	Yes
LIBOR-Based SCL	No	Yes
Fixed Rate SCL	No	Yes

Note: If Disbursed Balances are converted into SCP terms, then unless Undisbursed Amounts are converted into SCL terms, they will also be converted into SCP terms. You may not leave Undisbursed Amonts unconverted (i.e., on Currency Pool Loan terms) if the Disbursed Balances are converted into SCP terms.

While the above table shows that the conversion choices are limited and quite simple, because of the various permutations there are twenty possible combinations that could occur. This happens because the adjustments to the LPS depend on whether the conversion occurs while the original loan is within or past the grace period, whether the Disbursed Balances are being converted to SCP terms or not, the instrument into which the Undisbursed Amounts are being converted, and whether the original CPL amortization schedule is based on annuity or level principal amortization. While there are many possible combinations, many of the combinations are very similar. For completeness, this section identifies all of the possible combinations.

Conversions of Outstanding Currency Pool Loans Into SCPs/SCLs in U.S. Dollars

There are twenty possible conversion cases, depending on whether the loan is within or outside the grace period, the type of amortization, and the product into which the loan is converted. The cases are illustrated using the following simplified examples:

	A	ssumptions
erms of the original currency po	ool loan are as follows:	
	Level Principal Repayment	Annuity Amortization
original principal (millions)	100 USD equivalent	100 USD equivalent
grace period	5 years	4 years
final loan maturity	17 years	17 years
original interest rate	6.94%	6.94%
disbursed balance	40 USD equivalent	40 USD equivalent
undisbursed amount	60 USD equivalent	60 USD equivalent

- 2. All amounts are expressed in millions.
- 3. Annuity-type amortization schedules were developed using the original interest rate of 6.94%.
- 4. All conversions occuring after the expiration of the grace period are assumed to occur at the end of the seventh year (fourteenth semester).
- 5. For presentational purposes, the cash flows in these examples are shown on an annual basis. In fact, all IBRD loans are billed and paid on a semi-annual basis.
- 6. "Final Date" is defined as the last date on which interest and principal repayments may be made for fixed-rate SCLs, pursuant to the Loan Agreement.

As mentioned earlier, you can also convert the Undisbursed Amounts into combinations of SCLs in different currencies. The following presents the twenty possible cases, along with the procedure that needs to be done to adapt the LPS to analyze the conversion. (In many cases, the procedure is very similar.)

Note: Study the simplified examples, try out some of the conversions on a copy of the LPS and compare the results with the Exhibit.

The following table summarizes the various types of conversions that may occur. The amortization pattern of the original **CPL** is in parentheses.

I. BASE CASE

The base case reflects the original CPL principal repayment schedule that would prevail if no conversion takes place. The example shows both the annuity and level principal repayment amortization schedules.

- II. Conversion of Undisbursed Amounts to SCL Terms During the Grace Period
 - (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
 - (b) To LIBOR-Based SCL (Original CPL Annuity Amortization)
 - (c) To Fixed-Rate SCL (Original CPL Level Principal Repayment)
 - (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)
- III. Conversion of Undisbursed Amounts to SCL Terms After the Grace Period
 - (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
 - (b) To LIBOR-Based SCL (Original CPL Annuity Amortization)
 - (c) To Fixed-Rate SCL (Original CPL Level Principal Repayment)
 - (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)
- IV. Conversion of Disbursed and Undisbursed Portions to SCP
 - (a) During the Grace Period (Original CPL Level Principal Repayment)
 - (b) During the Grace Period (Original CPL Annuity Amortization)
 - (c) After the Grace Period (Original CPL Level Principal Repayment)
 - (d) After the Grace Period (Original CPL Annuity Amortization)
- V. Conversion of Disbursed Balances to SCP, Undisbursed Amounts to SCL During the Grace Period
 - (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
 - (b) To LIBOR-Based SCL (Original CPL Annuity Amortization)
 - (c) To Fixed-Rate SCL (Original CPL Level Principal Repayment)
 - (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)
- VI. Conversion of Disbursed Balances to SCP, Undisbursed Amounts to SCL After the Grace Period
 - (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
 - (b) To LIBOR-Based SCL (Original CPL Annuity Amortization)
 - (c) To Fixed-Rate SCL (Original CPL Level Principal Repayment)
 - (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)

The following discusses the procedure for implementing each of the above alternatives in the LPS.

Note: The principle to bear in mind is that whenever an existing **CPL** is split into two parts (i.e. into unconverted and converted portions), the original amortization schedule is split **pro rata** between the two loans, with the shares determined by the principal amounts of the two loans. The following examples will clarify this.

I. BASE CASE

The base case reflects the original CPL principal repayment schedule that would prevail if no conversion takes place. The example shows both the annuity and level principal repayment amortization schedules.

						Or	iginal S	Schedu	le									
year:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
level amortization (USDeo)	938	GR/	ACE PER	IOD	1 110	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	USDeq 100
annuity amortization (USDeq)		GRACE	PERIO)	4.98	5.33	5.70	6.10	6.52	6.97	7.46	7.97	8.53	9.12	9.75	10.43	11.15	USDeq 100

II. CONVERSION OF UNDISBURSED AMOUNTS TO SCL TERMS DURING THE GRACE PERIOD

II (a) Conversion of Undisbursed Amounts to LIBOR-Based SCL Terms During the Grace Period (Original CPL - Level Principal Repayment)

Divide the loan into two tranches, one for the USD 40 Disbursed Balance which is on the **CPL** basis, and one for the USD 60 Undisbursed Amount which is on the **LIBOR-Based SCL** basis. The original amortization schedule is split pro-rata according to the ratio of the USD principal amounts of the two tranches (40:60 in this case).

To implement this on the LPS, create two loan tranches: the CPL and the LIBOR-Based SCL, with identical loan terms and amounts corresponding to Unconverted Portion and Converted Portion, respectively. (The Unconverted Portion equals the Disbursed Balance, while the Converted Portion equals the Undisbursed Amount.) The CPL Disbursement Schedule would equal the disbursements to date, and the LIBOR-Based SCL disbursements would equal the future disbursements.

								Origin	nal Sch	edule									
year:	1	2	3	4	T	5	6	7	8	9	10	11	12	13	14	15	16	17	Tota
original terms (USDeq)	1	GR	ACE PE	RIOD			8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	USDeq 10
								Ameno	led Sc	hedu;lo									
Disbursed Balance (USDeq)		GRAG	CE PE	RIOD	,		3.33	Ameno	led Sc	hedu;le	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	USDeq 4
Disbursed Balance (USDeo) Indisbursed Amount (USD)		GRAC	CE PE	RIOD	,							3.33 5.00	USDeq.4						

II (b) Conversion of Undisbursed Amounts to LIBOR-Based SCL Terms During the Grace Period (Original CPL - Annuity Amortization)

Similar to Case II (a), the original amortization schedule is split pro-rata in a 40:60 ratio between the two tranches. The only difference is that since the method of amortization is different, the resulting cash flows are different. However, they are split pro-rata, just as in the previous case.

To implement this on the LPS, create two loan tranches: the CPL and the LIBOR-Based SCL, with identical loan terms and amounts corresponding to disbursed and undisbursed amounts, respectively. Although the amortization schedule for new LIBOR-based SCLs is normally developed using the previous six months' average LIBOR-based SCL lending rate as the discount rate, this is not the case here. The original amortization schedule is split pro-rata between the CPL and LIBOR-Based SCL.

There are two ways of implementing this on the LPS:

The first way is by dividing the old principal amortization schedule (pre-conversion) pro-rata into the Unconverted (Disbursed Balance) and Converted (Undisbursed Amount) tranches. To do this, first create a copy of the LPS which bears the original, unconverted principal repayment schedule. Then, create a second copy of the LPS which has two loan tranches, the CPL and the LIBOR-Based SCL, with identical loan terms and amounts corresponding to disbursed and undisbursed amounts, respectively. Overwrite the amortization schedules generated by the LPS with the new amortization schedules. The old amortization schedule is split pro-rata according to the ratio of the USD equivalent principal amounts of the two tranches (40:60 in this case).

The second method bypasses the first step in the first method. Create a copy of the LPS with two loan tranches: the **CPL** and the **LIBOR-Based SCL**, with identical loan terms and amounts corresponding to the **Unconverted** and **Converted Portions**, respectively. Enter the discount rate used to develop the original CPL amortization schedule in the cell for the previous six months' average LIBOR-based SCL lending rate, adjusted for the LIBOR day-count. (This is the first cell in the input row for the LIBOR-based SCL lending rates.)

For example, the discount rate used to develop the original **CPL** annuity amortization schedule was 6.94%. If the **Undisbursed Amount** is was being converted to a **USD LIBOR-Based SCL**, (which uses an Actual/360 day count), a rate of 6.94% x 360/365) should be entered in the cell for the previous six months' average USD LIBOR-Based SCL lending rate.

Note: If a CPL and LIBOR-Based SCL loan tranche in the LPS have the same loan terms and their annuity amortization schedules are developed using the same discount rate, this will produce the same result as the first method, which multiplies the original CPL amortization schedule by the ratio of the two loans. Remember that since LIBOR is quoted on a different day-count basis, it must first be restated to the same day-count basis as the CPL lending rate.

							0.,	ginal S	cricadi									
year:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Tota
original terms (USDeq)		GRACE	PERIOD		4.98	5.33	5.70	6.10	6.52	6.97	7.46	7.97	8.53	9.12	9.75	10.43	11.15	USDeq 100
							Ame	nded :	Schedu	ile								
bursed Balance (USDeq)		PACE	DERIC	n n	1.99	2.13	Ame	nded :	Schedu 2.61	ıle 2.79	2.98	3.19	3.41	3.65	3.90	4.17	4.46	USDeq 4
bursed Balance (USDeq) disbursed Amount (USD)	(GRACE	PERIC	DD	1.99	2.13 3.20					2.98 4.47	3.19 4.78	3.41 5.12	3.65 5.47	3.90 5.85	4.17 6.26	4.46 6.69	USDeq 40

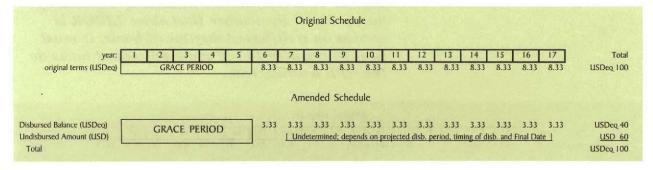
II (c) Conversion of Undisbursed Amounts to Fixed-Rate SCL Terms During the Grace Period (Original CPL - Level Principal Repayment)

The new amortization schedule for the Unconverted Portion will be equal to the individual amounts as per the original amortization schedule multiplied by the ratio of the Unconverted Portion to the original committed amount. In this

example, it would be 40%. The amortization schedule of the Fixed-Rate SCL tranche is undetermined, as it would depend on: the expected disbursement period from the time of loan approval to the closing date (as amended), the timing of the Fixed-Rate SCL disbursements, and the last date on which principal repayments can be made under Fixed-Rate SCL terms, pursuant to the Loan Agreement (the "Final Date").

To reflect this in the LPS, create two loans, a CPL in an amount equal to the **Disbursed Balance** and a **Fixed-Rate SCL** equal to the **Undisbursed Amount**. For the CPL tranche, the only differences versus the original CPL loan would be the amount committed (which would equal the **Unconverted Portion**) and the **Disbursement Schedule** (which would equal the disbursements to date).

The amortization of the Fixed-Rate SCL is dependent on the expected disbursement period. The disbursement period of the fixed-rate SCL is based on the expected disbursement period from the original CPL loan approval date to the closing date, not the disbursement period beginning from the time of conversion.



II (d) Conversion of Undisbursed Amounts to Fixed-Rate SCL Terms During the Grace Period (Original CPL - Annuity Amortization)

The procedure for this is very similar to that of case II (c), the only difference being that the amortization method for the Unconverted Portion is annuity-based, rather than level principal repayment. Since annuity-style amortization repays lower amounts of principal in the early years compared to the level principal repayment method, the Unconverted Portion as of the conversion date will be higher than that produced under Case II (c).

Reflect this in the Summary Loan Terms by entering a "1" under the "Repayment" column.

The new amortization schedule for the Unconverted Portion will be equal to the individual amounts as per the original amortization schedule multiplied by the ratio of the Unconverted Portion to the original committed amount. In this example, it would be 40%. The amortization schedule of the Fixed-Rate SCL tranche is undetermined, as it would depend on: the expected disbursement period from the time of loan approval to the closing date, the timing of the Fixed-Rate SCL disbursements, and the last date on which payments can be made under Fixed-Rate SCL terms.

To reflect this in the LPS, create two loans, a CPL in an amount equal to the **Disbursed Balance** and a **Fixed-Rate SCL** equal to the **Undisbursed Amount**. For the CPL tranche, the only differences versus the original CPL loan would be the amount committed (which would equal the **Unconverted Portion**) and the **Disbursement Schedule** (which would equal the disbursements to date).

year:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Tota
original terms (USDeq)		GRACE	PERIOD		4.98	5.33	5.70	6.10	6.52	6.97	7.46	7.97	8.53	9.12	9.75	10.43	11.15	USDeq 10
							Amen	ded S	chedul	e								

III. CONVERSION OF UNDISBURSED AMOUNTS TO SCL TERMS AFTER THE GRACE PERIOD

III (a) Conversion of Undisbursed Amounts to LIBORbased SCL After the Grace Period (Original CPL -Level Principal Repayment

The total of the amortization amounts for the Unconverted (CPL) and Converted (SCL)

Portions for each period should equal the amounts as per the original amortization schedule. The amended amortization schedules are developed as follows:

Unconverted Portion (Disbursed Balance Remains as CPL)

Calculate the **Unconverted Portion** as of the conversion date, which equals the cumulative disbursed amounts less the principal repayments to date. Divide this outstanding amount evenly over the remaining periods. An algorithm to do this would be as follows:

Calculate the weighting factor (WF) which is: (Unconverted Portion) divided by (the Unconverted Portion plus the Converted Portion). The Converted Portion equals the Undisbursed Amount as of the conversion date. Then, multiply the WF by the original period principal amortization amounts as per the original amortization schedule to obtain the adjusted amortization schedule for the Unconverted Portion. For example, assume that of the USD 100 million in our sample case, USD 16.67 million had been repaid as of the conversion date. The Unconverted Portion = (40 - 16.67 = 23.33), and the **Converted Amount** = (100 - 40 = 60). The **WF** = (40 - 16.67) / ((40 - 16.67) +(100-40)). The WF of 0.28 multiplied by the original principal amortization amount of \$8.33 gives an amount of \$2.33 for the CPL.

Converted Portion (Undisbursed Amount -Converted to LIBOR Based SCL)
Calculate the Converted Portion, which equals the Undisbursed Amount as of the conversion date.
Divide the Converted Portion evenly over the remaining periods.

An algorithm for calculating this is as follows:

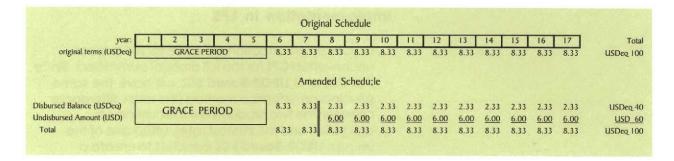
Calculate the ratio of (the Converted Portion) divided by (the sum of the Unconverted Portion plus the Converted Portion). (This ratio is also equal to (1-WF). Multiply this ratio by the original period amounts as per the original amortization schedule to obtain the adjusted amortization schedule for the Converted Portion.

For example, the **WF** was above as 0.28. The principal amortization for the**LIBOR-Based SCL** would be (1-**WF**) x \$ 8.33, or (.72 x 8.33), giving a principal amortization amount of \$6.00 for the **LIBOR-Based SCL** (which together with the \$ 2.33 would equal the original \$ 8.33.)

Implementation in LPS

- Create an amortization schedule for the original unconverted CPL for the full amount committed. Since the CPL and LIBOR-Based SCL will have the same principal amortization method (the main differences between the two products are the currency of obligation and the interest rate), utilize one of the unused LIBOR-Based SCL tranches to create a LIBOR-Based SCL with a disbursement profile, repayment terms, and discount rate identical to that of the original unconverted CPL loan.
- Note: We are using one of the unused LIBOR-Based SCL tranches to generate the amortization schedule of the original, unconverted CPL.
 - 2. Create a CPL for the Disbursed Balance. The loan amount would equal cumulative disbursements less cumulative repayments as of the conversion date. The loan repayment terms would be identical to those of the original CPL loan. Enter the disbursements to date. Beginning on the semester of conversion, the principal repayment row of the Original Amortization Schedule at the bottom of the Pool worksheet has to be modified. This can be done using the algorithm given above. The formula for the new principal repayment amounts would equal the original amortization amounts (refer to the cells containing the old repayment amounts (as created in (1) above)) multiplied by the WF. This gives the principal repayment schedule for the Unconverted Amount.
 - 3. Create a LIBOR-Based SCL for the Converted Amount, with the loan amount equal to the Undisbursed Balance, and loan repayment terms similar to those of the original CPL. However, there would be no disbursements to date.

 Beginning from the semester of conversion, enter the anticipated disbursements. Modify the principal repayment row as follows:
 - Up until the semester of conversion, delete any principal repayments.
 - Beginning from the semester of conversion, modify the principal repayment row using the algorithm given above (i.e., multiply the original principal repayment amounts beginning from the semester of conversion by (1 - WF)).



III (b) Conversion of Undisbursed Amounts to LIBOR-based SCL After the Grace Period -(Original CPL - Annuity Amortization)

This is similar to Case III (a), except that the amortization method is annuity style, rather than level principal repayment. The total of the amortization amounts for the uncoverted and SCL tranches for each period should equal the amounts as per the original amortization schedule. The algorithm used is identical to that used in **Case III (a)**.

Implementation in LPS

The implementation in the LPS is similar to that of Case III (a).

							Origina	al Scho	edule									
year:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Tota
original terms (USDeo)	GRACE PERIOD		4.98	5.33	5.70	6.10	6.52	6.97	7.46	7.97	8.53	9.12	9.75	10.43	11.15	USDeq 100		
							Amen	ied se	neuuie									
Disbursed Balance (USDeq)	GRACE PERIOD		4.98	5.33	5.70	1.74	1.86	1.99	2.13	2.28	2.43	2.60	2.78	2.98	3.18	USDeq 4		
		KALE	PEKIC	U				4.35	4.66	4.98	5 33	5.70	6.09	651	6.97	7.45	7.97	USD 6

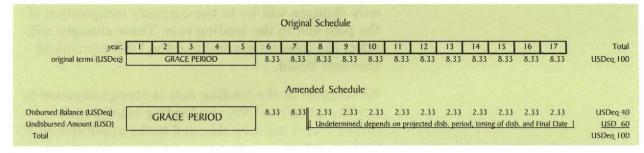
III (c) Conversion of Undisbursed Amounts to Fixed-Rate SCL After the Grace Period -(Original CPL - Level Principal Repayment)

This is similar to Case III (a), except that the amortization schedule of the **Fixed-Rate SCL** is undetermined, as it would depend on: the expected disbursement period from the time of loan approval to the closing date (as amended), the timing of the **Fixed-Rate SCL** disbursements, and the last date on which repayments can be made under **Fixed-Rate SCL** terms.

Implementation in LPS

The procedure for obtaining the revised amortization schedule for the **Unconverted Portion** is identical to the first two steps followed in Cases **III** (a) and **III** (b).

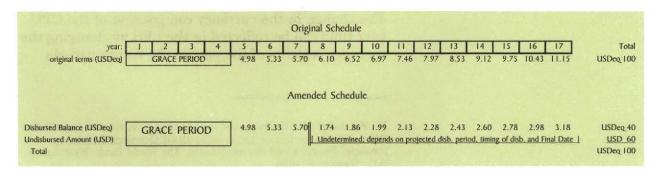
Create a **Fixed-Rate SCL** tranche with the amount equal to the **Undisbursed Amount** and the disbursements equal to the anticipated disbursements beginning from the conversion date. The loan repayment terms of the Fixed-Rate SCL are dependent on the anticipated disbursement period **measured from the original loan approval date to the closing date** (as amended).



III (d) Conversion of Undisbursed Amounts to Fixed-Rate SCL After the Grace Period - (Original CPL - Annuity Amortization)

This is similar to Case III (c), except that the amortization method of the Unconverted Portion is annuity-style, rather than level principal repayment. Since annuity-style amortization repays lower amounts of principal in the early years compared to the level principal repayment method, the Unconverted Portion as of the conversion date will be higher than that produced under Case III (c).

The implementation in the LPS is otherwise similar to that of **Case III** (c).



IV. CONVERSION OF DISBURSED BALANCES AND UNDISBURSED AMOUNTS TO SCP

- IV (a) Within the Grace Period (Original CPL Level Principal Repayment)
- IV (b) Within the Grace Period (Original CPL Annuity Amortization)
- IV (c) After the Grace Period (Original CPL Level Principal Repayment
- IV (d) After the Grace Period (Original CPL Annuity Amortization)

The procedures for Cases IV (a), IV (b), IV (c) and IV (d) are identical. There is no change in the original amortization schedule (in USD equivalent), nor in the amortization schedule in CPUs. The only changes will be in the currency composition of the pool and in the lending rate. These changes will affect the interest accrual and the USD equivalent amounts billed.

The change in the lending rate is straightforward to implement in the LPS; the lending rate in each future period must be changed to the applicable SCP lending rate.¹³

→ Note: Each SCP will have its own lending rate.

While the currency transformation from the current Currency Pool to the **SCP** would take time because of the large volume of debt funding the existing loans that need to be transformed, the IBRD intends to shift the currency composition of each new pool to 100% in the designated currency as soon as practicable. To ensure a large degree of currency certainty, the IBRD would undertake to reconfigure the currency composition of each of the new pools to at least 90% of the designated currency by July 1, 1999 and maintain it at or above the 90% thereafter, subject to its having access to funding and swaps in the designated currencies.

The change in the currency composition of the CPU over time can be reflected in the LPS by changing the currency weights of the pool in the future periods.

¹³ For more information on the SCP lending rate, refer to pages 9-12, Offer of Currency Choice for Existing IBRD Currency Pool Loans, Financial Products and Services Group, The World Bank, Washington, D.C., September 1996.

→ Note: Take care in calculating the new currency weights during the transition period.

The following examples show how to calculate the new currency weights. The following table summarizes the assumptions that will be used in the examples. These assumptions are illustrative only. They are not intended to forecast the actual pace of the shift of the pool composition between the conversion date and July 1, 1999, and the date on which 100% currency composition for the SCP will be achieved, nor do they forecast exchange rate levels over this period.

ASSUMPTIONS:

Date	Pool Composition	Exchange Rates
Conversion date (e.g., 7/1/97)	1 USD: 2 DEM: 125 JPY	Current rates
First interest payment date following the Conversion date	50% USD: 25% DEM: 25% JPY	1.5 DEM/USD, 110 JPY/USD
End of Year 1	75% USD: 12.5% DEM: 12.5% JPY	1.6 DEM/USD, 105 JPY/USD
End of Year 2	90% USD: 5% DEM: 5% JPY	1.4 DEM/USD, 120 JPY/USD
End of Year 3	100% USD	

Calculate the new currency weights for the first interest period following the conversion date.

1. Calculate the USD equivalent of the current CPU:

2. Calculate the new currency weights for the first interest period following the conversion date:

The new SCP CPU is composed of:

1.735 USD: 1.3 DEM: 95.425 JPY.

3. Apply the new CPU weights to the CPU balances beginning in the first semester following the conversion date.

Calculate the new currency weights for year 1.

1. Calculate the USD equivalent of the current CPU:

2. Calculate the new currency weights for year 1:

The new SCP CPU at year 1 is composed of:

3. Apply the new CPU weights to the CPU balances in year 1.

At the end of year 2, calculate the new currency weights for year 2.

1. Calculate the USD equivalent of the current CPU:

2. Calculate the new currency weights for year 2:

The new SCP CPU at year 2 is composed of:

3.1167 USD: .242 DEM: 20.778 JPY.

3. Apply the new CPU weights to the CPU balances in year 2.

When you assume that the SCP will reach 100% (year 3 in this example), calculate the new currency weights.

1. Calculate the USD equivalent of the current CPU:

1 CPU = \$3.1167 + (\$.242 / 1.8) + (\$20.778 / 95) = \$ 3.470 per CPU

2. Calculate the value of the 100% SCP:

SCP = USD = (3.47 * 1) = \$ 3.47.

3. Apply the new CPU weight to the CPU balances beginning when the **SCP** reaches 100%.

In developing your forecast of the pacing of the shift in currency weights, remember that the IBRD undertakes to reach a currency composition for each SCP that will be at least 90% in the borrower's designated currency by July 1, 1999.

- V. Conversion of Disbursed Balances to SCP, Undisbursed Amounts to SCL During the Grace Period
 - V (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
 - V (b) To LIBOR-Based SCL (Original CPL Annuity Amortization)
 - V (c) To Fixed-Rate SCL (Original CPL Level Principal Repayment)
 - V (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)

Por the Undisbursed Amounts, the implementation of Cases V (a), V (b), V (c) and V (d) are similar to those of Cases II (a), II (b), II (c) and II (d), respectively. For the Disbursed Balances, the currency pool weights and lending rates for the SCP tranche must be modified in a fashion similar to that for Cases IV (a), IV (b), IV (c) and IV (d).

VI. Conversion of Disbursed Balances to SCP, Undisbursed Amounts to SCL After the Grace Period

VI (a) To LIBOR-Based SCL (Original CPL - Level Principal Repayment)

VI (b) To LIBOR-Based SCL (Original CPL - Annuity Amortization)

VI (c) To Fixed-Rate SCL (Original CPL - Level Principal Repayment)

VI (d) To Fixed-Rate SCL (Original CPL - Annuity Amortization

For the Undisbursed Amounts, the implementation of Cases VI (a), VI (b), VI (c) and VI (d) are similar to those of Cases III (a), III (b), III (c) and III (d), respectively. For the Disbursed Balances, the lending rates and currency pool weights for the SCP tranche must be modified in a fashion similar to that for Cases IV (a), IV (b), IV (c) and IV (d).

Conversion of Undisbursed Amounts to SCLs Denominated in Non-USD Currencies

The foregoing examples all assumed that Undisbursed Amounts were being converted into USD. The procedure for converting into Non-USD currencies is very similar and straightforward. The principal amounts of the Converted Portions should be converted into the new currency of denomination at the exchange rate prevailing on the conversion date. (The Currency Amount entered into the Summary Loan Information for the Converted Portion should equal the Undisbursed Balance converted into the new currency of denomination at the exchange rate prevailing on the conversion date.)

Conversion of Undisbursed Amounts to Multiple SCLs

Similar procedures apply for converting into multiple **SCLs**. The original amortization schedule is applied **pro rata** to each **SCL**, with the principal amount of each **SCL** converted at the the exchange rate prevailing on the conversion date.

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The Fixed-Rate SCL **Lending Rate Calculator**

Introduction This spreadsheet has been prepared in response to requests from IBRD borrowers for a simple program which would allow users to calculate the Lending Rate for the IBRD's fixed-rate SCL product. This program is distributed free of charge by the IBRD. To use it, you should be familiar with the features of the IBRD's fixed-rate SCL product, including how the Base Rate is determined.

System Requirements

t a minimum, the following is needed to run this

- a PC computer running Windows 3.1
- a copy of Microsoft Excel (version 5.0)
- a data source for interest rate swap rates.

Program Description

The program is written in Excel and is called ■ "BASERATE.XLS". Although SCLs are offered in currencies of sufficient demand in which the Bank can appropriately fund itself (currently CHF, DEM, GBP, JPY, NLG and USD), this program is divided into three worksheets, called DEM, JPY and USD. Worksheets for other currencies may be created by copying one of the existing worksheets as follows:

	Use the	for
	DEM sheet	DEM, CHF, FRF and NLG
*	JPYsheet	JPY
	USD sheet	USD and GBP

The worksheets differ in two areas:

Frequency of compounding

Some markets quote interest rates assuming semiannual compounding, while others assume annual compounding. JPY and USD are quoted in semiannual terms, while DEM is quoted in annual terms (see page 50). The program quotes the IBRD lending rate in semi-annual terms. ¹⁴ When creating a worksheet for a currency for which the market interest rates are quoted in semi-annual terms, you should use either the JPY or USD worksheet; when creating one quoted in annual terms, the DEM worksheet should serve as the model.

Maturities in which swaps are quoted

The IBRD derives its base rate from the maturity-weighted average of the swap rates corresponding to each semester in which there is a loan principal repayment. Since swap rates are widely quoted only at the most liquid maturities, the IBRD interpolates the interest rates for those maturities that are not quoted. Thus, the number of interpolated rates will depend on the number and maturity of the swap rate quotations.

All cells in blue are data that you need to enter. These comprise the swap rates, IBRD cost spread and IBRD risk spread. The swap rates may be obtained from Reuters, Telerate or Bloomberg. In this example, the rates were obtained from Bloomberg page "IYC".

The IBRD cost spread, risk spread and lending spread are announced twice a year (in January and July) and are available on the IBRD Rates Web page.

The individual worksheets are divided into three areas. Beginning from the top of the worksheet, they correspond to the 3/12 year, 3/9 year and 3/6 year fixed-rate SCL. The following is a sample printout for a 3/9 year DEM fixed-rate SCL.

¹⁴ The IBRD announces its fixed-rate SCL lending rate in semi-annual terms, on an actual/actual day-count basis.

		Rate 9-Year		
T	Calculat Rates as of:	ion of Lend Jul-15-96	ing Kate	
r				
1000	2	3	4	5
	USD Swap	Interpolated		Wtd. Ave.
Tenor	Rates as of	Swap	Amortization	Swap
(years)	Jul-15-96	Rates	Weights	Rate
	(s.a.)	OR SERVER		(3×4)
0.00				
0.50				
1.00	V			
1.50				
2.00				
2.50				
3.00	6.75%	6.75%		
3.50		6.82%	0.0467	0.32%
4.00	6.88%	6.88%	0.0533	0.37%
4.50		6.94%	0.0600	0.42%
5.00	6.99%	6.99%	0.0667	0.47%
5.50		7.03%	0.0733	0.52%
6.00		7.08%	0.0800	0.57%
6.50		7.12%	0.0867	0.62%
7.00	7.16%	7.16%	0.0933	0.67%
7.50		7.19%	0.1000	0.72%
8.00		7.22%	0.1067	0.77%
8.50		7.25%	0.1133	0.82%
9.00		7.27%	0.1200	0.87%
10.00	7.33%	7.33%		
sum of tenors	75.00		Base Rate:	7.12%
		Add: IBRI	Cost Spread	-0.17%
			Risk Spread	0.10%
		Le	ending Spread	0.50%
		LEN	DING RATE:	7.55%

The swap rates are entered in Column 2. If needed, the program converts them to semi-annual compounding. The Column labeled "3" then interpolates for the missing points. The column labeled "4" solves for the maturity weights to be applied to each interest rate, and is equal to the maturity divided by the sum of the tenors. Finally, the column labeled "5" multiplies each interest rate by its corresponding weight. The sum of this column gives the base rate. Adding to this the three components of the total spread (i.e., the IBRD cost spread, risk spread and lending spread) gives the IBRD lending rate.

Note: The Base Rate is defined as "the equivalent of 6-month LIBOR in the single currency for value on the Rate Fixing Date, expressed as a single fixed interest rate based on fixed interest rates that correspond to the maturities of the Disbursed Amount". This is a well-known standard market practice in the swap markets and is commonly called the "amortizing swap rate". The Base Rate is defined as the derived offered side amortizing swap rate in the currency, for a maturity structure corresponding to that of the sub-loan to which the Base Rate applies, and for value as of the Rate Fixing Date, based on and derived from the offered side interest rate swap quotes in the same currency, appearing on the Rate Determination Date on the specified reference screens for value as of the Rate Fixing Date.

Creating Worksheets for New Currencies

This section outlines the steps to create a worksheet for a currency other than DEM, JPY or USD.

- Determine the compounding basis under which the currency is quoted.
- Based on the compounding frequency, copy one of the existing workseets into a new workseet. (Use JPY or USD as the model if the currency is quoted using semiannual compounding, otherwise use DEM.)
- 3. The interpolation of swap rates depends on the swap quotes available. For example, the USD swap rates are quoted for 7 and 10-year maturities, requiring the 6.5 through 9.5-year rates to be interporlated between the 7- and 10-year rates. On the other hand, since JPY and DEM rates are quoted for every whole year maturity, the 8 and 9-year rates do not have to be interpolated. You should modify the cells in the column marked "interpolated swap rates", as necessary.





Offer of Currency Choice for Existing IBRD Currency Pool Loans

September 1996

Offer of Currency Choice for Existing IBRD Currency Pool Loans



FINANCIAL PRODUCTS AND SERVICES GROUP
OFFICE OF THE VICE PRESIDENT AND TREASURER
The World Bank
Washington, D.C.

I. Introduction

In response to borrower demand for broader currency choice, the IBRD has taken two steps to provide borrowers flexibility to select loan terms that are consistent with their debt management strategy and suited for their debt servicing capacity. The first step is to offer a broad range of terms for new IBRD loan commitments. The second is to allow IBRD borrowers to amend the terms of their existing currency pool loans to reflect the offered currency of their choice.

Under this offer, borrowers have three choices:

- Borrowers may retain the terms of their existing currency pool loans;
- Borrowers may convert undisbursed loan amounts to single currency loan terms; and
- Borrowers may convert disbursed loan balances and undisbursed loan amounts (to the extent not converted to single currency loan terms) to one of four new single currency pools.

This offer is being accompanied by an information campaign so that borrowers may have available the information and support they need to evaluate these alternatives in light of their business needs and objectives.

This booklet describes the financial terms of the offer of currency choice for existing IBRD loans. For further information, please see the back cover of this booklet for IBRD contacts.

For a description of these products, see "Major Terms and Conditions of IBRD Loans," dated September 1996. See also page 1 of Annexes 1, 2 and 3 of this booklet.

II. Currency Pool Loans (CPLs)

When evaluating the IBRD's offer of currency choice, it is important for borrowers to consider the nature of their currency pool loan obligations.

CPL Currency Characteristics

Currency pool loans are multicurrency obligations. While they are committed in US dollars equivalent, currency pool loans are not US dollar obligations.

The currency composition of borrowers' currency pool loan obligations reflects that of the currency pool and is the same for all borrowers. At least 90% of the US dollar equivalent value of the currency pool is maintained in fixed currency ratios of 1 US dollar:125 Japanese yen: 2 Deutsche mark equivalent (consisting of Deutsche mark, Netherlands guilders and Swiss francs). These ratios have been maintained since 1991, and as of the date of this booklet over 97% of the US dollar equivalent value of the pool was in these target ratios.² These ratios are next expected to be reviewed in June 2001.

With its targeted currency composition, the currency pool loan product provides a stable currency mix across the three major currency groups. The currency characteristics of this product may be preferred, from a risk management perspective, by certain IBRD borrowers, especially those with a projected debt servicing capacity of either uncertain or diverse currency composition. The offer of currency choice for existing currency pool loans is intended to assist those borrowers that consider the newly offered terms to be better suited to their needs.

² Borrowers may find it useful to read "Pool Unit Approach to Currency Pool Loans," dated June 1995. This publication gives a detailed explanation of how the IBRD calculates its billing statements for currency pool loans. Copies are available upon request from the IBRD's Loan Department.

CPL Lending Rate Characteristics

From 1980-1982, currency pool loans were made at fixed rates of interest, set at the time of loan commitment. These rates were fixed for the life of the loan.

From 1982-1989, currency pool loans were made at a variable lending rate (the VLR82 rate). This lending rate is reset semiannually. It is based on the weighted average cost of all of the IBRD's outstanding borrowings since 1982, as recalculated each June 30 and December 31, plus IBRD's standard 0.50% lending spread.

Since 1989, currency pool loans have been made at a different variable lending rate (the VLR89 rate). This lending rate also applies to VLR82 loans that have been converted to VLR89 terms. The VLR89 rate is reset semiannually and is a direct pass-through to borrowers of the IBRD's cost of funding allocated to these loans, as recalculated each June 30 and December 31. It is based on the weighted average cost of the IBRD's outstanding borrowings since 1982, excluding those borrowings allocated to fund the IBRD's liquid investment portfolio or loan products introduced after 1989 (such as single currency loans and single currency pool loans). The IBRD's standard 0.50% lending spread is added to that cost.

Under current policy guidelines approved by the IBRD's Executive Directors, at least 85% of the funding allocated to VLR89 loans is medium- to long-term fixed-rate funding. As a result, the VLR89 lending rate has low volatility.

When the IBRD notifies borrowers of the VLR89 lending rate each January and July, it also provides information on the currency composition of the currency pool and component currency cost rates. This information is intended to assist borrowers in their planning, budgeting and risk management of these loan obligations.

Annex 1 (pages 15-19) provides a term sheet for currency pool loans made since 1989, information on the evolution of the currency composition of the currency pool, a chronology of lending rates for currency pool loans, and the July 1996 lending rate notification sent to all borrowers with VLR89 loans.

III. Alternative Currency Choices for Existing Currency Pool Loans

Borrowers may now request the IBRD to amend their currency pool loan agreements to change the nature of their currency obligation. As outlined above, borrowers have three choices:

- Borrowers may retain the terms of their existing currency pool loans;
- Borrowers may convert undisbursed loan amounts to single currency loan terms; and
- Borrowers may convert disbursed loan balances and undisbursed loan amounts (to the extent not converted to single currency loan terms) to one of four new single currency pools.

This offer is available for all eligible loans (as defined in Section IV) and will be implemented on a loan-by-loan basis. It is expected that each borrower will consider this offer of currency choice not only in the context of individual projects or programs, but also in light of its overall portfolio and debt management strategy. In this way, borrowers can consider the full implications of their choice, and conversions can be implemented more efficiently.

Unless a borrower requests the IBRD to amend its loan agreement to reflect one of the newly available choices, the terms of the currency pool loan agreement will remain in effect.

The remainder of this booklet describes the financial terms of conversions to single currency loan and single currency pool terms.

A. Conversion of Undisbursed Loan Amounts to Single Currency Loan (SCL) Terms

Eligible borrowers (as defined in Section IV) may request the IBRD to convert undisbursed loan amounts to single currency loan terms. As is the case for new SCL commitments, SCL terms for converted loan amounts are offered in any currency of sufficient borrower demand in which the IBRD determines it can appropriately fund itself. As of the date of this booklet, the IBRD offered SCLs in the following seven currencies: Deutsche mark, French francs, Japanese yen, Netherlands guilders, pounds sterling, Swiss francs, and US dollars.

Borrowers may select SCL terms in more than one currency to obtain multicurrency liabilities in preferred currency compositions. They may also select LIBOR-based or fixed-rate single currency terms.³

LIBOR-based SCL Terms

The lending rate for loan amounts converted to LIBOR-based SCL terms is determined in the same manner as for new LIBOR-based SCLs and is reset semi-annually. The rate is tied to six-month LIBOR in each loan currency, to which the Bank's funding margin below (or above) LIBOR for these loans is subtracted (or added) and the IBRD's standard 0.50% lending spread is added. The rate reflects a direct pass-through to borrowers of the IBRD's cost of funding for these loans.

Undisbursed loan amounts converted to LIBOR-based SCL terms will maintain the same remaining maturity as the currency pool loan possessed prior to amendment of the terms. The amortization schedule will be based on a *pro rata* share of the amortization schedule of the original loan, with the share determined by the ratio of converted amounts to the sum of converted and unconverted balances.

In the case of French francs, all references to LIBOR should be read as PIBOR.

Fixed-Rate SCL Terms

The lending rate for loan amounts converted to fixed-rate SCL terms is determined in the same manner as for new fixed-rate SCLs. The lending rate is set on semiannual rate-fixing dates for loan amounts disbursed during the preceding six-month period (Disbursed Amounts). The rate remains fixed for such Disbursed Amounts until they are repaid.

The fixed lending rate is based on the fixed-rate equivalent, on the rate-fixing date, of six-month LIBOR for the loan currency corresponding to the maturities of the Disbursed Amount. The IBRD's cost margin below (or above) LIBOR for those loans is subtracted (or added) to this base rate. A risk premium to compensate the IBRD for market risks incurred in funding these loans and the IBRD's standard 0.50% lending spread are also added. The rate is thus not a direct pass-through of the IBRD's funding costs.

For the interim period from the date each disbursement is made until its rate-fixing date, interest accrues at the same rate as is applicable to LIBOR-based SCLs for such period.

Loans converted to fixed-rate SCL terms will have maturities, grace periods and amortization schedules set in the same manner as for new fixed-rate SCLs. Those terms will be determined by the expected overall disbursement period for the fixed-rate SCL, measured from the original currency pool loan approval date to the closing date, and in no case will exceed the final maturity of the original loan.

Borrowers may wish to refer to "The Fixed-Rate SCL Lending Rate Calculator" to understand more about how the base rate for the fixed-rate SCL lending rate is calculated from market interest rate swap quotes. This is included in "IBRD Financial Products: Loan Product Spreadsheet," dated September 1996. Copies of this software model and documentation are available from the IBRD on request. For more information, see the back cover of this booklet for IBRD contacts.

Annex 2 (pages 20-21) provides term sheets for new LIBOR-based SCLs and for undisbursed currency pool loan amounts that are converted to LIBOR-based SCL terms.

Annex 3 (pages 22-23) provides term sheets for new fixedrate SCLs and for undisbursed currency pool loan amounts that are converted to fixed-rate SCL terms.

Appendix 1 (pages 26-33) provides simplified illustrations of how the original currency pool loan amortization schedule will be amended to reflect conversions to LIBOR-based or fixed-rate SCL terms.

B. Conversion to Single Currency Pool (SCP) Terms

All borrowers may request the IBRD to convert their currency pool loans to the terms of one of four new single currency pools.⁵

While borrowers may evaluate this offer and request SCP terms at any time during the offer period, actual implementation of conversions will take place on one of three dates for each loan: July 1, 1997; January 1, 1998; and July 1, 1998. Borrowers' conversion requests must be received one month in advance of the implementation date in order for the conversion to take place on that date (see Section V).

SCP terms are offered for conversion of existing currency pool loans; they are not offered for new loan commitments.

Additional conversions after July 1, 1998 will be considered only on a case-by-case basis, taking into account, *inter alia*, whether permitting such later conversions would adversely affect the IBRD's undertaking to achieve the 90% target for SCPs referred to below by July 1, 1999.

SCP Currency Characteristics

Loans that are converted to SCP terms will be multicurrency obligations initially and will continue to be denominated in US dollars equivalent. SCPs are offered in four designated currencies: Deutsche mark, Japanese yen, Swiss francs, and US dollars.

The IBRD is undertaking to reach, not later than July 1, 1999, a currency composition for each SCP that will be at least 90% in the borrower's designated currency, and to maintain it at or above 90% thereafter, subject to funding and swap access being available in the necessary currencies. Over time, the IBRD intends to shift the currency composition of each SCP to 100% in the designated single currency.

The speed with which the IBRD will be able to shift the currency composition of each SCP to 100% in the designated currency will depend on several factors. The most important factor is the speed with which existing IBRD funding can be transformed to the currencies designated by borrowers. This funding will be transformed by recalling non-designated currencies for borrowers' debt service and undertaking new funding in designated currencies. In addition, funding will be swapped by the IBRD to achieve the intended currency composition for each SCP.

SCP Lending Rate Characteristics

Fixed-Rate SCP Loans. The lending rate for fixed-rate currency pool loans originally made from 1980-1982 that are converted to SCP terms will remain fixed at the original fixed lending rate.

Variable Rate SCP Loans. All variable rate currency pool loans that are converted to SCP terms will accrue interest at a variable interest rate, which will be determined separately for each of the four SCPs. The

variable SCP lending rate will be reset semiannually, and will be a direct pass-through to borrowers of the IBRD's cost of funding allocated to the particular SCP. The variable lending rate for each SCP will be the weighted average cost of the IBRD's outstanding borrowings allocated to fund that SCP, as recalculated each June 30 and December 31, plus the IBRD's standard lending spread of 0.50%.

More specifically, for the interest period in which the loan conversion occurs and thereafter, the variable SCP lending rate will be calculated as follows:

Loans Converted on July 1, 1997. Loans that are converted to SCP terms on July 1, 1997 will most likely be in the midst of a semi-annual interest period. Since the loan conversion does not affect a loan's interest payment dates and the lending rate is reset at the beginning of an interest period, such loans will continue to carry their existing CPL variable lending rate until the next interest period commences. In July 1997, the IBRD will notify borrowers of the SCP lending rate in each designated currency that will apply for interest periods commencing between July 1, 1997 and December 31, 1997. Those SCP lending rates will reflect the semester average cost of the IBRD's outstanding borrowings allocated to fund those loans, as calculated on June 30, 1997. Accordingly, the SCP lending rates announced in July 1997 will be the same as the VLR89 rate.

For six-month interest periods beginning on or after January 1, 1998 and thereafter, loans that were converted to SCP terms on July 1, 1997 will accrue interest based on the semester average cost of funding allocated to that SCP as described above.

Loans Converted on January 1, 1998. Loans that are converted to SCP terms on January 1, 1998 will accrue interest at the then-existing CPL variable lending rate until the next interest period commences. In January 1998, the IBRD will notify borrowers of the SCP lending

rate in each designated currency that will apply for interest periods commencing between January 1, 1998 and June 30, 1998. Those SCP lending rates will reflect the semester average cost of the IBRD's outstanding borrowings allocated to fund those loans, as calculated on December 31, 1997.

For six-month interest periods beginning on or after July 1, 1998 and thereafter, loans that were converted to SCP terms on January 1, 1998 will accrue interest based on the semester average cost of funding allocated to that SCP, as described above.

Loans Converted on July 1, 1998. Loans that are converted to SCP terms on July 1, 1998 will accrue interest at the then-existing CPL variable rate until the next interest period commences. In July 1998, the IBRD will notify borrowers of the SCP lending rate in each designated currency that will apply for interest periods commencing between July 1, 1998 and December 31, 1998. Those SCP lending rates will reflect the semester average cost of the IBRD's outstanding borrowings allocated to fund those loans as calculated on June 30, 1998.

For six-month interest periods beginning on or after January 1, 1999 and thereafter, loans that were converted to SCP terms on July 1, 1998 will accrue interest based on the semester average cost of funding allocated to that SCP as described above.

As the SCPs approach 90% in the designated currency, the SCP rate will increasingly reflect the average cost of funding for the designated currency.

SCP Amortization Characteristics

For borrowers that elect to convert entire loans to SCP terms, maturities, grace periods, and amortization schedules will remain unchanged from the original currency pool loan agreement. If undisbursed amounts are converted to

SCL terms and only disbursed loan balances are converted to one of the SCPs, the remaining maturities and amortization schedules of the disbursed balances will be adjusted *pro rata*, with the share determined by the ratio of balances converted to SCP terms to the sum of those converted to SCP and SCL terms.

Annex 4 (page 24) provides a term sheet for currency pool loans that are converted to SCP terms.

Appendix 1 (pages 26-33) provides a simplified illustration of how the SCP amortization schedule will be established.

IV. Eligibility Criteria

This offer applies to all currency pool loans for which the invitation to negotiate was issued before September 1, 1996.

Access to SCP terms will be available to all borrowers.

Access to SCL terms will be available to all borrowers, provided that:

- the member has no unconverted VLR82 loans; and
- the individual borrower, if not the member, also has no unconverted VLR82 loans.⁷

In order to become eligible for SCL terms for undisbursed currency pool loan amounts for any loan, a borrower must first agree to convert all of its VLR82 loan balances to VLR89 terms and/or SCP terms.⁸

⁷ These eligibility criteria also apply for new SCL commitments.

Borrowers may convert VLR82 loans to VLR89 terms or SCP terms by agreeing with the Bank to amend their loan agreements. For more information on VLR82 loans and the loan conversion process to VLR89 terms or SCP terms, please see the back cover of this booklet for IBRD contacts.

V. Timetable

The timetable for the offer of currency choice for existing currency pool loans is as follows:

F	or Individual Loans or Portfolios of Loans	Conversion to SCL Terms		onversion to SCP Terms	3
(1)	Bank receives conversion request	At any time until 6/1/98	by 6/1/97	by 12/1/97	by 6/1/98
(2)	Conversion implementation dates	As soon as possible after Bank approval of conversion request	7/1/97	1/1/98	7/1/98
(3)	Notification to borrower of completed conversion and applicable lending rate	As soon as possible after (2)	As soon	as possible af	ter (2)
(4)	Last date for conversion	7/1/98		7/1/98	
(5)	Converted volume is 90% in borrower's currency choice	N/A		by 7/1/99	
(6)	Converted volume is 100% in borrower's currency choice	Immediately after (2)	As soon a	s practicable :	after (5)

PRINCIPAL TERMS AND CONDITIONS OF CURRENCY POOL LOANS

Loan Currencies:

Currency pool loans are multicurrency obligations, committed in US dollars convalent.

The IBRD intends to maintain the currency composition of borrowers' currency pool loan obligations so that at least 90% of the US dollar equivalent value of the currency pool would be comprised of US dollars, Japanese yen and Deutsche mark group currencies (comprised of Deutsche mark, Swiss francs and Netherlands guilders). These currencies would be targeted in fixed currency ratios of 1 US dollar for every 125 Japanese yen and 2 Deutsche mark equivalent. These target ratios are expected to be reviewed in June 2001 (or earlier, as a result of significant market developments, lack of access to the requisite funding, or if the share of loans from non-targeted currencies from paid-in capital increased to more than 10% of the pool).

Lending Rate Reset Dates: The lending rates will be reset every six months, on the interest payment date for the loan. Interest payment dates will be on the 1st or 15th day of a month and semi-annually thereafter, as selected by the borrower when the loan is negotiated.

Maturity:

New loans will be made on standard country terms.

(At present, according to country classifications established by the IBRD, these terms are:

Country Category	Grace Period	Final <u>Maturity</u>	Repayment Pattern
1-11	5	20	Annuity
Ш	4	17	Annuity
	5	17	Level repayment of principal
IV-V	3	15	Annuity
	5	15	Level repayment of principal

IBRD policy provides some flexibility to tailor loan repayment terms to match project requirements within these country guidelines.)

Lending Rate:

The lending rate consists of the semester average cost of outstanding debt drawn down after June 30, 1982 (excluding debt funding the IBRD's liquid investments and loan products introduced by the IBRD after July 1, 1989 bearing other interest rates), plus a lending spread.

- Lending Spread:

50 basis points.

Commitment Fee:

75 basis points on undisbursed loan amounts, beginning 60 days

after the loan agreement is signed.

Waivers:

Determined annually by IBRD's Executive Directors.

Prepayment:

Prepayment is permissible. A prepayment premium schedule would be specified in the loan agreement for these loans. The premium

may be waived under certain conditions.

Annex 1 Page 2 of 5

CURRENCY RATIOS AND SHARES IN THE CURRENCY POOL

	Curre	ency Ratios (u	ınits)	(Currency Sha	ares (%)	
Date	USD	DEMg 1/	<u>JPY</u>	<u>USD</u>	DEMg 1/	<u>JPY</u>	OTHER
11001	1.00	2.00	261.52		2.1	22	
Jun-1981	1.00	2.99	261.53	19	24	22	35
Dec-1981	1.00	7.66	354.47	14	48	23	15
Jun-1982	1.00	11.92	485.02	11	52	21	17
Dec-1982	1.00	10.80	265.16	13	59	15	. 13
Jun-1983	1.00	6.69	164.25	21	54	14	11
Dec-1983	1.00	8.41	284.28	17	53	21	10
Jun-1984	1.00	11.20	443.67	13	53	25	8
Dec-1984	1.00	11.08	402.66	15	53	24	8
Jun-1985	1.00	11.57	431.61	14	54	25	7
Dec-1985	1.00	15.39	562.75	9	58	26	6
Jun-1986	1.00	16.03	566.95	8	59	28	6
Dec-1986	1.00	11.12	409.39	10	58	26	5
Jun-1987	1.00	9.96	390.63	10	56	27	6
Dec-1987	1.00	10.31	450.37	8	54	31	7
Jun-1988	1.00	5.85	257.67	15	49	30	6
Dec-1988	1.00	3.78	201.81	20	42	32	6
		Targeted	Currency R	atios Appro	ved		
Jun-1989	1.00	3.29	195.84	23	39	32	5
Dec-1989	1.00	2.59	162.03	26	40	30	4
Jun-1990	1.00	2.27	145.54	29	39	27	5
Dec-1990	1.00	2.12	132.29	29	40	28	4
		Targeted	Currency R	atios Achiev	ed		
Jun-1991	1.00	2.00	125.32	32	36	29	3
Dec-1991	1.00	1.99	125.04	29	39	29	3
Jun-1992	1.00	2.00	125.53	29	38	29	3
Dec-1992	1.00	1.99	124.34	30	37	30	3
Jun-1993	1.00	1.99	124.64	29	34	34	3
Dec-1993	1.00	1.98	124.44	30	34	33	3
Jun-1994	1.00	2.00	125.13	28	35	35	3
Dec-1994	1.00	2.00	124.94	28	35	35	2
Jun-1995	1.00	2.00	124.99	25	36	37	2
Dec-1995	1.00	2.00	124.90	27	38	33	2
Jun-1996	1.00	2.00	124.80	28	37	32	2
							-

^{1/} The Deutsche mark group (DEMg) is composed of Deutsche mark, Swiss francs and Netherlands guilders.

CHRONOLOGY OF LENDING RATES FOR **CURRENCY POOL LOANS**

From	<u>To</u>	Rate (% per annum)
FIXE	O-RATE CURRENCY POOL	
	(for loan commitments)	
July 1, 1980 January 13, 1981 July 1, 1981 September 18, 1981	January 12, 1981 June 30, 1981 September 17, 1981	9.25 9.60 10.60 11.60
VARIABLE	LENDING RATE 1982 (VI	R82 LOANS)
	(for interest periods beginning	g)
July 1, 1982 January 1, 1983 July 1, 1983 January 1, 1984 July 1, 1984 January 1, 1985 July 1, 1985 January 1, 1986 January 1, 1987 January 1, 1988 July 1, 1988 January 1, 1988 January 1, 1989	December 31, 1982 June 30, 1983 December 31, 1983 June 30, 1984 December 31, 1984 June 30, 1985 December 31, 1985 June 30, 1986 December 31, 1986 June 30, 1987 December 31, 1987 June 30, 1988 December 31, 1988 June 30, 1988	11.43 10.97 10.47 10.08 9.89 9.29 8.82 8.50 8.23 7.92 7.76 7.72 7.59 7.65
VARIABLE	LENDING RATE 1989 (VI	
L. L. 1000	(for interest periods beginnin	g) 7.74
July 1, 1989 January 1, 1990 July 1, 1990 January 1, 1991 July 1, 1991 January 1, 1992 July 1, 1993 July 1, 1993 January 1, 1994 January 1, 1995 July 1, 1995 July 1, 1996 July 1, 1996 July 1, 1996	December 31, 1989 June 30, 1990 December 31, 1990 June 30, 1991 December 31, 1991 June 30, 1992 December 31, 1992 June 30, 1993 December 31, 1993 June 30, 1994 December 31, 1994 June 30, 1995 December 31, 1995 June 30, 1996 December 31, 1996	7.75 7.75 7.72 7.73 7.73 7.60 7.43 7.43 7.27 7.10 7.09 7.07 6.98 6.94

JULY 1996 VLR89 LENDING RATE NOTIFICATION TO BORROWERS



1818 H Street N.W. Washington, D.C., 20433 U.S.A. Date Page

(202) 477-1234 CableAddress: INTBAFRAD CableAddress: INDEVAS 16-Aug-1996

NOTICE TO BORROWERS

Subject: Variable Interest Rate - 1989

This is to inform you, in respect of loans under the IBRD's 1989 variable rate lending system (The VLR89 Lending Rate), that the cost of qualified borrowings of the IBRD for the semester ending June 30, 1996 was 6.44 percent per annum. Consequently, the interest rate applicable to such loans for the first interest period commencing on or after July 1, 1996 is 6.94 percent per annum.

In your forward planning for your loan obligations under the VLR89 lending rate system, you may find the information in the attachment useful.

Sincerely,

Malcolm Johnson,

Chief, Loan Accounting and Borrower Services Division Loan Department

Subject: Variable Interest Rate - 1989

The currency composition of borrower's loan obligations under VLR89 is currently targeted, for at least 90 percent (on average, about 97.58 percent over the last six months) of the US Dollar equivalent currency pool value, in a ratio of 1 US Dollar for every 125 Japanese Yen and 2 Deutsche Mark equivalent (including Deutsche Mark, Swiss Francs and Netherlands Guilders). The Bank currently intends, but assumes no obligation, to maintain these ratios until at least June 2001.

The Bank's VLR89 lending rate of 6.94 percent is applied to all currency amounts disbursed to you to calculate the interest due on your loan. This rate is based on an average of the cost rates in each currency of the Bank's debt obligations that have been allocated as funding for VLR89 loans, weighted by the shares of the currencies in the currency pool. To this, the Bank adds a lending spread of 0.50 percent, less any annual interest waiver for eligible borrowers.

The Bank's overall VLR89 lending rate is the rate to use for the current semester in projecting how much you will owe, since that is the rate used by the Bank in calculating interest due on your loan. At the same time, because of the targeted nature of the Bank's currency pool, it may be useful to think of currency pool loans as if they were three subloans in U.S Dollars, Japanese Yen and Deutsche Mark. Your currency pool loan obligation is thus similar to one comprising three subloans - U.S Dollars at the U.S Dollar interest cost rate, Japanese Yen at the Yen interest cost rate, and Deutsche Mark at the Deutsche Mark group cost rate, plus a fourth subloan in the non-targeted currencies comprising 0 to 10 percent of the currency pool (2.42 percent, on average over the last six months), at the interest cost rate for those currencies.

The following table shows how close the actual currency composition of the currency pool was to the target currency ratios on June 30, 1996 and provides the cost rates for the core currencies in the VLR89 pool.

Currency Pool Composition and Variable Lending Rate 1989 Cost Rates for Targeted Currencies (For the Semester ending June 30, 1996 [A])

	VLR 89 Loans	US Dollars	Japanese Yen	Deutsche Mark Group [B]	
Target Ratios		1.00	125.00	2.00	
Actual Ratios [C]		1.00	124.80	2.00	
Cost Rates (Percent)	6.44	7.47	5.25	6.61	
Lending Rates (Percent)	6.94				

- [A] Non-Targeted various currencies represent 0-10 percent of the total US Dollar equivalent pool value. On average, over the last six months, non-targeted currencies accounted for 2.42 percent of the US Dollar equivalent value of the pool, with an average cost rate of 8.66 percent.
- [B] The Deutsche Mark group consists of Deutsche Mark, Swiss Francs and Netherland Guilders.
- [C] The Actual ratios have been maintained within 1 percent of the target ratios since March 1991.

In addition to its use in forward planning, the foregoing information could provide a basis for you to consider whether it would be beneficial to you to hedge the currency-targeted components of your currency pool loan. However, you will not be able to hedge your VLR89 loans perfectly because: (1) the pool is not composed entirely of U.S. Dollars, Japanese Yen and Deutsche Mark. As noted above, the Deutsche Mark group also contains a portion of Swiss Francs and Netherlands Guilders, and up to 10 percent of the currency pool can be in non-targeted currencies; (2) the Bank has the flexibility to change the composition of the currency pool. As mentioned above, it is the Bank's intention to keep the current target ratios until at least June 2001, although it is not obliged to do so; and (3) the cost rates are based on the average cost of the Bank's outstanding borrowings allocated to fund VLR89 loans. These average costs adjust over time as old debt matures and new debt is allocated.

PRINCIPAL TERMS AND CONDITIONS OF LIBOR-BASED SINGLE CURRENCY LOANS

Loans will be offered in currencies of sufficient borrower demand in which the

IBRD can appropriately fund itself.

Lending Rate The lending rates will be reset every six months, on the interest payment date Reset Dates:

The lending rates will be reset every six months, on the interest payment date will be on the 15th day of a month and

for the loan. Interest payment dates will be on the 15th day of a month and semi-annually thereafter, as selected by the borrower when the loan is

negotiated.

Maturity: New loans will be made on standard country terms.

(At present, according to country classifications established by the IBRD, these

terms are:

Country Category	Grace <u>Period</u>	Final <u>Maturity</u>	Repayment Pattern
1-11	5	20	Annuity
Ш	4	17	Annuity
	5	17	Level repayment of principal
IV-V	3	15	Annuity
	5	15	Level repayment of principal

IBRD policy provides some flexibility to tailor loan repayment terms to match

project requirements within these country guidelines.)

Lending Rate: The lending rate consists of a Base Rate and a Total Spread.

- Base Rate: The 6-month currency LIBOR rate prevailing for value on the reset date.

(LIBOR is the London Inter-Bank Offered Rate for 6-month deposits in the loan currency; in the case of French francs, PIBOR, the Paris Inter-Bank Offered

Rate, is used.)

- <u>Total Spread</u>: The Total Spread will equal the Cost Margin and the Lending Spread. It would

be announced in January and July each year, and will apply to all debt service

periods commencing in the semester in which it is announced.

Cost Margin: The IBRD's weighted semester average funding costs for such loans relative to

6-month currency LIBOR averaged across currencies.

Lending Spread: 50 basis points.

Commitment Fee: 75 basis points on undisbursed loan amounts, beginning 60 days after the loan

agreement is signed.

Waivers: Determined annually by IBRD's Executive Directors.

Prepayment: Prepayment is permissible. A premium may be charged based on the IBRD's

redeployment costs.

Currency In the unlikely event of an access constraint in the loan currency, the

<u>Substitution</u>: IBRD would retain the right to replace the currency of the loan by a substitute

currency until the IBRD's access to the loan currency would be restored. No

prepayment premium would be charged while a substitute currency is

outstanding.

PRINCIPAL TERMS AND CONDITIONS OF UNDISBURSED LOAN AMOUNTS CONVERTED TO LIBOR-BASED SINGLE CURRENCY LOAN TERMS

Loan Currencies: Same as for LIBOR-based single currency loans.

Lending Rate

The lending rates will be reset every six months, on the interest payment date for the loan. Interest payment dates will be on

payment date for the loan. Interest payment dates will be on the 15th day of the months originally selected by the borrower

for the loan being converted to single currency loan terms.

Maturity: Repayment terms will be established on the basis of the original

amortization schedule for the loan being converted, on a pro

rata basis.

Lending Rate: Same as for LIBOR-based single currency loans.

Base Rate: Same as for LIBOR-based single currency loans.

- <u>Total Spread</u>: Same as for LIBOR-based single currency loans.

- Cost Margin: Same as for LIBOR-based single currency loans.

- Lending Spread: Same as for LIBOR-based single currency loans.

Commitment Fee: 75 basis points on undisbursed loan amounts, beginning 60

days after the original loan agreement is signed.

Waivers: Same as for LIBOR-based single currency loans.

Prepayment: Same as for LIBOR-based single currency loans.

Currency Same as for LIBOR-based single currency loans.

Substitution:

PRINCIPAL TERMS AND CONDITIONS OF FIXED-RATE SINGLE CURRENCY LOANS

Loan Currencies: Loans will be offered in currencies of sufficient borrower demand in which the

IBRD can appropriately fund itself.

Rate Fixing Dates: Each loan will have one Rate-Fixing Date per semester, on the interest payment

date for the loan. Interest payment dates will be on the 15th day of a month and semi-annually thereafter, as selected by the borrower when the loan is negotiated.

Maturity: Accumulated disbursements in a semester ("Disbursed Amount") in effect form a

sub-loan. Each Disbursed Amount will have a 3-year grace period and amortize thereafter in level repayments of principal. The final maturity of each Disbursed Amount will be based on the expected total disbursement period of each type of

loan and will be stipulated in the Loan Agreement.

Expected Disbursement Period Final Maturity
0-3 years 12 years
3-6 years 9 years
More than 6 years 6 years

Rate Fixings: Amounts disbursed each semester prior to the Rate Fixing Date will accrue interest

at the applicable 6-month LIBOR/PIBOR single currency Lending Rate in the currency disbursed, or at an appropriate LIBOR-based rate determined by the Bank if there is no LIBOR-based single currency loan in the specific currency.

On the Rate-Fixing Date, the Disbursed Amount in that semester will begin accruing interest at the applicable Fixed Lending Rate, which applies throughout

the maturity of that part of the loan.

Fixed Lending Rate: The lending rate consists of a Base Rate and a Total Spread.

- Base Rate: The Base Rate is defined as the amortizing swap rate in the currency for value as

of the Rate-Fixing Date; this amortizing swap has the same maturity profile as the

Disbursed Amount whose rate is being fixed.

- <u>Total Spread</u>: The Total Spread will consist of the Funding Margin and the Lending Spread. It

will be announced in January and July each year, and will apply to all Disbursed

Amounts with rate fixings in the semester in which it is announced.

- Funding Margin: The Funding Margin reflects the IBRD's own cost of funding in the currency

relative to LIBOR, for that funding allocated to these loans during the semester for which this margin would apply, plus a risk spread, principally reflecting interest

rate risk.

Lending Spread: 50 basis points.

Commitment Fee: 75 basis points on undisbursed loan amounts, beginning 60 days after the loan

agreement is signed.

Waivers: Determined annually by IBRD's Executive Directors.

Prepayment: A premium normally would be charged based on the IBRD's redeployment cost for

the applicable remaining maturity, as reasonably determined by the IBRD. Prepaid amounts would be applied across all Disbursed Amounts on a last-in-first-out

basis, starting with the last Disbursed Amount.

Currency In the unlikely event of an access constraint in the loan currency, the IBRD would substitution: retain the right to replace the currency of the loan by a substitute currency until

retain the right to replace the currency of the loan by a substitute currency until the IBRD's access to the loan currency would be restored. No prepayment premium would be charged while a substitute currency is outstanding.

PRINCIPAL TERMS AND CONDITIONS OF UNDISBURSED LOAN AMOUNTS CONVERTED TO FIXED-RATE SINGLE CURRENCY LOAN TERMS

Loan Currencies: Same as for fixed-rate single currency loans.

Rate-Fixing Dates: Each loan will have one Rate Fixing Date per semester, on the interest

payment date for the loan. Interest payment dates will be on the 15th day of the months originally selected by the borrower for the currency pool loan being converted to single currency loan terms.

Maturity: Accumulated disbursements in a semester ("Disbursed Amount") in

effect form a sub-loan. Each Disbursed Amount would have a 3-year grace period and amortize thereafter in level repayments of principal. The final maturity of each Disbursed Amount would be based on the expected total disbursement period of each type of loan, measured from the original approval date to the closing date of the currency pool loan being converted to fixed-rate single currency

loan terms, and will be stipulated in the Loan Agreement.

Expected Disbursement P	<u>'criod</u>	Final Maturity
0-3 years		12 years
3-6 years		9 years
More than 6 years	×	6 years

Rate Fixing: Same

Same as for fixed-rate single currency loans.

Base Rate:

Same as for fixed-rate single currency loans.

Total Spread:

Same as for fixed-rate single currency loans.

Funding Margin:

Same as for fixed-rate single currency loans.

- Lending Spread:

Same as for fixed-rate single currency loans.

Commitment Fee:

75 basis points on undisbursed loan amounts, beginning 60 days

after the original loan agreement is signed.

Waivers:

Same as for fixed-rate single currency loans.

Prepayment:

Same as for fixed-rate single currency loans.

Currency

Same as for fixed-rate single currency loans.

Substitution:

PRINCIPAL TERMS AND CONDITIONS OF CURRENCY POOL LOAN BALANCES CONVERTED TO SINGLE CURRENCY POOL LOAN TERMS

Loan Currencies:

Single currency pool loans will be multicurrency obligations initially and will continue to be denominated in US dollars

equivalent.

Single currency pools will be offered in four currencies: . Deutsche mark, Japanese yen, Swiss francs and US dollars. The IBRD will undertake to reach, not later than July 1, 1999, a currency composition for each single currency pool that would be at least 90% in the borrower's preferred currency, and to maintain it at or above 90% thereafter. Over time, the IBRD intends to shift the currency composition of each single currency pool to 100% in the designated single currency.

Lending Rate Reset Dates: Same as for new currency pool loans.

Maturity:

Repayment terms will be established on the basis of the original

amortization schedule for the currency pool loan being

converted, on a pro rata basis.

Lending Rate:

The lending rate consists of the semester average cost of outstanding debt allocated to fund the loans in an individual

single currency loan pool, plus a lending spread.

Lending Spread:

Same as for new currency pool loans.

Commitment Fee:

75 basis points on undisbursed loan amounts, beginning 60

days after the original loan agreement is signed.

Waivers:

Same as for new currency pool loans.

Prepayment:

Same as for new currency pool loans.

<u>Currency</u> <u>Substitution:</u> In the unlikely event of an access constraint in the loan currency, the IBRD would retain the right to replace the currency of the loan by a substitute currency until the IBRD's

currency of the loan by a substitute currency and t

access to the loan currency would be restored.

Appendix I follows on next page.

REVISED AMORTIZATION SCHEDULES FOR CONVERTED CURRENCY POOL LOANS

This Appendix presents sample principal repayment cash flows arising from conversions of existing IBRD currency pool loans. The examples cover most of the possible combinations of conversions and are organized as follows:

I. Base Case

The Base case reflects the original CPL principal repayment schedule that would prevail if no conversion takes place. The example shows both annuity and level principal repayment amortization schedules.

II. Conversion of Undisbursed Amounts to SCL Terms During the Grace Period; Disbursed Balance Remains as CPL or is Converted to SCP Terms

- II (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
- II (b) To Fixed-Rate SCL (Original CPL -Level Principal Repayment)
- II (c) To LIBOR-Based SCL (Original CPL Annuity Amortization)
- II (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)

III. Conversion of Undisbursed Amounts to SCL Terms After the Grace Period; Disbursed Balance Remains as CPL or is Converted to SCP Terms

- III (a) To LIBOR-Based SCL (Original CPL Level Principal Repayment)
- III (b) To Fixed-Rate SCL (Original CPL Level Principal Repayment)
- III (c) To LIBOR-Based SCL (Original CPL Annuity Amortization)
- III (d) To Fixed-Rate SCL (Original CPL Annuity Amortization)

IV. Conversion of Disbursed and Undisbursed Portions to SCP Terms

- IV (a) During the Grace Period (Original CPL Level Principal Repayment)
- IV (b) After the Grace Period (Original CPL Level Principal Repayment)
- IV (c) During the Grace Period (Original CPL Annuity Amortization)
- IV (d) After the Grace Period (Original CPL Annuity Amortization)

Since SCLs are denominated in the currency of commitment (rather than in USD equivalent terms as is the case for currency pool loans), examples of conversions into both USD and non-USD SCL terms are shown. For illustrative purposes, a Deutsche mark SCL is shown.

The amortization schedules of both CPLs and SCP loans are identical. However, a SCP loan will have a currency composition and lending rate based on the currency composition and cost of its respective single currency pool.

I. BASE CASE: ORIGINAL CURRENCY POOL LOAN AMORTIZATION SCHEDULES

Original Schedules:

	,	2	7	L/	7	7	ox	6	0	=	1.7	~	4 1	15	91	17	Total
)cal.	7 1	0	r	2	0	1	0	,	2	:	1	,					
level amortization (USDeq)	GRA	RACE PERIOD	QC		8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	USDeg 100
annuity amortization (USDeq)	GRACE	ERIOD		4.98	5.33	5.70	6.10	6.52		7.46	7.97	8.53	9.12	9.75	10.43	11.15	USDeg 100

Assumptions:

1. Terms of the original currency pool loan are as follows:

	Level	Level Principal Repayment	Annui	Annuity Amortization
original principal (millions)	100	USD equivalent	100	USD equivalent
grace period	S	years	4	years
final loan maturity	17	years	17	years
original interest rate	6.94%		6.94%	10
dishursed balance	40	USD equivalent	40	USD equivalent
undisbursed amount	09	USD equivalent	09	USD equivalent

- 2. All amounts are expressed in millions.
- 3. Annuity-type amortization schedules were developed using the original interest rate of 6.94%.
- All conversions occuring after the expiration of the grace period are assumed to occur at the end of the sewenth year (fourteenth semester).
 - 5. Amounts converted into non-USD SCI. terms are assumed to be converted into DEM at a DEM/USD exchange rate of 1.5 DEM / USD.
- 6. For presentational purposes, the cash flows in these examples are shown on an annual basis. In fact, all IBRD loans are billed and paid on a semi-annual basis.
 - 7. "Final Date" is defined as the last date on which interest and principal repayments may be made for fixed-rate SCLs, pursuant to the Loan Agreement

Appendix I Page 3 of 8

USD 60 USDeq 100

USDep 40

II. CONVERSION DURING THE GRACE PERIOD OF A CURRENCY POOL LOAN WITH A LEVEL REPAYMENT OF PRINCIPAL AMORTIZATION STRUCTURE

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year:	1 2 3 4 5	9	7	8	6	10	=	12	13	14	1.5	91	17
year.	GRACE PERIOD	8 33	8 33	× 23	× × ×	10	= ×	71	8 22	8 22	15	16	/ 8 33

II (a): Disbursed Balance remains as CPL or is converted to SCP: Undisbursed Amounts are converted to LIBOR-based SCL terms.

Example 1: Undisbursed Amount Converted into USD LIBOR-Based SCL Undishursed Amount (USD) Disbursed Balance (USDeg)

INCLUSION USE LIBON-DASC	1 3CF											
CDACE BEBION	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
CINACL FLINOLD	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	8 33	8 33	X 33	8 33	X 33	8 33	8 33	8 33	8 33	8 22	8 22	2 2 2

09 OSN USDeq 40 USDeg 100 USDcq 40 DEM 90

3.33

3.33

3.33

3.33

7.50 3.33 3.33 7.50

7.50 3.33 7.50 3.33 3.33 7.50 7.50 3.33 7.50 3.33 3.33 7.50 Example 2: Undisbursed Amount Converted into DEM LIBOR-Based SCL GRACE PERIOD Undisbursed Amount (DEM) Disbursed Balance (USDeq)

II (b): Disbursed Balance remains as CPL or is converted to SCP; Undisbursed Amounts are converted to Fixed-rate SCL terms.

Example 1: Undisbursed Amount Converted into USD Fixed-Rate SCL Undisbursed Amount (USD) Disbursed Balance (USDeg)

The second	
in doth botton	a data beginster an abancal

Example 2: Undisbursed Amount Converted into DEM Fixed-Rate SCI GRACE PERIOD

3.33

Undetermined: depends on projected disb. period, timing of disb. and Final Date 3.33 3.33 3.33 3.33 3.33 3.33 3.33 3.33 3.33

USDeq 40 DEM 90

3.33

Appendix I Page 4 of 8

II. CONVERSION DURING THE GRACE PERIOD OF A CURRENCY POOL LOAN WITH AN ANNUITY AMORTIZATION STRUCTURE

Schedule:
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year.	-	2	~	4	N	9	7	8	6	01	=	12	13	14	15	91	17	Total
(USDeo)		GRACE	PERIOD		4.98	5.33	5.70	6.10	6.52	6.97	7.46	7.97	8.53	9.12	9.75	10.43	3 11.15	USDeg 1

II (c): Disbursed Balance remains as CPL or is converted to SCP; Undisbursed Amounts are converted to LIBOR-based SCL terms.

isbursed Balance (USDeq)	COMPACT DEBICE	66.1	2.13	2.28	2.44	7.61	2.79	2.98	3.19	3.41	3.65	3.90	4.17	4.46
ndisbursed Amount (USD)	GWICE LENOD	2.99	3.20	3.42	3.66	3.91	4.18	4.47	4.78	5.12	5.47	5.85	6.26	69.9
Total		4 98	5 33	5.70	6.10	6.52	6.97	7.46	7.97	8.53	9.12	9.75	10.43	11.15

USD 60 USDeq 100

USDeq 40

USDeq 40 DEM 90

Disbursed Balance (USDeq)	OCIATO TO AND	1.99	2.13		2.44	2.61	2.79	2.98	3.19	3.41	.65	3.90	4.17	4.46
Undishursed Amount (DFM)	GNACE PENIOD	4.49	4.80	5.13	5.49	5.87	6.27	12.9	7.18	7.67	.2	8.78 9.38 10	9.38	10.04

II (d): Disbursed Balance remains as CPL or is converted to SCP; Undisbursed Amounts are converted to Fixed-rate SCL terms.

		La Charle Date	03 (1311
Undisbursed Amount (USD)	Undetermined; depends on projected disb. period, uming of disb. a	sp. and Final Date	اد

Example 2: Undispursed Amount C	unt Converted into DEM Fixed	d-Kate SCI.										
Disbursed Balance (USDeo)	dolada 10 tab	1.99	2.13	2.28 2.44	2.44	2.61	2.79	2.98 3.19	3.19	3.41	3.65	3.90
Hadishursed Amount (DEM)	GRACE PERIOD			majoha	. Promi	monde o	n project	and dich	poriod	timino o	of dish an	and Fin

DEM		Dale	period, timing of disb. and Final Date	of disb.	timing	period.	ted disb.	an projec	ds on
USDe	4.46	4.17	3.90	3.65	3.41	3.19 3.41	2.98	2.79	19
COLL	4.0		1010				000	1	

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III. CONVERSION AFTER THE GRACE PERIOD OF A CURRENCY POOL LOAN WITH A LEVEL REPAYMENT OF PRINCIPAL AMORTIZATION STRUCTURE

Appendix 1 Page 6 of 8

III. CONVERSION AFTER THE GRACE PERIOD OF A CURRENCY POOL LOAN WITH AN ANNUITY AMORTIZATION STRUCTURE

Original Schedule:

Total USDcq 100		USDeq 40 USD 60 USDeq 100	USDeq 40 DEM 90		USDeq.40 DEM 90
nsp	erms.	usn uspasn	nsr Did		nsn Ja
12	III (c): Disbursed Balance remains as CPL or is converted to SCP; Undisbursed Amounts are converted to LIBOR-based SCL terms.	3.18 7.97 11.15	3.18	III (d): Disbursed Balance remains as CPL or is converted to SCP; Undisbursed Amounts are converted to Fixed-rate SCL terms. Example 1: Undisbursed Amount Converted into USD Fixed-Rate SCL. Disbursed Balance (USDeq) GRACE PERIOD Total	.18 Date 1
17	ased			ite SC	3 d Final
15 16 17 9.75 10.43 11.15	OR-P	3 2.98 7 7.45 5 10.43	3 2.98	ed-ra	8 2.5 fisb. an
	o LIB	2.78 6.97 9.75	2.78	2.7	2.74 ing of 4
9.12	rted t	2.60 6.51 9.12	2.60	2.60 od, timi	2.60 od, tim
8.53	conve	2.43 6.09 8.53	2.43	2.43 sb. peri	2.43 sb. peri
7.97	are (2.28 5.70 7.97	2.28	2.28 ected di	2.28 ected di
7.46	ounts	2.13 5.33 7.46	2.13	2.13 on proje	2.13 on proje
10	ad Am	1.99 4.98 6.97	7.47	SCP: Undisbursed Amounts are converted to Fixed-rate SCL te	1.74 1.86 1.99 2.13 2.28 2.43 2.60 2.78 2.98 3.18 Undetermined: depends on projected disb. period. timing of disb. and Final Date.
9 6.52	spurse	1.86 4.66 6.52	1.86	sburse 1.86	1.86 nined; d
	Undis	4.35	6.53	Undis 74 Indeterm	74 Idelern
	CP;		·- ·- ·- ·- ·- ·- ·- ·- ·- ·- ·- ·- ·	0 CP:	- 1
5.70	l to S	5.70	5.70	1 to S	5.70
5.33	erted	sed SCL 4.98 5.33 4.98 5.33	5.33	erted 5.33	5.33
4.98	conv	ased SC 4.98 4.98	ased St	conv e SCL 4.98	te SCI.
4	or is	30R-8	BOR-B	or is	ved-Ra
3 NOD	CPL	dol	IOD IOD	S CPL	JOD JOD
	ins as	verted into USD	Werted into DEM	cmains as CI	verted into DEM GRACE PERIOD
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	ance	Somt	O Juni C	ance	ount Co
year: original terms (USDeq)	d Bal	ed Ame Deal USD)	ed Ami Deoj DEM)	d Bal	ed Amo Dea) DEM)
u) suus	asuno	lisburs ce (US nount (lisburs ce (US nount (ourse fisburs cc (US nount (fisburs ice (US nount (
ginal to	Disk	1: Unc 1 Balan sed An	2: Unc I Balan sed An	Disl I: Unc I Balan sed An	2: Und 1 Balan sed An
ori	(c):	Example 1: Undisbursed Amount Converted Into USD LIBOR-Based SCI Disbursed Balance (USDeq) GRACE PERIOD Total 4.98 4.98	Example 2: Undishursed Amount Converted into DEM LIBOR-Based SCL Dishursed Balance (USDeo) GRACE PERIOD GRACE PERIOD 4.98	III (d): Disbursed Balance remains as CPL or is con Example 1: Undisbursed Amount Converted into USD Fixed-Rate SCI Undisbursed Balance (USDeq) GRACE PERIOD Total	Example 2: Undisbursed Amount Converted into DEM Fixed-Rate SCI Disbursed Balance (USDeo) GRACE PERIOD GRACE PERIOD
	=	A D P	ř ō ř	= 72 2 2 ,	A G A

Appendix 1 Page 7 of 8

IV. CONVERSION OF DISBURSED AND UNDISBURSED PORTIONS OF A CURRENCY POOL LOAN TO SINGLE CURRENCY POOL TERMS WITH A LEVEL PRINCIPAL REPAYMENT STRUCTURE

	Total USDeg 100		USDeg 100		USDeq 100
	8.33		8.33		8.33
	8.33		8.33		8.33
	8.33		8.33		8.33
	8.33		8.33		8.33
	8.33	riod.	8.33	.po	8.33
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 17 18 19 10 11 12 13 14 15 16 17 17 18 18 18 18 18 18	ce Per	8.33 8.33 8.33 8.33 8.33 8.33 8.33 8.33	e Peri	8.33 8.33 8.33 8.33 8.33 8.33 8.33 8.33
	8.33	e Gra	8.33	Grac	8.33
	8.33	thin th	8.33	ter the	8.33
	9.8.33	ms Wi	8.33	ms Afi	8.33
	8.33	P Ter	8.33	P Ter	8.33
	7 8.33	to SC	8.33	to SC	8.33
	8.33	rtions	8.33	ortions	8.33
	2	sed Po		sed Po	
	4 dols	lisbur	don	Jisbur	dob
	2 3 4 GRACE PERIOD	oun pu	GRACE PERIOD	nd Une	GRACE PERIOD
	2 GR/	sed an	GR	sed ar	GR/
		Disbur		Disbur	
<u>:</u>	year: USDco)] Jo uc	USDeta	I Jo uc	USDeo)
chedu	lization (nversio	ization (nyersia	ization (I
Original Schedule:	year: principal amortization (USDcq)	IV (a): Conversion of Disbursed and Undisbursed Portions to SCP Terms Within the Grace Period.	principal amortization (USDeq)	IV (b): Conversion of Disbursed and Undisbursed Portions to SCP Terms After the Grace Period	principal amortization (USDeq)
Orig	princip) <u>VI</u>	princi	1) \(1	princi

Appendix 1 Page 8 of 8

IV. CONVERSION OF DISBURSED AND UNDISBURSED PORTIONS OF A CURRENCY POOL LOAN TO SINGLE CURRENCY POOL TERMS WITH AN ANNUITY REPAYMENT STRUCTURE

	Total	USDeg 100		USDeq 100		USDeq 100
	17	11.15		1.15		1.15
	91	10.43		10.43		10.43
	1.5	9.75		9.75		9.75
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	9.12		9.12		4.98 5.33 5.70 6.10 6.52 6.97 7.46 7.97 8.53 9.12 9.75 10.43 11.15
	13	8.53	iod.	8.53	ď.	8.53
	12	7.97	ce Per	7.97	Perio	7.97
	=	7.46	e Gra	7.46	Grace	7.46
	01	6.97	hin th	6.97	r the	6.97
	6	6.52	15 Wit	6.52	s Afte	6.52
	80	6.10	Term	6.10	Term	6.10
	7	5.70	SCF	5.70	o SCP	5.70
	9	5.33	ions t	5.33	ions to	5.33
	5	4.98	d Port	4.98	1 Porti	4.98
	4		purse		onrsec	
	3	RIOD	Undis	RIOD	Undis	RIOD
	2	ACE PE	d and	ACE PE	and	ACE PE
	_	Š	purse	8	oursec	5
chedule:	year:	principal amortization (USDeo) GRACE PERIOD 4.98 5.33 5.70 6.10 6.52 6.97 7.46 7.97 8.53 9.12 9.75 10,43 11.15	IV (c): Conversion of Disbursed and Undisbursed Portions to SCP Terms Within the Grace Period.	principal amortization (USDeo) GRACE PERIOD 4.98 5.33 5.70 6.10 6.52 6.97 7.46 7.97 8.53 9.12 9.75 10.43 11.15	IV (d):Conversion of Disbursed and Undisbursed Portions to SCP Terms After the Grace Period.	principal amortization (USDeq) GRACE PERIOD
Original Schedule:		principal amo	IV (c): Co	principal amo	IV (d):Cor	principal amo

In all of these cases, the amortization schedule remains unchanged. However, each SCP loan will have a currency composition and lending rate based on the currency composition and cost of its respective single currency pool.

NOTES

For further information, please contact:

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

FINANCIAL PRODUCTS AND SERVICES GROUP
Office of the Vice President and Treasurer
1818 H Street, N.W.
Washington, D.C. 20433

Phone: 202-458-1122 Fax: 202-522-3264

Information on IBRD lending rates can be obtained from the IBRD Web page:

http://www.worldbank.org



INTRODUCTION (continued)

LIBOR-Based Single Currency Loans

The lending rate for LIBOR-based single currency loans is tied to sixmonth LIBOR in each loan currency. It is reset semiannually. The rate is a direct pass-through to borrowers of the Bank's cost of funding for these loans.

Fixed-Rate Single Currency Loans

The lending rate for each fixed-rate single currency loan is set on semiannual rate-fixing dates for loan amounts (Disbursed Amounts) disbursed during the preceding six-month period. The rate remains fixed for such Disbursed Amounts until they are repaid. In effect, a fixed-rate single currency loan is like a series of fixed-rate subloans, comprising as many fixed-rate subloans as semesters in which disbursements occur.

The fixed lending rate is based on the fixed-rate equivalent of sixmonth LIBOR for the loan currency corresponding to the maturities of the Disbursed Amount on its rate-fixing date. It is not a direct pass-through of the Bank's funding costs, and it includes a risk premium to compensate the Bank for market risks incurred in funding these loans.

For the interim period from the date each disbursement is made until its rate-fixing date, interest accrues at the same rate as is applicable to LIBOR-based single currency loans for such period.

ELIGIBILITY FOR SINGLE CURRENCY LOANS

Access to single currency loan terms will be available to all IBRD borrowers, provided that:

- the member has no unconverted VLR82 loans; and
- · the individual borrower, if not the member, also has no unconverted VLR82 loans.2

2 VLR82 loans are currency pool loans that carry the variable lending rate in effect for loans made from 1982-1989. Borrowers may convert these loans to the lending rate offered for new currency pool loans or for single currency pool loans by agreeing with the Bank to amend their loan agreements. For more information on VLR82 loans and the loan conversion process, please see the reverse of this brochure for Bank contacts. For more information on single currency pool loans, see "Offer of Currency Choice for Existing IBRD Currency Pool Loans," dated September 1996.

For further information. please contact:

International Bank for Reconstruction and Development Financial Products and Services Group Office of the Vice President and Treasurer 1818 H Street, N.W. Washington, D.C. 20433 U.S.A.

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Information on IBRD lending rates can be obtained from the IBRD Web page:

http://www.worldbank.org

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Conditions of **IBRD** Loans

Major Terms and

The International Bank for Reconstruction and Development (World Bank) currently offers three loan products for new loan commitments. These products are: currency pool loans, LIBOR-based single currency loans, and fixed-rate single currency loans. The principal terms and conditions of these products are set out in the accompanying table.

INTRODUCTION

This product offering is intended to provide borrowers flexibility to select terms that are consistent with their debt management strategy and suited for their debt servicing capacity. Borrowers may combine currency loan pool terms and/or single currency loan terms to finance parts of the same project orprogram.

Currency Pool Loans

IBRD borrowers may select currency pool loan terms for new loans. The currency composition of borrowers' currency pool loan obligations reflects that of the currency pool and is the same for all borrowers. At least 90% of the US dollar equivalent value of the currency pool is maintained in fixed currency ratios of 1 US dollar: 125 Japanese yen: 2 Deutsche markequivalent. These ratios have been maintained since 1991, were reviewed in 1996, and are next expected to be reviewed by the Bank's Executive Directors in 2001

The lending rate for currency pool loans is reset semiannually. It is a direct pass-through to borrowers of the Bank's cost of funding for these loans, as recalculated each June 30 and December 31. Under current policy guidelines approved by the Bank's Executive Directors, at least 85% of this funding is medium-to long-term fixed rate funding. As a result, the lending rate for currency pool loans has low volatility.

Single Currency Loans

"Eligible" IBRD borrowers (as defined on the overleaf) may select LIBOR-based and fixed-rate single currency loan terms for new loans. Single currency loans are offered in currencies of sufficient borrower demand in which the Bank can efficiently fund itself. As of the date of this brochure, the Bank is offering single currency loans in Deutsche mark, Frenchfrancs, Japanese yen, Netherlands guilders, pounds sterling, Swiss francs and US dollars. It would need to evaluate borrower requests before offering single currency loans in other currencies. Single currency loans are not offered in the currency of any borrowing member.

September 1996

In the case of French francs, all references to LIBOR should be read as PIBOR.

PRINCIPAL TERMS AND CONDITIONS OF IBRD LOANS						
LOAN TYPE	CURRENCY POOL LOANS	LIBOR-BASED SINGLE CURRENCY LOANS	FIXED-RATE SINGLE CURRENCY LOANS			
BORROWERS	· Offered to all IBRD borrowers.	· Offered to all eligible IBRD borrowers.	· Offered to all eligible IBRD borrowers.			
LOAN CURRENCIES	 Currency pool loans are multicurrency obligations, committed in US dollars equivalent. Each borrower's loan obligation is a share of the currency pool and has the same currency composition as all other currency pool loans. At least 90% of the US dollar equivalent value of the currency pool is maintained in fixed currency ratios of 1 US dollar: 125 Japanese yen: 2 Deutsche mark equivalent (comprised of Deutsche mark, Swiss francs and Netherlands guilders). Currencies recalled by the Bank for borrowers' debt service are based on the currency composition of the pool. The Bank retains the right to revise the targeted currency ratios for the currency pool. The targeted currency ratios are next expected to be reviewed by the Bank's Executive Directors in 2001. 	 Committed and repayable in the currency of the loan, as selected by the borrower. Currently offered in Deutsche mark, French francs, Japanese yen, Netherlands guilders, pounds sterling, Swiss francs and US dollars. Borrowers may contract single currency loans in more than one currency tranche to obtain multicurrency liabilities in preferred currency compositions. In the unlikely event the Bank is not able to obtain the loan currency, it retains the right to replace the loan currency by a substitute currency until the Bank's access to that currency is restored. The exchange risk and cost of currency substitution will be pooled and shared by all borrowers with single currency loans in the substituted currency. 	 Committed and repayable in the currency of the loan, as selected by the borrower. Currently offered in Deutsche mark, French francs, Japanese yen, Netherlands guilders, pounds sterling, Swiss francs and US dollars. Borrowers may contract single currency loans in more than one currency tranch to obtain multicurrency liabilities in preferred currency compositions. In the unlikely event the Bank is not able to obtain the loan currency, it retains the right to replace the loan currency by a substitute currency until the Bank's access to that currency is restored. The exchange risk and cost of currency substitution will be pooled and shared by all borrowers with single currency loans in the substituted currency. 			
LENDING RATE	The variable lending rate is comprised of the semester average cost of outstanding debt allocated to fund these loans (recalculated each June 30 and December 31), plus a lending spread. The contractual lending spread is 50 basis points. The lending rate is reset semiannually each January 1 and July 1 and applies to interest periods beginning on or after those dates.	 The variable lending rate is comprised of a base rate and a total spread. The base rate is equal to six-month LIBOR for value at the start of an interest period. The total spread comprises the Bank's weighted average cost margin relative to six-month LIBOR for funding allocated to LIBOR-based single currency loans (recalculated each June 30 and December 31), plus a lending spread. The contractual lending spread is 50 basis points. The lending rate is reset semiannually, on each interest payment date, and applies to interest periods beginning on those dates. 	 The fixed lending rate is comprised of a base rate and a total spread. It is so on the semiannual rate-fixing date for loan amounts disbursed during the preceding six-month period (Disbursed Amount). The lending rate remain fixed for each Disbursed Amount until it is repaid. The base rate is defined as the equivalent of six-month LIBOR in the single current for value on the rate-fixing date, expressed as a single fixed interest rate based of the fixed interest rates that correspond to the maturities of the Disbursed Amount. The total spread (determined each June 30 and December 31) comprises the Bank's cost margin for funding allocated to fixed-rate single currency loans in the loan currency, a market risk premium, and a lending spread. The contractual lending spread is 50 basis points. For the interim period from the date each disbursement is made until its rate-fixing date, interest accrues at the same rate as is applicable to LIBOR-based sing currency loans for such period. 			
COMMITMENT FEE	The contractual commitment fee is 0.75% p.a. on undisbursed loan amounts, beginning 60 days after the loan agreement is signed.	 The contractual commitment fee is 0.75% per annum on undisbursed loan amounts, beginning 60 days after the loan agreement is signed. 	 The contractual commitment fee is 0.75% per annum on undisbursed loan amoun beginning 60 days after the loan agreement is signed. 			
PAYMENT DATES	Debt service payments are due on the 1st or 15th of a month, in regular six-month intervals.	 Debt service payments are due on the 15th of a month, in regular six-month intervals. 	 Debt service payments are due on the 15th of a month, in regular six-mon intervals. 			
REPAYMENT PREMIUM	A prepayment premium schedule is specified in the loan agreement for these loans. The premium may be waived under certain conditions.	 The prepayment premium will be determined on the basis of the Bank's redeployment costs. The premium will be waived if a substitute currency is outstanding. 	 The prepayment premium will be determined on the basis of the Bank redeployment costs. The premium will be waived if a substitute currency is outstanding. 			

All borrowers will receive an unconditional annual reduction of 0.50% of the 0.75% contractual commitment fee on undisbursed loan amounts.

DISBURSEMENT PERIOD AND REPAYMENT TERMS OF IBRD LOANS

All IBRD loans disburse as projects and programs are being implemented. The disbursement period for project loans frequently extends over six to nine years. Structural and sectoral adjustment loans and other non-project loans are usually disbursed more quickly than project loans (i.e., within one to three years).

Currency Pool Loans and LIBOR-Based Single Currency Loans

The grace period and final maturity for currency pool loans and LIBOR-based single currency loans are based on country criteria. In the table below, country categories represent lower (I–II), middle (III) and higher (IV–V) income borrowing members. There is some flexibility to tailor loan repayment terms to match project requirements within the country guidelines shown.

Country Category	Grace Period (years)	Final Maturity (years)	Amortization Pattern
1 - 11	5	20	annuity
III	4	17	annuity
	5	17	level repayment of principal
IV - V	3	. 15	annuity
	5	15	level repayment of principal

Fixed-Rate Single Currency Loans

Repayment terms for fixed-rate single currency loans are determined by the length of the disbursement period expected at the time the loan is made, as shown below. The amortization pattern for fixed-rate single currency loans is level repayment of principal for each Disbursed Amount.

Expected Total Disbursement Period (years)	Grace Period for each Disbursed Amount (years)	Final Maturity for each Disbursed Amount (years)	Final Loan Maturity from Date of Approval (years)
0 - 3	3	12	12 - 15
3 - 6	3	9	12 - 15
more than 6	3	6	12 - 20¹
(3)			

¹ For middle and higher income borrowing members, overall loan repayment terms would be limited to 17 years and 15 years, respectively.



POOL UNIT APPROACH TO CURRENCY POOL LOANS



STATEMENT BY THE DIRECTOR OF THE LOAN DEPARTMENT

The Currency Pooling System, effective since 1980, will be modified to a Pool Unit Approach for accounting and billing purposes in response to borrowers' concerns that the current indexing approach is too complex. This change is being made as one of our primary enhancements of the Loan Administration Modernization Project.

We first advised Bank borrowers of this forthcoming change in 1993 and are now pleased to announce that we plan to implement the new approach in October 1995.

The Pool Unit Approach is a logical extension of targeting the currency composition of the pool, which made the currency composition of borrowers' loan obligations more predictable. The Pool Unit Approach is intended to simplify borrowers' accounting procedures and to facilitate comprehension of their loan obligation to the IBRD.

This brochure has been produced to explain the Pool Unit Approach and to describe the changes that will be made in the accounting and billing information we provide regarding currency pool loans.

V. S. Raghavan Director, Loan Department

Summary

This brochure summarizes the changes in IBRD's approach to accounting and billing for Currency Pooling System (CPS) loans, to be implemented on October 1, 1995. The present index-based approach to presenting CPS loan information requires the use of several indices which, borrowers have indicated, makes it difficult for them to monitor and verify their loan obligations to the Bank. The new Pool Unit Approach, which uses the concept of loan pool units to express these obligations, will help borrowers improve the monitoring of their loan accounts.

Under the Pool Unit Approach, the outstanding principal (not yet due) amount of the loan is represented by a certain number of pool units. The value of each pool unit is the same for all currency pool loans and for all borrowers. The principal and interest charges due will be exactly the same under this Approach as under the current indexing approach.

This new approach will not modify any of the legal provisions or change the established contractual payment obligations of the borrowers under the Loan Agreement.

Pool Unit Approach to Currency Pool Loans

Introduction

Prior to July 1980, the IBRD offered loans which were committed in US dollar equivalents but disbursed in various currencies and repayable in the currencies disbursed. This type of lending was suitable to IBRD borrowers when the major currencies were fixed to the US dollar. However. with the wide exchange rate fluctuations in the seventies, IBRD borrowers encountered some problems in financing their loan obligations. The different currency composition of each loan also created inequities in the exchange risk exposure among IBRD borrowers. To remedy these inequities, the Currency Pooling System (CPS) was introduced in 1980. Its objective was to ensure that all borrowers shared equally in the currency composition of Bank loans and the risk associated with exchange rate fluctuations. In 1989. to improve the predictability of the currency composition in the pool and reduce the volatility of borrowers' obligations, the targeted currency pool was adopted.

The targeted currency pool, however, solved only part of the problem. The index-based approach to calculating borrowers' obligations still remained. In order to monitor their indebtedness or to verify their bills, borrowers were required to perform computations using several indices. These included the revaluation factor (RF), which measures daily changes in the dollar value of the pool; the cumulative revaluation factor (CRF), which measures changes in the value of a transaction or loan balance over a given period and which is mainly used for calculating interest; and the amortization adjustment factor (AAF), which is used to determine the value of the repayment obligation.

The new Pool Unit Approach will eliminate index calculations and make it simpler for borrowers to monitor and verify their loan accounts.

Pool Unit Concept

Under this new approach, for billing purposes, the total principal amount withdrawn and outstanding (not yet due) under each CPS loan will be represented as a number of pool units with each unit having the same value (the pool unit value). At any point in time, borrowers will be able to compute their obligations by knowing the number of pool units outstanding on their loans and the current pool unit value.

The daily pool unit value will be calculated at the beginning of each day by translating all currencies in the pool to U.S. dollars and dividing by the number of units outstanding. The unit value will be common to all loans in the pool. As of any day, a borrower's obligation for a loan in U.S. dollars equivalent value would be determined by the number of pool units outstanding for that loan multiplied by the pool unit value.

The basic concept is that withdrawals will be recorded in both USD equivalent and in pool units. Repayments will be determined by multiplying the number of pool units due by the pool unit value on the due date, to arrive at the USD equivalent of the principal to be recalled. The amount of principal repayments and interest charges will be the same under this approach as under the current practice using AAF. Also, the key features of the CPS will be retained except the RF, CRF, and AAF. The central disbursement account (CDA), where currencies disbursed and outstanding debts are recorded, will continue to be revalued daily. This account will show currency amounts only. borrowers' sub-accounts, in which the dollar equivalent of the daily transactions are recorded, will also show the equivalent number of pool units.

The Pool Unit Approach will have no impact on loan commitments and cancellations since these transactions do not change the value of the pool. These transactions will continue to be expressed in US dollar equivalents.

Benefits to Borrowers

This approach to currency pool loans offers two main benefits to borrowers that were not previously available under the Currency Pooling System. The benefits are:

Simplified presentation of currency pool billings; and

 Facilitated monitoring and verification, without index-based calculations.

Pool Unit Value

When the Pool Unit Approach is implemented on October 1, 1995, the pool unit value will be determined on that date by recomputing the value per unit from the time of the pool's inception. The initial pool unit value will be set at USD 10,000 based on the initial value set when the CPS was introduced in July 1980. This value was chosen because: (a) 85% of all transactions in the CPS since its inception were valued at USD 10,000 or more, therefore, 85% of the transactions will be worth, at least, one pool unit, and (b) the total current amount of the pool is about USD 113 billion, so starting with USD 10,000 will give a manageable number of pool units disbursed and outstanding. The initial pool unit value will change daily in accordance with movements of exchange rates of the currencies in the pool. As of January 1, 1995, the total currency pool value was USD 100.42 billion and the pool unit value would have been USD 14.544.99. The computation is based on the

US dollar equivalent of the currencies outstanding in the pool divided by the number of outstanding units:

(Initial Value of the Pool Unit on 1/1/81)

Equivalent USD outstanding	=	\$23,033.43
Number of units outstanding	=	2.30
Pool unit value (rounded)	=	\$23,033.43 / 2.30
	=	\$10,000

(Value of the Pool Unit on 1/1/95)

Equivalent USD outstanding	=	\$100.42 billion
Number of units outstanding	=	6.90 million
Pool unit value (rounded)	=	\$100.42 / 6.90
American Company of the Company of t	=	\$14,554

Our system will use ten decimal points to determine the precise value of the pool unit and the report "Pool Unit Value in US dollars" which will be made available to borrowers will show ten decimal points. Billing statements, however, will display only two decimals.

Loan Disbursements

The currency disbursed will be converted into US dollar equivalent using the applicable exchange rate (AER) on the day of disbursement. The US dollar equivalent will then be divided by the pool unit value as of the day of disbursement to arrive at the number of pool units disbursed. This number of pool units will then be added to the total outstanding number of pool units.

For example:

Disbursed on 1/1/95: DEM 100,000.00

AER on 1/1/95: 1.5761

Pool unit value on 1/1/95

Pool units disbursed = 100,000.00 / 1.5761

= \$63,447.75 / \$14,544.99

= 4.36 units

Loan Repayments

Borrowers are requested by the Bank to repay their loans in semiannual installments, with the closing date of the billing cycle falling months before the payment due date. The number of pool units to be recalled on a loan will be determined by taking the maturity repayment ratio (MRR) and applying this ratio (expressed as percentage) to the total number of pool units outstanding on the loan. The MRR is calculated by dividing the repayment amount (from the amortization schedule) to the total historical US dollar equivalent of withdrawals outstanding as of the billing date. To determine the amount to be repaid in a particular currency, the number of pool units to be recalled will be multiplied by the pool unit value, and the AER will then be applied.

For example:

Billing date:	1/1/95
Amortization as per schedule:	\$500,000
Withdrawals outstanding, 1/1/95:	\$5,000,000
Pool units outstanding on loan, 1/1/95:	565
Pool unit value, 1/1/95:	\$14,544.99
Currency of recall:	Deutsche mark
AER: (DEM/USD)	1.5761

Therefore, loan repayment is determined as follows:

MRR = \$500,000 / \$5,000,000 = 10%

Number of pool units		
to be recalled	=	$565 \times 10\% = 56.50$
US\$ equivalent amount		
to be recalled	=	56.50 x \$14,544.99
	=	\$821,791.93
Amount to be recalled		
in DEM	=	\$821,791.93 x 1.5761
	=	DEM 1,295,226.26

Interest

The computation of interest to be paid by borrowers on a loan on due date will be based on the interest expressed in units (IEU). The daily IEU for a loan will be determined by multiplying the total pool units outstanding for that loan by the daily interest rate (annual rate / 365 or 366). The IEU will be accumulated daily over six months, coinciding with the payment period the loan. The total accumulated IEU will then be multiplied by the pool unit value as of the billing date to arrive at the US dollar equivalent amount of interest. Since the bill will be sent to the borrower two months in advance of the due date. the IEU for the first four months will be actual. while the IEU for the next two months will be estimated. On the due date, the definitive amount will be calculated and any difference will be deferred for settlement on the next due date.

For example:

Total pool units outstanding:	565
Daily interest rate:	7.11% / 365
•	= .01947945205%
Actual number of days elapsed:	122
Number of days remaining	
in the interest period:	61
Total number of days:	183
Pool unit value:	\$14,544.99

Daily IEU	=	565.00 x .01947945205%
	=	.1100589041
Cumulative IEU	=	.1100589041 x 183
	=	20.1407794503
Interest due in US\$		
equivalent	= 20	0.1407794503 x \$14,544.99
	=	US\$ 292,947.44
Interest due in DEM	=	US\$292,947.44 x 1.5761
	=	DEM 461,714.46

Interest Waiver

There will be no change in the index approach to CPS loans as to how the partial waiver of interest given to eligible borrowers is calculated.

Commitment Charges

The Pool Unit Approach will have no impact on the calculation of commitment charges. These charges will still be calculated based on the daily unwithdrawn balance, expressed in US dollars, multiplied by the daily commitment rate, and accumulated daily over six months coinciding with the payment period of the loan.

Billing and Related Reports

Billing statements will continue to be sent semiannually and will consist of:

- o Payment Instructions
- o Summary Statements of Amounts Due
- o Statement of Interest Due
- o Statement of Commitment Charges Due
- Statement of Debt Service Amounts
 Received and Applied
- o Statement of Account Principal Activity

The following additional reports will be made available to borrowers:

- o Pool Unit Value in US dollars
- o The Currency Composition of the Pool in Major Currencies
- o Central Disbursement Account Summary

Implementation

The IBRD expects the Pool Unit Approach will be adopted October 1, 1995.

Any questions should be addressed to:

Mr. Malcolm J. Johnson, Division Chief, or

Mr. Robert Drake, Section Chief

Loan Accounting and Borrower

Services Division, Loan Department

The World Bank

1818 H Street, NW

Washington DC 20433

Telephone: (202) 477-1234 Fax: (202) 477-6391

Abbreviations amortization adjustment factor AAF applicable exchange rate AER Currency Pooling System **CPS** cumulative revaluation factor CRF Deutsche mark DEM interest expressed units IEU maturity repayment ratio MRR revaluation factor RF US dollar USD



The World Bank

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street N.W. Washington, D.C. 20433 U.S.A. (202) 477-1234 Cable Address: INTBAFRAD

Cable Address: INDEVAS

September 1996

[Addressee] [Company] [Address] [City] [Country]

Re: Currency Choice for Existing Currency Pool Loans

Dear [Salutation]:

- 1. As you know, on June 25, 1996, the Bank's Executive Directors approved a proposal to remove the volume limits on the Bank's single currency loan program and to offer currency choice to borrowers for existing currency pool loans through the amendment of the existing terms of the loan agreements providing for these loans.
- 2. This letter and its enclosures have been prepared for the following purposes: (a) to inform [Borrower] (the Borrower) of the various currency choice options approved by the Bank's Executive Directors and the terms and conditions on which such options may be exercised by the Borrower, (b) to assist the Borrower in making an informed judgment regarding whether it wishes to avail itself of any of these options, and (c) to enable the Borrower to request the conversion of one or more of the currency pool loans made by the Bank to the Borrower, should the Borrower decide to avail itself of any of these options. Please note that the Borrower is free to choose any of the available options, but that it is not required to do so. Its choice should be made on the basis of a thorough analysis of the options, since the Bank assumes no responsibility for the Borrower's choice.

3. <u>Enclosures</u>. Enclosed you will find:

- (a) a package of materials describing the currency choice options in further detail, including a list of persons in the Bank you may contact if you have further questions about the options;
- (b) the Bank's "Provisions for Conversion of Currency Pool Loans", dated September 1, 1996, together with the Bank's "General Conditions Applicable to Loan and Guarantee Agreements for Single Currency Loans", dated May 30, 1995; and

- (c) [two or three] originals of a form of letter of request from the Borrower (the Letter of Request) with an attachment listing the currency pool loans made to the Borrower which are eligible for conversion, together with a self-addressed return envelope to be used by the Borrower when it returns the Letter of Request to the Bank (one original is for the Borrower's records, [a second original is for the Guarantor's records] and the other original is to be returned to the Bank if the Borrower wishes to convert the terms of any of its loans).
- 4. **Options.** Under the offer of currency choice, the Borrower may convert the terms of any of the Loans listed in the attachment to the Letter of Request as follows:
- (a) it may convert the disbursed Loan balance and undisbursed Loan amount (to the extent the undisbursed Loan amount is not converted to Single Currency Loan terms) to Single Currency Pool terms;
- (b) it may convert the *undisbursed* Loan amount to *Fixed Rate Single Currency Loan terms*; or
- (c) it may convert the *undisbursed* Loan amount to *LIBOR-based Single* Currency Loan terms.
- 5. **Borrower's Exercise of Options.** If the Borrower wishes to convert the terms of any of the Loans listed in the attachment to the Letter of Request, please:
- (a) designate how it wishes to convert the terms of such Loan by: (i) specifying the project name and loan number in the appropriate boxes in the attachment to the Letter of Request that corresponds to the conversion option selected for such Loan; (ii) marking with an "X" in the appropriate box in the attachment, the currency it has selected for such Loan; and (iii) having the duly authorized representative of the Borrower sign in the space provided in the attachment for each conversion option selected;
- (b) confirm the Borrower's request for the respective amendments to the Loan Agreement, set forth in the "Provisions for Conversion of Currency Pool Loans", dated September 1, 1996, for each Loan it wishes to convert by having the duly authorized representative of the Borrower sign the Letter of Request in the space provided [and have the Guarantor of such Loan(s) confirm its agreement to such request by having the duly authorized of the Guarantor sign also sign in the Letter of Request in the space provided];
- (c) set forth in the space provided on the last page of the attachment to the Letter of Request a written statement of the terms selected for each Loan (i.e., Single Currency Pool, Fixed Rate Single Currency Loan or LIBOR-based Single Currency Loan and the currency choice) and an explanation of the reasons for each such selection and

September 1996

3

have the duly authorized representative of the Borrower sign in the space provided on the last page;

- (d) indicate in the space provided in the Letter of Request the appropriate person to contact should the Bank have questions about the Letter of Request; and
- (e) return the completed and signed Letter of Request and attachment to the Bank in the self-addressed envelope enclosed for this purpose.
- 6. <u>Bank Follow-up</u>. If and when the Bank receives a Letter of Request from the Borrower, it will review the request for each Loan. If the Bank agrees to the request made for that Loan, it will send the Borrower a letter (Letter of Acceptance), confirming the Bank's agreement, except in the situations described in paragraph 7 below. The Borrower's Letter of Request, together with the Bank's Letter of Acceptance, will constitute a binding agreement amending the terms of the Loan Agreement for that Loan in accordance with the Borrower's request. Such amended agreement will enter into effect on the date indicated in the Letter of Acceptance. If, however, the Bank agrees to the request, but determines that the required amendments cannot be made as set forth in the Provisions for Conversion of Currency Pool Loans, dated September 1, 1996, then the Bank will process the relevant amendments by a separate exchange of letters between the Borrower and the Bank. The full text of the amendments requested by the Borrower pursuant to the Provisions and accepted by the Bank, including the revised amortization and disbursement schedules (if any), will be attached to the Letter of Acceptance.

7. The following situations will require special treatment:

- (a) <u>Unsigned Loan Agreements</u>. Since all of the Loans to the Borrower for which invitations to negotiate were sent out before September 1, 1996, are eligible to have their terms converted to any one of the above options, you will note that for some of the Loans listed in the attachment to the Letter of Request, the loan agreements may not yet have been negotiated or may have been negotiated but not yet have been signed. If the Borrower designates one of the above options for these Loans, the terms selected will form the basis of negotiations in the case of loans not yet negotiated and will be reflected in the documents to be signed in the case of negotiated but not yet signed agreements.
- (b) <u>Single Currency Loans: Tranches of Several Currencies, Unlisted Currencies or Interest Rate Bases</u>. Please note that the conversion options included in the attachment to the Letter of Request provide only for conversion to Single Currency Loan terms in *one* of the following currencies for each Loan: *CHF, DEM, FRF, GBP, JPY, NLG, and USD*; and only for conversion to either *Fixed Rate or LIBOR-based* terms. If the Borrower wishes to convert the undisbursed balance of any of its Loans to Single Currency Loan terms in tranches of more than one currency or to Single Currency Loan terms in tranches each bearing a different interest rate basis, or to Single Currency Loan terms in a currency not listed, it may indicate the requested currency or currencies

(other than the Borrower's domestic currency) or the requested interest rate bases in the attachment to the Letter of Request; the necessary amendments to the Loan Agreement for that Loan will then be processed individually by a separate exchange of letters between the Borrower and the Bank. The Bank does not offer Single Currency Loans in borrowers' domestic currencies, and the Bank will be able to honor a request for a currency not listed only if the currency requested is one in which the Bank determines it can appropriately fund itself and there is sufficient demand from borrowers.

- (c) <u>Major Amendments</u>. In the event the Bank determines that the Borrower's request for conversion of the terms of a particular Loan would require a significant revision in the Project design, the Bank will inform the Borrower of the additional steps that would be required before the conversion could take place.
- 8. <u>Single Currency Pools: Only One Single Currency Pool per Loan</u>. Please note that while the conversion options included in the attachment to the Letter of Request refer to four Single Currency Pools (CHF, DEM, JPY, USD), the terms of each Loan listed in said attachment may be converted to provide for only *one* of the four *Single Currency Pools* (i.e., an individual Loan may not be converted to two or more Single Currency Pools).
- 9. <u>Deadline for Receipt of Requests</u>. Please note that the Bank will not consider requests received from the Borrower after *June 1, 1998*, for conversion of the terms of the Loans listed in the attachment to the enclosed Letter of Request, unless the Bank otherwise notifies the Borrower. If the Borrower wants to convert the terms of some of its Loans while deferring a decision with respect to its other Loans, it may send more than one Letter of Request to the Bank, provided that all Letters of Request are received by the Bank by June 1, 1998.
- 10. <u>Effectiveness of Conversions</u>. You should also be aware that while each conversion will take effect only after the Bank has sent the Borrower its Letter of Acceptance for that particular conversion, on the effectiveness date specified in the Letter of Acceptance, conversions to Single Currency Pool terms will occur only on one of three dates, depending on when the Bank receives a request, in form and substance satisfactory to the Bank, from the Borrower for such conversion: (i) if the request is received on or prior to June 1, 1997, the conversion would, subject to the Loan Agreement's being effective, occur on July 1, 1997; (ii) if the request is received after June 1, 1997, but on or prior to December 1, 1997, the conversion would, subject to the Loan Agreement's being effective, occur on January 1, 1998; and (iii) if the request is received after December 1, 1997, but on or prior to June 1, 1998, the conversion would, subject to the Loan Agreement's being effective, occur on July 1, 1998.

11. <u>Further Information</u>. If you have any questions regarding the foregoing, please contact any of the persons indicated in the attached materials.

Very truly yours,

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By	
Authorized	Representative

[Borrower]

International Bank for Reconstruction and Development 1818 H Street, N.W. Washington, D.C. 20433 U.S.A.

Attention:

Financial Products and Services Group Office of the Vice President and Treasurer

Re: <u>Currency Choice for Existing Currency Pool Loans</u>

Dear Sir/Madam:

- 1. We have received your letter of September 1996, regarding currency choice for our existing currency pool loans, together with the enclosures referred to in said letter. We have reviewed your letter and its enclosures and have had an opportunity to inform ourselves fully of the three conversion options available to [Borrower] (the Borrower) in respect of each Loan set forth in the attachment to this Letter of Request, namely:
- (a) convert the disbursed Loan balance and undisbursed Loan amount (to the extent the undisbursed Loan amount is not converted to Single Currency Loan terms) to Single Currency Pool terms (Option 1);
- (b) convert the undisbursed Loan amount to Fixed Rate Single Currency Loan terms (Option 2); or
- (c) convert the undisbursed Loan amount to LIBOR-based Single Currency Loan terms (Option 3).
- 2. We wish to inform you that the Borrower requests conversion of the terms of the Loans specified in the attachment to this Letter of Request as follows:

Option 1: Conversion to Single Currency Pool Loan Terms.

3. The Borrower requests that each Loan Agreement for a Loan set forth in the attachment to this Letter of Request whose disbursed Loan balance and undisbursed Loan amount (to the extent the undisbursed Loan amount is not converted to Single Currency Loan terms) is designated to be converted to Single Currency Pool terms, be amended as provided in Chapter II of the Provisions for Conversion of Currency Pool Loans dated September 1, 1996 (the "Provisions").

4. <u>Designated Currency</u>. The currency selected by the Borrower in the attachment to this Letter of Request as the designated currency of each Loan (or designated portion thereof) referred to in paragraph 3 of this Letter of Request shall constitute, for such Loan, the Designated Currency referred to in Section 2.01(22) of the General Conditions Applicable to Loan and Guarantee Agreements, set forth in the Schedule to the Provisions.

Option 2: Conversion to Fixed Rate Single Currency Loan Terms.

5. The Borrower requests that each Loan Agreement for a Loan referred to in the attachment to this Letter of Request whose undisbursed Loan amount is designated to be converted to Fixed Rate Single Currency Loan terms in one currency, be amended as provided in Chapter III of the Provisions.

Option 3: Conversion to LIBOR-based Single Currency Loan Terms.

6. The Borrower requests that each Loan Agreement for a Loan set forth in the attachment to this Letter of Request whose undisbursed Loan amount is designated to be converted to LIBOR-based Single Currency Loan terms in one currency, be amended as provided in Chapter IV of the Provisions.

Options 2 and 3: Single Currency Selected.

7. The currency selected by the Borrower in the attachment to this Letter of Request as the denominated currency of each Loan (or designated portion thereof) referred to in paragraph 5 or 6 of this Letter of Request shall constitute, for such Loan, the Single Currency referred to in Section 2.01(12) of the General Conditions Applicable to Loan and Guarantee Agreements for Single Currency Loans, dated May 30, 1995, of the Bank.

Other Conversions.

8. With reference to paragraph 7(b) of your letter of September 1996, the Borrower requests that the Loan Agreement for each Loan (if any) referred to in the attachment to this Letter of Request which the Borrower wishes to be converted under Option 2 or 3, but for which more than one currency or an unlisted currency or more than one interest bases or a combination of these options is requested, be amended as indicated in page 4 of said attachment. The Borrower understands that if the Bank agrees to these requests, it will process the amendments through further exchanges of letters between the Bank and the Borrower.

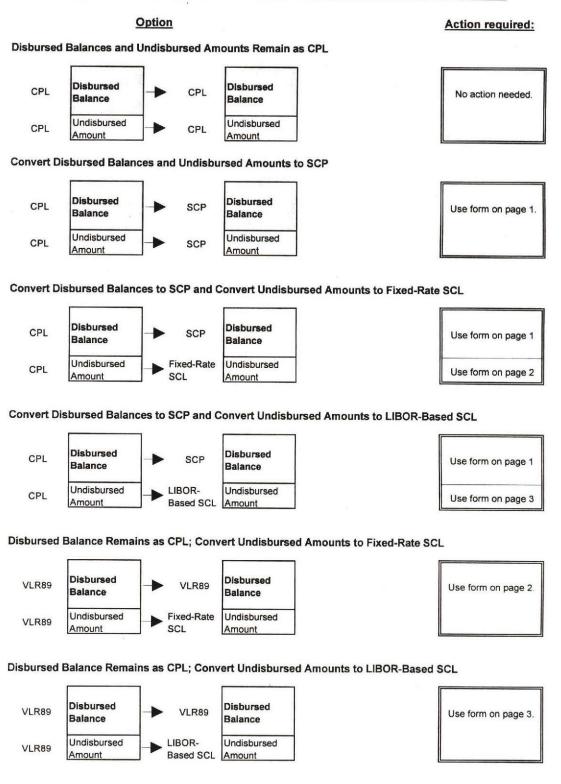
Definitions.

- 9. For purposes of the attachment to this Letter of Request, the following terms have the meanings set forth below:
 - (a) "CHF" means the lawful currency of Switzerland.

- (b) "DEM" means the lawful currency of the Federal Republic of Germany.
- (c) "FRF" means the lawful currency of the Republic of France.
- (d) "GBP" means the lawful currency of the United Kingdom.
- (e) "JPY" means the lawful currency of Japan.
- (f) "NLG" means the lawful currency of The Kingdom of the Netherlands.
- (g) "USD" and "\$" each means the lawful currency of the United States of America.
- 10. We understand that, unless the Bank otherwise notifies the Borrower, the Bank will not consider any requests for conversion of the terms of the Loans referred to in the attachment to this Letter of Request which are received by the Bank after June 1, 1998.
- 11. We understand that, with respect to each Loan Agreement the Borrower has requested to be amended pursuant to this Letter of Request, this Letter of Request, together with the Bank's Letter of Acceptance hereof, will constitute a valid and binding agreement amending the terms of such Loan Agreement as specified herein. The Borrower hereby represents that it is authorized to make the request for such amendment as specified herein and to enter into such binding agreement. This representation is made pursuant to the provisions of the General Conditions applicable to the Loan provided for under such Loan Agreement relating to action on behalf of the Borrower, which provide that any modification of the provisions of the Loan Agreement may be agreed to by the person designated by the Borrower for that purpose, provided that, in the opinion of such person such modification is reasonable in the circumstances and will not substantially increase the obligations of the Borrower under the Loan Agreement.
- 12. The Borrower confirms that it has been given the opportunity to obtain such additional information from, and ask such questions of, Bank staff as it considered necessary to evaluate the potential risks and merits of exercising the loan conversion options available to it. Thus, it assumes sole responsibility for the requests specified in the Letter of Request.

(insert name, address person).	, facsimile/telephone number/electroni	c mail address of appropriate
	Very truly yours,	
	[BORROWER]	
	ByAuthorized Representative	_
	NameTitleDate	
[AGREED:] [Guarantor]		
[By: [Authorized Representa as set out in the applica Guarantee Agreement]	ative able	
[Name: [Title:	<u>]</u>	

Summary of Options for Conversion of Existing Currency Pool Loans



Option 1: Conversion to Single Currency Pool Terms of the Disbursed Loan Balance and Undisbursed Loan Amount (to the Extent the Undisbursed Loan Amount is Not Converted to Single Currency Loan Terms)

	Designated Currency (one currency per loan) Please mark "X" in proper column			
Loan No.	USD	JPY	DEM	CHF
*				
		4		
		i k		
		•		
				ļ
				-
	Loan No.	Loan No. USD	Loan No. USD JPY JPY	(one currency per loan) Please mark "X" in proper colum Loan No. USD JPY DEM

Name of Borrower	
Ву	: Authorized Representative
	Authorized Representative
Title	ī
Data	

Option 2: Conversion to Fixed Rate Single Currency Loan Terms of the *Undisbursed* Loan Amount

		Denominated Currency (one currency per loan*) Please mark "X" in proper column						
Project Name	Loan No.	USD	JPY	DEM	CHF	NLG	FRF	GBP
	-							
		-						
					1			
								-
				-				
<u> </u>			-	-				-

ivallie of Bollower.	
By	
	Authorized Representative
Title	
Doto	

^{*} If more than one currency is requested, use page 4. Please note that in such case a further exchange of letters between the Bank and the Borrower will be necessary.

Option 3: Conversion to LIBOR-based Single Currency Loan Terms of the *Undisbursed* Loan Amount

		Denominated Currency (one currency per loan*) Please mark "X" in proper column						
Project Name	Loan No.	USD	JPY	DEM	CHF	NLG	FRF	GBP
		<u> </u>						
	_	-						
								-
,								
		-				-		
	•							
		-		-		-		-
		J						

	Name of Borrower:
	By:
uthorized Representative	ALT - CA-CALCO
	Title:
	Date:

^{*} If more than one currency is requested, use page 4. Please note that in such case a further exchange of letters between the Bank and the Borrower will be necessary.

Conversion Requests Not Covered by Pages 1, 2 or 3 of this Attachment*

Project Name	Loan No.	Description of Request
900		
	-	
	Name o	f Borrower:
		Ву:

	ne of Borrower:
	By:
Authorized Representative	
	Title:
	Data

^{*}For each conversion request, a separate exchange of letters will be necessary.

Borrower's Explanatory Statement

The Borrower's selection and the reasons for its selection (i.e., Fixed Rate Single
Currency Loan, LIBOR-based Single Currency Loan or Single Currency Pool and the
currency choice) of the terms as indicated in the attachment to the Letter of Request are as
follows: (A separate explanation for each Loan should be provided unless it is stated that
the same rationale applies to more than one Loan.)
Name of Borrower:
By:
Authorized Representative
Authorized Representative
Title:
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Margaret Png A:\LETTER.DOC February 26, 1997 6:01 PM Expanded
Distance
Currency
Education
Choice for
Program
IBRD Loans

Solutions
November 1997

Exercise Solutions

In the case of multiple choice questions, a short explanation of the answer is given where the answer is not self-explanatory.

Exercise 1

Scenario 1

	Loan in US		n USD		Loan in		
	Export	Debt	Net	Debt	Exchange	Debt	Net
	earnings	service	income	service	rate	service	income
	(USD)	(USD)	(USD)	(DEM)	(DEM/USD)	(USDeq)	(USDeq)
Year 1	110	100	10	160	1.6	100	10
Year 2	110	100	10	160	1.8	88.89	21.11

Scenario 2

	Loan in		n USD		Loan ir		
	Export earnings (USD)	Debt service (USD)	Net income (USD)	Debt service (DEM)	Exchange rate (DEM/USD)	Debt service (USDeq)	Net income (USDeq)
Year 1	110	100	10	160	1.6	100	10
Year 2	110	100	10	160	1.4	114.29	(4.29)

Exercise 2

1. d.

2. b.

The other choices are incorrect for the following reasons:

- (a) We believe your choice of financing terms should be based primarily on risk minimization, as opposed to cost minimization considerations.
- (c) The offer of choice does not diversify financing sources; the lender is still the IBRD.
- (d) The choice usually involves tradeoffs between risk and cost considerations.

3. c.

4. c

Repayment terms for LIBOR-based SCLs are based on country criteria, while those of fixed-rate SCLs are based on the expected disbursement period of the project.

d.	
f.	
f.	
xercise 3	
b .	
. c. a) and (b) apply to CPLs.	
. f.	
. d.	
. g. a) and (c) refer to fixed-rate SCLs.	
. с.	
a.	
. е.	
. e. cone-year reduction in final maturity would allone grace period.	ow for a 6-month increase in
0. c.	
1. e.	
Exercise 4	
 c. a) is incorrect because the rates are not fixed at b) is incorrect because the rates are not fixed at hey are fixed on semiannual rate-fixing dates for the fixed at disbursements. 	the time of disbursement;

2. d.

The other choices are incorrect for the following reasons:

- (a) It is composed of a base rate, the Bank's cost margin, a risk premium, and lending spread.
- (b) The fixed base rate is equal to the amortizing swap rate.
- (c) The LIBOR-based SCL lending rate is reset every 6 months on the interest payment date. The fixed lending rate for each Disbursed Amount remains fixed for the remaining life of the loan.
- 3. d.
- 4. c.

(d) refers to the CPL.

5. c

The risk premium is currency-specific; it is not averaged across currencies, unlike the cost spread on the LIBOR-based SCL.

- 6. b.
- 7. b.
- 8. a.

h 0

The other choices are incorrect for the following reasons:

- (a) This only applies to slow-disbursing fixed-rate SCLs.
- (b) For slow-disbursing SCLs, the final maturity date may exceed 15 years for Category I, II, and III countries.
- (c) The final maturity of fixed-rate SCLs cannot be extended using this type of trade-off. However, if the final maturity of a fixed-rate SCL is shorter than the country's standard repayment terms, the unused final maturity can be utilized to extend the final maturity of a LIBOR-based SCL or CPL to the same country in the same fiscal year.

10. d.

The other choices are incorrect for the following reasons:

- (a) The grace period for fixed-rate SCLs is counted from the rate-fixing date.
- (b) For fixed-rate SCLs, grace periods cannot be extended, unlike for LIBOR-based SCLs or CPLs.

11. d.

12. a.

The other choices are incorrect for the following reasons:

- (b) Once it is fixed, the fixed lending rate for each Disbursed Amount remains fixed for the remaining maturity.
- (c) The formula for the amortizing swap is widely used in the market; it was not developed by the World Bank.

13. b.

Exercise 5.3

Part 1

1. c.

The targeted ratios are reviewed by the Bankís Executive Directors every 5 years , or sooner if warranted.

2. b.

(a) is incorrect because the lending rate is based on the semester average cost of outstanding liabilities funding these loans; it is not based on the cost of these liabilities outstanding at two points in time.

3. d.

The lending rate on your CPL is reset on your interest payment date. The CPL lending rate is announced every January 1 and July 1, to apply to interest periods beginning on these semesters.

- 4. b.
- 5. c.
- 6. c.
- 7. c.
- 8. b.

9. a

The other choices are incorrect for the following reasons:

- (b) is the targeted currency composition of a CPL obligation. CPL commitments and disbursements are measured in USD equivalent terms.
- (c) are the currencies currently offered for SCLs.

Part 2

Question 1: Calculate how much each disbursement was worth in CPU terms, using the exchange rates prevailing on each disbursement date.

Year 1:

Disbursement #1 =
$$\frac{50 \text{ USDeq}}{1 \text{ USD} + \frac{2 \text{ DEM}}{1.70 \text{ DEM/USD}} + \frac{125 \text{ JPY}}{123 \text{ JPY/USD}}} = 15.66 \text{ CPUs}$$

Year 2:

Total: 30.47 CPUs

Question 2: Calculate how much your principal payments would be in USD, DEM, and JPY in each year.

Year 3: Principal Payment #1 The first step is to determine how many CPUs you owe in the current year. Multiply the number of CPUs outstanding by the ratio of the principal installment due in USD to the principal amount outstanding (expressed in historical USDeq).

$$30.47 \text{ CPUs x } \frac{31 \text{ USD}}{100 \text{ USD}} = 9.45 \text{ CPUs}$$

Then, multiply the CPU amount due by the currency ratios.

Year 4: Principal Payment #2

$$(30.47 - 9.45)$$
 CPUs x $\frac{33 \text{ USD}}{(100 - 31) \text{ USD}} = 10.05 \text{ CPUs}$

Year 5: Principal Payment #3

Question 3: Calculate how much your principal payments would be in USDeq, using the exchange rates prevailing on the principal repayment dates.

Year 3: Principal Payment #1

USD 9.45 +
$$\frac{18.90 \text{ DEM}}{1.45 \text{ DEM/USD}}$$
 + $\frac{1,181.25 \text{ JPY}}{128 \text{ JPY/USD}}$ = 31.71 USDeq

Year 4: Principal Payment #2 (Hint: Multiply the CPU amount by the currency ratios and then divide the currency amounts due by the exchange rate.)

USD 10.05+
$$\frac{20.10 \text{ DEM}}{1.80 \text{ DEM/USD}} + \frac{1,256.25 \text{ JPY}}{140 \text{ JPY/USD}} = 30.19 \text{ USDeq}$$

Year 5: Principal Payment #3

USD 10.97+
$$\frac{21.94 \text{ DEM}}{1.40 \text{ DEM/USD}}$$
 + $\frac{1,371.25 \text{ JPY}}{95 \text{ JPY/USD}}$ = 41.08 USDeq

How does this compare with the original principal amortization schedule?

	Year 3	Year 4	Year 5	Total
Original amortization schedule	31	33	36	100
Actual amount paid in USD	31.71	30.19	41.08	103

Exercise 6.4

- 1. b.
- 2. c.
- 3. c.

4. a.

However, the pool unit values of the respective SCPs will be different, reflecting the increasing shares in their respective designated currencies.

- 5. d.
- 6. b.

The other choices are incorrect for the following reasons:

- (a) Conversions into SCLs may be made at any time.
- (c) Conversion requests must be submitted to the Bank's Executive Directors only if such conversion requests substantially alter the project design.
- 7. d.

The original amortization schedule remains the same. The Pool Unit Value of the SCP will differ from that of the original currency pool, however.

- 8. e.
- 9. c.

Final exercise

Degree of matching between IBRD loan terms and borrower earnings characteristics

Currency characteristics of earnings	Single foreign currency earnings			Multiple foreign currency earnings		
Interest rate characteristics of earnings	Market- based floating	Market- based fixed	Moving- average variable	Market- based floating	Market- based fixed	average variable
IBRD loan product	rate	rate	rate	rate	rate	rate
LIBOR-based SCL in one currency	1	3	3	3	4	4
LIBOR-based SCL in currency tranches	3	4	4	1	2	3
Fixed-rate SCL in one currency	3	1	2	4	3	3
Fixed-rate SCL in currency tranches	4	3	3	3	1	2
Currency pool loan	4	4	. 3	3	3	1
Conversion						
to SCP terms	3	3	1	4	4	3

Expanded Distance Currency Education Choice for Program IBRD Loans

Study Guide November 1997

Expanded Distance Currency Education Choice for Program IBRD Loans

Study Guide November 1997

The objective of this training program is to facilitate self-paced learning of the World Bank's financial products and present other information about choosing the appropriate instruments for Bank-financed projects. The program is not meant to provide—nor does it provide—all the information needed for detailed planning and selection of particular loan products for a project.

The Bank's terms for its financial products are changed from time to time. The terms described in this program are those that were in effect in November 1997.

Users should thus refer to appropriate documents included in the program's reference list and to Bank staff when dealing with activities in a Bank-sponsored or funded project.

Meant to provide an understanding of the Bank's financial products, this study guide includes some basic risk management principles, but it is not a tutorial on risk management.



GREETINGS FROM WASHINGTON

am delighted to welcome you to our distance education program on the Bank's loan products. I attach great importance to both the medium and to the message.

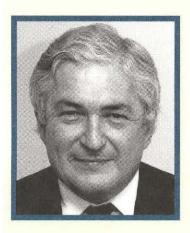
As far as the medium is concerned, this is one of the Bank's first uses of the distance education format. Through a carefully designed curriculum and the use of technology, learners and course leaders are brought together, even though you may be in different locations. You will be able to use the course materials to study in the comfort of your own office or home and to participate as part of a larger group in live interactive sessions.

Our goal is for each of you to be able to learn at your own pace, within the structure of the program, while also benefiting from learning and sharing together. I am excited that distance education has the potential to be an important means by which to provide information and front-line support to you in a timely way.

As to the message, I am pleased that, after many years of offering only one product, the Bank now offers a wide range of currency and interest rate choices, both for new loans and for existing loans. You will learn about these products in this course, and how they can fit into borrowers' debt management strategies.

As I told our Board when the initiative was approved, "We should use the Bank's tremendous intermediation capacity to deliver the full range of financial products our clients need."

Your feedback is crucial to our future product development. Let's keep an open dialogue, so that the Bank can continue to offer products and services that you will find competitive and responsive.



—James D. Wolfensohn,
President,
The World Bank Group

CONTENTS

Course o	bjectives, methods, and overview
Unit 1	Context for selecting IBRD loan products
Unit 2	Common features of the two single currency loan products
Unit 3	Distinguishing features of the LIBOR-based single currency loan
Unit 4	Distinguishing features of the fixed-rate single currency loan
Unit 5	The currency pool loan
Unit 6	Conversion offer for existing currency pool loans
Unit 7	Closing comments
Annex 1	Currency substitution
Annex 2	Chronology of IBRD lending rates
Annex 3	The base rate for fixed-rate single currency loans
Annex 4	Calculating your currency-specific CPL obligation from your bill

Annex 5 Abbreviations and definitions

COURSE OBJECTIVES

The terms "International Bank for Reconstruction and Development (IBRD),"
"World Bank," and "Bank" are used interchangeably. See the glossary of abbreviations and definitions in Annex 5.

Welcome to the World Bank's distance education course on expanded currency choices for IBRD loans.

Aims of the course

Our aims in preparing this course are to help you:

1. Understand the main financial characteristics of the Bank's loan products offered for new loans:



The LIBOR-based single currency loan.



The fixed-rate single currency loan.



The currency pool loan.

2. Know the options available to convert existing currency pool loans to single currency terms, and the procedures to follow to request conversions to:



LIBOR-based single currency loan terms.



Fixed-rate single currency loan terms.



Single currency pool terms.

- **3.** Know the financial risks to be considered in choosing terms for new or existing loans.
- 4. Be able to make a choice and explain your decision.

COURSE METHODS

This course has been designed to take about 18 hours of your time. You will be able to plan how to use this time, working at your own pace and according to your own schedule. However, 3 live teleconferences with your course leaders (at the end of Units 1, 4, and 7) are a vital part of the course, and you should try to complete the tasks we give you in good time to take part in the teleconferences. Please see the schedule for conducting this course included in your registration information.

Besides the 3 live teleconferences, the course consists of a set of readings, a video tape, and this Study Guide.

For a course conducted over a 3-week period, we estimate that each week you will need to devote about:

- 3 hours to reading the Study Guide with its associated readings and exercises.
- 1 hour to studying the video tape.
- 2 hours in the live teleconference.

The following icons will be used to direct you to:



This Study Guide.



Portions of the video tape to give animated presentations of the features of these 3 financial products, the expanded choices available, and examples of how borrowers selected among offered alternatives.



Selected readings from other print materials relevant for this course.



Exercises to help you to check how well you have understood the material.



Live teleconferences with your course leaders and other participants.

COURSE OVERVIEW

UNIT 1

Context for selecting IBRD loan products

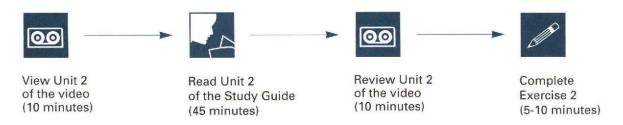
- 1.1 Financial risks to consider when selecting loan terms
- 1.2 Defining your goals
- 1.3 Some considerations for managing portfolio risk
- 1.4 IBRD loan products offered



UNIT 2

Common features of the two single currency loan products

- 2.1 SCL currency characteristics
- 2.2 SCL payment dates
- 2.3 SCL prepayment terms
- 2.4 Commitment fees and loan charge waivers



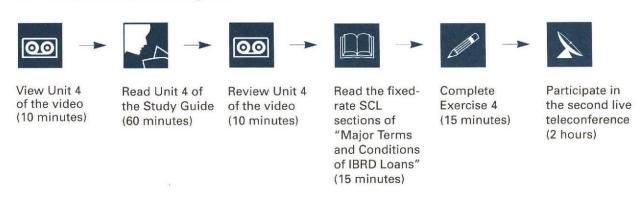
UNIT 3 Distinguishing features of the LIBOR-based single currency loan

- 3.1 The LIBOR-based SCL lending rate
- 3.2 Repayment terms of LIBOR-based SCLs



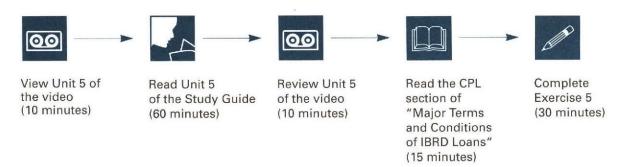
UNIT 4 Distinguishing features of the fixed-rate single currency loan

- 4.1 Repayment terms of fixed-rate SCLs
- 4.2 The fixed-rate SCL lending rate



UNIT 5 The currency pool loan

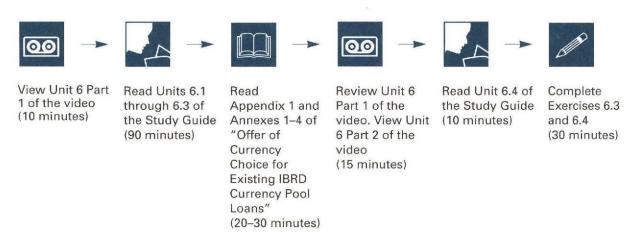
- 5.1 Currency obligation on a CPL
- 5.2 The CPL lending rate
- 5.3 CPL repayment terms
- 5.4 CPL prepayment premium



UNIT 6

Conversion offer for existing currency pool loans

- 6.1 The conversion offer's scope
- 6.2 Conversion of undisbursed loan amounts to single currency loan (SCL) terms
- 6.3 Conversion to single currency pool terms
- 6.4 The conversion process



UNIT 7 Closing Comments



Financial risks to consider when selecting loan terms

for selecting

Some considerations for managing portfolio risk

IBRD loan products offered

UNIT OVERVIEW

Unit 1 gives an introduction to the reasons for offering choice, the choices being offered, and the types of risks you should consider in making your choice.

This should take you about 5 minutes



First, you will view Unit 1 of the video that will give you an overview of the course.

This, about 45 minutes



After viewing the video, you will read Unit 1 of your Study Guide. Look out for the following:

- What financial risks should you consider when selecting loan terms?
- What are your goals?
- What other considerations should you keep in mind when managing portfolio risk?
- What are the loan products offered by the IBRD?

And this, 10–20 minutes



Then, to test your understanding of the concept of risk, and the differences between minimizing risk and minimizing cost, you will complete a short exercise.

The teleconference session will take 2 hours



Last, you will participate in a live teleconference to give you a chance to discuss these issues with course leaders and other participants in the course.

UNIT 1

To provide borrowers with flexibility in managing the financial risks of IBRD loans, the World Bank has expanded its menu of products for new loan commitments. Borrowers can now select freely from the following 3 products (or any combination thereof).

- LIBOR-based single currency loans.
- Fixed-rate single currency loans.
- Currency pool loans.

The choice presents you with several factors to consider, such as currency, interest rate basis, grace period, final maturity, amortization pattern, and prepayment terms.

In this first unit, you will learn the following:

- 1.1. Financial risks that have to be considered when deciding which World Bank loan product to select.
- 1.2. The differences between minimizing risk and minimizing cost.
- 1.3. Some factors to bear in mind when managing risk at the portfolio level.
- 1.4. A definition of each of the World Bank's 3 loan products.



View the Introduction and Unit 1 of the video tape to familiarize yourself with the material that will be covered in this course. After viewing Unit 1, return to this point in the Study Guide.



Now read Unit 1, looking out for risks to consider and other factors to address in choosing from the loan products offered by the IBRD.

Financial risks to consider when selecting loan terms

DEFINITION

Financial risk—The probability that the actual financial outcome is different from the expected outcome.

Abbreviations

CHF	Swiss franc
DEM	Deutsche mark
FRF	French franc
GBP	Pound sterling
JPY	Japanese yen
NLG	Netherlands guilder
USD	U.S. dollar
USDeq	U.S. dollar equivalent

Question: In the example, what currency would have minimized your currency risk?

Answer: USD (because your net income would not be affected by exchange rate changes).

The meaning of risk

We define **financial risk** as the probability that the actual financial outcome is different from the expected outcome. Financial risk is high when there is a high probability that the actual financial outcome is different from the expected outcome—and low when that probability is low.

Since the actual outcome can be higher or lower than expected, increasing your risk can increase your gain or loss.

Types of financial risk

When you have a choice of loan terms, there are several financial risks that you may want to consider, such as:

- Currency risk.
- Interest rate risk.
- Cash flow risk.
- Credit risk.

You may have additional considerations—such as budgetary, political, or administrative factors—but we will focus on the financial risks and the choice of loan terms that can help you address these risks.

Currency risk

Currency risk arises when the currencies you owe are different from what you earn from your net earnings or revenue streams. If exchange rates never changed, you would not need to worry about currency risk. But when the currency you owe appreciates relative to the one you earn, you face a loss compared to your expected outcome if exchange rates did not change. You face a gain when the reverse is true.

EXAMPLE OF CURRENCY RISK

Consider what could happen if your export earnings are in USD, while your debt is in DEM and the DEM/USD exchange rate changes. Assume in year 1 that the DEM/USD exchange rate is 1.80 DEM/USD. In year 2, the DEM appreciates to 1.65 DEM/USD. What is the effect on your net income?

Date	Earnings (USD)	Debt service (DEM)	Exchange rate (DEM/USD)	Debt service (USDeq)	Net income (USDeq)
Year 1	105	180	1.80	100	5
Year 2	105	180	1.65	109	(4)

Interest rate risk

Interest rate risk arises when the interest rate characteristics of what you owe differ from those of what you earn. This would be the case if, say, your earnings fluctuated with commodity prices while your borrowing cost was fixed. Interest rate risk can result in gains or losses depending on changes in interest rates.

EXAMPLE OF INTEREST RATE RISK

Consider what could happen if you borrow USD 100 at variable rates, lend the USD 100 at a fixed rate of 10% and interest rates change. Assume in year 1 that your cost of borrowing is 6%. In year 2, your cost of borrowing rises to 11%. What is the effect on your net income?

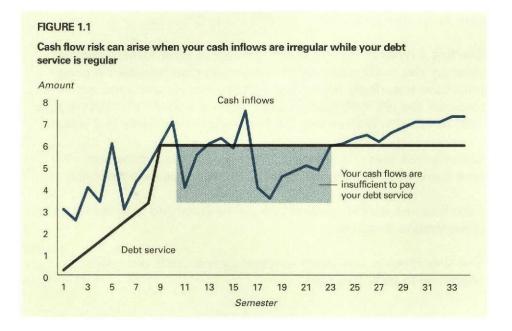
Date	Earnings (USD)	Cost of borrowing	Debt service (USD)	Net income (USD)
Year 1	10	6%	6	4
Year 2	10	11%	11	(1)

Question: In the example, what interest rate basis would have reduced your interest rate risk?

Answer: Fixed rate (because your net income would not be affected by interest rate changes).

Cash flow risk

Cash flow risk arises when differences in the timing of your earnings and debt service may leave your cash flows insufficient to make repayments for your loans at certain points in time (Figure 1.1). (Another term for this is liquidity risk.) This type of risk could arise, for example, if repayments are due before you earn sufficient revenues—or if your earnings fluctuate while your debt service remains constant from one period to the next.



Credit risk

Credit risk arises when loan terms may not be appropriate for the borrower's debt servicing capacity, increasing the risk that the entity responsible for repaying the loan cannot do so. (Note: We are not referring to credit risk vis-à-vis the IBRD—that is, to the sovereign credit risk that the IBRD bears that a country may be unable to repay its debt as scheduled. We are referring to the credit risk that the sovereign bears that the entities it onlends to may be unable to repay the sovereign in full and on time.) This could happen if the loan terms selected by the borrower and passed on to a project entity have currency, interest rate, or cash flow characteristics that are inappropriate for that entity. The currency, interest rate, or cash flow risks may lead that entity to default on the loan.

EXAMPLE OF CREDIT RISK

Suppose that a country borrows in JPY at variable rates and onlends the JPY at variable rates to a rural bank that makes fixed-rate loans and earns some foreign exchange in USD. At first glance, it seems that the country has no currency or interest rate risk, since it has passed these on to the rural bank. But the rural bank is taking on currency risk and interest rate risk that it may be ill-equipped to bear (see the 2 previous examples). If as a result of these risks the rural bank is unable to pay off the loan, the country still has to pay the IBRD. In effect, the country has transformed its currency risk and interest rate risk into credit risk.

Question: In the example, how might the country reduce this credit risk?

Answer: Lending on a currency and interest rate basis that fits the rural bank's needs would lower the country's credit risk.

Question: What terms
would reduce the financial
risks faced by the rural
bank?

Answer: In this example, a USD fixed-rate loan seems appropriate.

Hierarchy of importance of these risks

The hierarchy of importance of these risks may vary depending on your circumstances.

The first 2 types of risk are usually present in most loans. Generally, currency risk is the most important consideration because exchange rates have historically been more volatile than interest rates. For example, the JPY/USD exchange rate moved from 84 JPY/USD in June 1995 to 125 JPY/USD in May 1997—a revaluation of 49% in 2 years.

Currency risk also affects both the principal and the interest of your loan, while interest rate risk affects your loan's interest only.

Cash flow risk may be present in some projects, and may not be a major consideration in others.

You should select loan terms to guard against credit risk when onlending to project entities.

1 2 Defining your goals

In evaluating products for their suitability, you need to consider your goals. Normally, borrowers seek to:

- Minimize their financial risk.
- Minimize their effective cost.

Selecting loan terms may involve tradeoffs between minimizing risk and minimizing effective cost.

In minimizing risk, you are looking for a product that:

- Will have an actual outcome that is unlikely to differ much from the expected outcome.
- Will result in a net margin that is predictable but is not necessarily the least costly, either overall or in any given year.
- Requires you to have as little additional cash reserves or capital as possible to meet unexpected outflows.

Borrowers may reduce their financial risks by seeking to match the currency and interest rate characteristics of their revenues and expenses or their assets and liabilities.

In *minimizing effective cost*, you are attempting to get the lowest cost over a given period of time. This usually means selecting currency or interest rate characteristics that differ from those of your earnings—because you have a strong view about the future course of exchange rates or interest rates. For example, you can end up with a low cost if the currency you owe depreciates relative to the one you earn. But if what actually happens turns out to be different from what you expected, you can end up with a higher effective cost.

Some borrowers attempt to minimize their effective cost after establishing the extent of risk they can prudently take. For example, New Zealand's Treasury had the following debt management objectives: "To identify a low risk portfolio of net liabilities consistent with the Government's aversion to risk, having regard for the expected costs of reducing risk, and to transact in an efficient manner to achieve and maintain that portfolio."



"The New Zealand Debt Management Office's objectives were to identify a low-risk portfolio of net liabilities consistent with the government's aversion to risk, having regard for the expected costs of reducing risk, and to transact in an efficient manner to achieve and maintain that portfolio."

— Graeme Wheeler,
Director, Financial Products
and Services Department,
World Bank
(former Treasurer,
New Zealand
Debt Management Office)



"There are sound reasons why governments should take a prudent and conservative approach and have a low risk objective. Governments need to specify their risk preferences or tolerance for risk. This sets the parameters within which the debt manager can then seek to reduce the long-term effective cost of the sovereign debt."

—Jose Molina, Financial Officer, Financial Products and Services Department, and author of the Loan Product Spreadsheet Model Countries that manage their debt by attempting to forecast and take advantage of future exchange or interest rate movements should be aware that:

- The lowest cost alternative may not necessarily be the lowest cost at all points in time, although its average over your time horizon may be the lowest.
- In trying to minimize cost, you've taken on additional risk. For a firm, incurring more risk will require having more available capital. For a country, taking on additional risk may mean having to reserve contingency funds that could otherwise have been invested elsewhere.

Some considerations for managing portfolio risk

While this course is not meant to be a primer on sovereign debt management, you may want to keep a few points in mind. Governments that have had the most success in managing their foreign currency debt have developed clear sovereign debt management objectives. These governments decided their risk preferences and the trade-offs they were willing to make between risk and expected cost of funding (or expected return in the case of assets). For many, this process begins by knowing the nature of the balance sheet that the sovereign is attempting to manage.

Currency risk is usually the largest risk a sovereign borrower faces on its foreign currency-denominated debt. Several governments, at this stage principally OECD countries, have found it useful to establish a strategic foreign currency benchmark or target debt portfolio. This benchmark enables the sovereign debt manager to assess portfolio risk and measure portfolio performance.

For many of our client countries, World Bank loans constitute a modest portion of a country's foreign debt. Even though your IBRD obligations may not be large, you can still choose currency, interest rate, and repayment terms on your IBRD loans that help you meet your overall liability portfolio and broader balance sheet objectives.

We will use the following icons for the 3 main characteristics of IBRD loan products:



Currency characteristics



Lending rate characteristics



Repayment terms (cash flow characteristics)

1 A IBRD loan products offered

The IBRD now offers borrowers a choice of 3 products to finance new loans:



1. **LIBOR-based single currency loans (SCLs)**—Single currency obligations in any currency of sufficient borrower demand in which the Bank can efficiently fund itself, with a floating interest rate, reset semiannually, based on 6-month LIBOR, the London InterBank Offered Rate (or PIBOR, the Paris InterBank Offered Rate, when using French francs).



2. **Fixed-rate single currency loans**—Single currency obligations in any currency of sufficient borrower demand in which the Bank can efficiently fund itself, with a fixed lending rate that is set on semi-annual rate-fixing dates for loan amounts disbursed during the preceding 6 months.



3. Currency pool loans (CPLs)—Multicurrency obligations that are committed in U.S. dollar equivalents, but are not U.S. dollar obligations. These loans have a targeted currency composition (of 1 U.S. dollar: 125 Japanese yen: 2 Deutsche mark equivalent). Currency pool loans carry a variable lending rate that is reset every 6 months, based on the cost of a pool of the Bank's outstanding debt.

All borrowers are eligible for CPLs. All borrowers are likewise eligible for SCLs, with the exception of a few borrowers that still have outstanding loans using a lending rate formula that was in effect from 1982 to 1989 called variable lending rate 82 (VLR82).



Proceed to Exercise 1 to test your understanding of the types of financial risk, and the differences between minimizing risk and minimizing cost.

Exercise 1

Suppose you are taking out a loan to finance a project that generates export earnings in USD, and you have a choice of a loan in either USD or DEM. In Scenario 1, the DEM/USD exchange rate moves from 1.6 to 1.8; in Scenario 2, from 1.6 to 1.4.

DEM/USD exchange rates

	Scenario 1	Scenario 2	
Year 1	1.6	1.6	
Year 2	1.8	1.4	

Fill in the blanks in the following tables to show the effect of these exchange rate movements on your net income:

Scenario 1

		Loan in USD		Loan in DEM			
	Export earnings (USD)	Debt Net service income (USD) (USD)	Debt service (DEM)	Exchange rate (DEM/USD)	Debt service (USDeq)	Net income (USDeq)	
Year 1	110	100	160	1.6			
Year 2	110	100	160	1.8			

Scenario 2

		Loan in USD		Loan in DEM			
	Export earnings (USD)	service inco	let Debt ome service SD) (DEM)	Exchange rate (DEM/USD)	Debt service (USDeq)	Net income (USDeq)	
Year 1	110	100	160	1.6			
Year 2	110	100	160	1.4			

Now answer the following questions:

1. Under Scenario 1, which financing alternative produces the larger net income, measured in USDeq? Why?

- 2. Under Scenario 2, which financing alternative produces the larger net income, measured in USDeq? Why?
- 3. Which financing alternative has the lower currency risk? Why?
- 4. Which financing alternative has potentially the largest return and/or loss? Why?
- 5. Assuming that your earnings remain the same, which alternative would guarantee you a profit in year 3, regardless of how exchange rates evolve?

See the exercise solutions in your Readings pocket.

6. If you had no information on future exchange rates, which financing alternative would you select? Why?



You will next participate in the first of three teleconferences that will connect you with your course leaders and with course participants at other sites. This first teleconference will focus on the concepts presented in this unit. It will also introduce the topics that you will cover in Units 2–4. Any questions you have on Unit 1 may be addressed at this teleconference.

The course leader will announce the case studies to be taken up at the second teleconference at the end of Unit 4. You should familiarize yourself with the cases and be prepared to discuss them at that time.

9

UNIT

SCL currency characteristics

features
SCL payment dates

of the two scl prepayment terms

Single Currency
Commitment fees and loan charge waivers

loan products

UNIT OVERVIEW

Unit 2 introduces the 2 types of single currency loans (SCLs), the LIBOR-based SCL and the fixed-rate SCL, and discusses the features common to both of them.

This should take you about 10 minutes

00

First, you will view Unit 2 of the video to familiarize yourself with the material. Take note of the most important feature that is common to SCLs: the currency of obligation.

This, about 45 minutes



After viewing the video, you will read Unit 2 of your Study Guide. This section presents the features common to the LIBOR-based and the fixed-rate SCLs:

- Currency.
- Payment dates.
- Prepayment terms.

It also describes commitment fees and loan charge waivers that are common to SCLs and currency pool loans.

This, another 10 minutes



Having mastered the material in Unit 2 of the Study Guide, you will review Unit 2 of the video tape to reinforce your understanding of the features common to SCLs.

And this, 5-10 minutes



Finally, to test your understanding of these common features, you will complete Exercise 2.

UNIT 2



There are two kinds of single currency loans (SCLs): LIBOR-based and fixed-rate SCLs. SCL terms are available for new loan commitments as well as for the conversion of undisbursed commitments for existing currency pool loans.



The *LIBOR-based SCL* is a long-term loan denominated in a currency of the borrower's choice that carries a floating interest rate that changes every 6 months.

The icon reflects the floating nature of the LIBOR interest rate.



The *fixed-rate SCL* is a long-term loan denominated in a currency of the borrower's choice carrying interest rates that are fixed on portions of the loan as the loan disburses.

The icon reflects the fact that each portion of the loan has its own fixed rate.



As an introduction to the single currency loans, begin by viewing Unit 2 of the video. Please rewind the tape to the beginning of Unit 2 when you have finished.



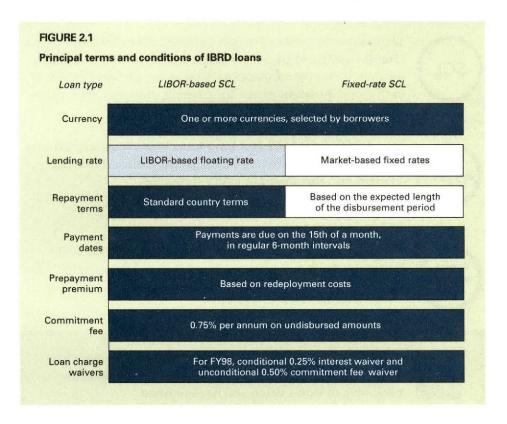
Read Unit 2 of the Study Guide.

In Units 2 through 4, you will be learning details about both kinds of SCLs. Their main characteristics are summarized in Figure 2.1.

The major differences between the two types of SCLs are the lending rates and the repayment terms.

DEFINITION

FY (IBRD fiscal year)—A year beginning July 1 and ending on June 30 the following calendar year.



To simplify matters, we'll start with commonalities. As you can see from Figure 2.1, both types of single currency loans have identical currency characteristics, payment dates, prepayment terms, commitment fees, and loan charge waivers.

The major differences are the lending rates, as implied in the names of the loans, and the repayment terms. These areas will be discussed in Units 3 and 4.

Now, let's get back to the features common to both SCL products.

2 1 SCL currency characteristics

PRINCIPAL TERMS AND CONDITIONS OF IBRD LOANS

Loan type

Single currency loans

Loan currencies

- Committed and repayable in the currency of the loan, as selected by the borrower.
- Currently offered in Deutsche mark, French francs, Japanese yen, Netherlands guilders, Pounds sterling, Swiss francs, and U.S. dollars.
- Borrowers may contract single currency loans in more than one currency tranche to obtain multicurrency liabilities in preferred currency compositions.
- In the unlikely event that the Bank is not able to obtain the loan currency, it retains the right to replace the loan currency by a substitute currency until the Bank's access to that currency is restored. The exchange risk and cost of currency substitution will be pooled and shared by all borrowers with single currency loans in the substituted currency.



The above panel shows the loan currency section for LIBOR-based and fixed-rate single currency loans, taken from the "Major Terms and Conditions of IBRD Loans" brochure in your Readings pocket.

SCLs are offered in any currency of sufficient borrower demand in which the Bank can efficiently fund itself. The Bank currently offers SCLs in Deutsche mark, French francs, Japanese yen, Netherlands guilders, Pounds sterling, Swiss francs, and U.S. dollars. It may offer other currencies upon borrower request.

You should remember the following important points about the currency obligation of your SCL:

- Your loan commitment and currency obligation are the same; you owe the currency you selected. For example, if you select a DEM 100 million SCL, you will owe DEM 100 million. The principal amounts in your Loan Agreement will be in DEM, and your bills will be denominated in DEM.
- If you want to borrow a currency other than the 7 currently offered, the IBRD will make the currency available if it can borrow that currency in a cost-efficient way.
- If you want a multicurrency obligation, your loan can be divided into portions, and each portion can be committed in a different currency. You can build your own basket of foreign currency liabilities by contracting SCLs in the currencies and proportions you want.

DEFINITION

Currency of sufficient demand— Put simply, the phrase "in any currency of sufficient demand in which the Bank can efficiently fund itself" means any currency chosen by the client as long as there is enough demand for that currency by the Bank's borrowers. This currency should be available in world markets in large enough amounts and competitively priced to onlend to borrowers in a cost-effective way. The demand should be sufficient for the Bank to raise debt in costeffective transactions. There should be sufficient certainty about actual disbursements that the Bank can manage any cost of carry from holding liquidity in these currencies. Funding efficiency is size, cost, and risk management of funded amounts.

If you select SCLs in more than one currency for a single project, each portion is treated separately for loan administration purposes.

DEFINITION

Applicable exchange rate—The Bank's financial transactions are valued using applicable exchange rates (AERs). AERs are official rates, provided daily by central banks to the IMF, and are used to value financial transactions among the Bank and its borrowing members.

■ The transaction currencies of disbursement are independent of the currency you owe. The IBRD will convert your disbursements into whatever convertible currencies are needed for project implementation, but the disbursements will be measured in the currency equivalent of the currency in which your SCL is denominated. For example, if you took out a DEM SCL and you wanted to buy equipment in Italy, the IBRD will convert your DEM disbursement into Italian lira (ITL). The amount disbursed will be recorded as the DEM equivalent of the ITL that the IBRD used to pay your supplier, using the applicable exchange rate (AER) on the date of disbursement. The amounts you owe will be measured in DEM, regardless of the transaction currencies.

EXAMPLE OF AN SCL CURRENCY OBLIGATION

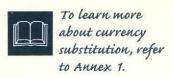
This example illustrates how your SCL currency obligation might be reflected on your bill.

Assumptions:

- 1. You have a DEM 50,000,000 SCL with a principal outstanding balance of DEM 8,000,000.
- 2. You need to purchase equipment in Italy for ITL 2,000,000,000.
- 3. Applicable exchange rates are: 1690.35 ITL/USD and 1.687 DEM/USD. This gives an ITL/DEM exchange rate of 1,690.35/1.687 = 1,001.986 ITL/DEM.

Your disbursement equals ITL 2,000,000,000 ÷ 1,001.986 ITL/DEM = DEM 1,996,036. Your SCL bill would look similar to this:

Currency of Commitment: DEM			Outstanding Unwithdrawn Cancelled Recalled/ Prepaid Original Amount	9,996,036 40,003,964 0 0 50,000,000
Description	Disbursed	Unwithdrawn	Recalled/Prepaid	Outstanding
Opening	8,000,000	42,000,000		8,000,000
Withdrawal	1,996,036	-1,996,036		1,996,036
Balance	9,996,036	40,003,964		9,996,036



Your obligation and debt service on an SCL will be denominated in the currency you selected, except in the case of currency substitution.

2.2 SCL payment dates

PRINCIPAL TERMS	AND CONDITIONS OF IBRD LOANS
Loan type	Single currency loans
Payment dates	 Debt service payments are due on the 15th of a month, in regular 6-month intervals.

SCL debt service is due semiannually, on the 15th of the month. You may select any pair of semiannual debt service payment dates, as long as they are 6 months apart. (SCLs differ slightly from currency pool loans in this regard, since CPL semiannual payment dates may fall on either the 1st or 15th of the month.)

Some borrowers have experienced cash flow problems due to the bunching of debt service payments in certain months. Borrowers can avoid this by selecting payment dates to achieve their desired intra-year debt profile.

2.3 SCL prepayment terms

PRINCIPAL TERMS AND CONDITIONS OF IBRD LOANS				
Loan type	Single currency loans			
Prepayment premium	■ The prepayment premium will be determined on the basis of the Bank's redeployment costs.			
	 The premium will be waived if a substitute currency is outstanding. 			

Single currency loans may be prepaid, and a prepayment premium may be charged. The General Conditions that govern SCLs provide that the premium payable on prepayment of any maturity "shall be an amount reasonably determined by the Bank to represent the cost to the Bank of redeploying the amount to be prepaid from the date of prepayment to the maturity date."

The prepayment premium on SCLs is based on the cost that will be incurred by the Bank in relending or reinvesting the funds that are prepaid.

In other words, the prepayment premium on SCLs is based on the cost that will be incurred by the Bank in relending or reinvesting the funds that are prepaid. The IBRD bears little risk from prepayment on the LIBOR-based SCL, since both the lending rate and the IBRD's cost of funding for this product are reset relative to the current LIBOR rate every 6 months. Therefore, in most market situations the prepayment premium for the LIBOR-based SCL would likely be zero.

For fixed-rate SCLs, prepayment is most likely to occur when interest rates are substantially lower than the fixed cost of the loan. To offset the potential loss the IBRD could incur by relending the prepaid amounts at a lower rate than the cost at which they were funded, the Bank would charge a prepayment premium based on the net present value of the rate differential over the remaining life of the loan. The Bank would advise the borrower of the amount of such a premium before the borrower confirms its decision to prepay.

The prepayment premium on SCLs will be waived in the event of currency substitution.

2 4 Commitment fees and loan charge waivers

Loan type	Single currency loans
Commitment fee	The contractual commitment fee is 0.75% per annum on undisbursed loan amounts, beginning 60 days after the Loan Agreement is signed.
Loan charge waivers	 For interest periods beginning in the fiscal year ending June 30, 1998: Eligible borrowers will receive an annual waiver of 0.25% of interest on disbursed and outstanding loans. A borrower is eligible for such a waiver if it has serviced all of its Bank loans within 30 calendar days of the due date for all payment dates occurring in the preceding 6 months. All borrowers will receive an unconditional annual reduction of 0.50% of the 0.75% contractual commitmen fee on undisbursed loan amounts.

The *commitment fee* is charged by the Bank on the undisbursed amount of the loan for conditionally guaranteeing the availability of funds for the agreed-upon time period. An integral part of the Bank's loan charges and targeted key financial ratios, the commitment fee also serves as an incentive to implement projects and programs in a timely way.

The Bank provides an unconditional commitment fee waiver as described below.

EXAMPLE OF THE COMMITMENT FEE CALCULATION

Commitment fees accrue in the currency of the loan on an actual day-count convention. For example, the 6-month commitment fee for an undisbursed USD SCL volume of USD 100 million would be: USD 100 million \times .0075 \times 182/365 = USD 373,972.60.

If the undisbursed DEM SCL volume were DEM 100 million, the 6-month commitment fee would be calculated in DEM as: DEM 100 million \times .0075 \times 182/365 = DEM 373,972.60.

Loan charge waivers are portions of interest and the commitment fee that are waived. Under current policy, there are 2 loan charge waivers:

■ The *annual interest waiver*—Each year the Bank's Executive Directors decide whether the IBRD can waive part of the interest charges on outstanding loans. For the fiscal year ending June 30, 1998, the IBRD is providing a 0.25% interest waiver for all eligible borrowers. A borrower is eligible for such a waiver if it has serviced all of its IBRD loans within 30 calendar days of the due date for all payment dates occurring during the preceding 6 months.

The purpose of the eligibility requirement is to encourage IBRD borrowers to preserve and improve their strong debt-servicing record. This strong debt-servicing record is an important factor in the Bank's financial strength that allows it to borrow on attractive terms in the capital markets to finance loans to borrowers.

The amount of interest charges waived on a loan is reflected in the billing statement of that loan as an actual reduction in interest charges due.

■ The *commitment fee waiver*—Each year the Bank's Executive Directors decide whether the IBRD can waive part of the commitment fee on undisbursed loan balances. For the fiscal year ending June 30, 1998, the IBRD is providing an unconditional reduction of 0.50% of the 0.75% contractual commitment fee.

These loan charge waivers are the same, regardless of the SCL currency. They also apply equally to currency pool loans (and to CPL amounts converted to single currency terms).



Review Unit 2 of the video tape to reinforce your understanding of the currency obligation, which is the most important feature common to both LIBOR-based and fixed-rate SCLs. When you've finished your review, return to this point in the Study Guide.



To test your understanding of these common features, complete Exercise 2. If you have difficulty with any of the questions, you may wish to review the appropriate part of Unit 2.

For the purpose of determining eligibility for the annual interest waiver, the term "borrower" means the borrower of record. It is possible for one borrower in a country to be eligible for the waiver while another borrower is not.

Exercise 2

Choose only one answer for each question.

- 1. Single currency loans offer borrowers choice in terms of:
 - a. Loan currency.
 - b. Interest rate basis.
 - c. Neither loan currency nor interest rate basis.
 - d. Both loan currency and interest rate basis.
- 2. The choice offered to borrowers through SCLs is intended primarily to help borrowers to:
 - a. Lower their cost of borrowing.
 - b. Reduce their financial risks.
 - c. Diversify their sources of financing.
 - d. Both a and b above.
- 3. Which of the following is not true of SCLs?
 - a. The loan commitment is made in the currency of the loan.
 - Disbursements can be converted into different transaction currencies.
 - c. Transaction currencies affect borrowers' obligations.
 - d. Borrowers' obligations are measured in the currency of the loan (except in the case of currency substitution).
- 4. What features are not common to LIBOR-based SCLs and fixed-rate SCLs?
 - a. Currency characteristics.
 - b. Payment dates, commitment fees, and waivers.
 - c. Repayment terms.
 - d. Prepayment terms.
- 5. The SCL prepayment premium:
 - a. Is based on the Bank's redeployment cost.
 - b. Is likely to be zero for LIBOR-based SCLs.
 - c. Will be waived in the case of currency substitution.
 - d. All of the above.
 - e. Only a and b.

- 6. The commitment fee for SCLs is:
 - a. The same as for currency pool loans.
 - b. Calculated based on the USD equivalent amount of the undisbursed
 - c. Contractually 0.75% per annum on undisbursed loan amounts, beginning 60 days after the Loan Agreement is signed.
 - d. All of the above.
 - e. Only a and b.
 - f. Only a and c.
- See the exercise solutions in your Readings pocket.

7. The annual interest waiver is:

- a. Given to all borrowers unconditionally.
- b. Conditional on timely debt service by the borrower of record.
- c. Conditional on timely debt service by the country.
- d. 0.25% on disbursed and outstanding loan amounts for fiscal year 1998 interest periods.
- e. 0.50% on disbursed and outstanding loan amounts for fiscal year 1998 interest periods.
- f. Only b and d.
- g. Only b and c.
- h. Only c and d.



Now that we've looked at the features common to both SCL products, let's turn to the features that are different. Unit 3 describes the distinguishing features of the LIBOR-based SCL product. The fixed-rate SCL product is the subject of Unit 4.

UNIT

Distinguishing The LIBOR-based SCL lending rate

features of the
Repayment terms of LIBOR-based SCLs

LIBOR-based single currency loan

UNIT OVERVIEW

Unit 3 presents the distinguishing features of the LIBOR-based SCL product.

This should take you about 10 minutes



First, you will view Unit 3 of the video as an introduction to these features.

This, about 45 minutes



After viewing the video tape, you will read Unit 3 of the Study Guide. This section describes the LIBOR-based SCL:

- Lending rate.
- Repayment terms.

You should pay particular attention to the following aspects of the lending rate:

- Its components.
- How it is calculated and the frequency with which it is reset.
- How it behaves over time.

Note also how standard repayment terms are set according to country criteria and the flexibility borrowers have to tailor them to suit their needs.

This, another 10 minutes



After going through the Study Guide, you will review Unit 3 of the video tape. Take note of the two main product features mentioned earlier. Note how clients have used the LIBOR-based SCL to reduce their risks.

This, about 10 minutes



Having gone through the Study Guide and video, you will review the LIBOR-based SCL section of the "Major Terms and Conditions of IBRD Loans" brochure, which summarizes the main product features. If any of the features are still unclear to you, review the Study Guide and video.

And this, 15 minutes



Finally, you will test your understanding by completing Exercise 3.

UNIT 3

In Unit 2 we discussed the features common to both types of SCLs. We now turn to the two main areas where the LIBOR-based SCL and fixed-rate SCL differ—the lending rate and the repayment terms.



View Unit 3 of the video tape. Rewind the video tape to the start of Unit 3 when you have finished, and return to this point in the Study Guide.



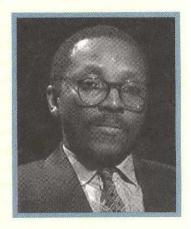
Now read Units 3.1 and 3.2 of the Study Guide.

3 1 The LIBOR-based SCL lending rate

The following panel shows the lending rate section for LIBOR-based SCLs, taken from the "Major Terms and Conditions of IBRD Loans" brochure.

Loan type LIBOR-based single currency loans The variable lending rate comprises a base rate and a total spread. The base rate is equal to 6-month LIBOR for value at the start of an interest period. The total spread comprises the Bank's weighted average cost margin relative to the 6-month LIBOR for funding allocated to LIBOR-based single currency loans (recalculated each June 30 and December 31), plus a lending spread. The contractual lending spread is 50 basis points. The lending rate is reset semiannually, on each interest payment date, and applies to interest periods beginning on those dates.

Now that you have reviewed this panel, let's explore the nature of this lending rate in more detail.



"A client selected

LIBOR-based SCL terms

because they wanted a loan
with a currency composition
that more closely matched
their export earnings, along
with an interest rate that
was market-based."

—Sylvester Zigah Loan Accounting Officer, Loan Department

DEFINITIONS

LIBOR (London InterBank
Offered Rate)—The interest rate
at which banks lend to each
other in the interbank market in
London.

PIBOR (Paris InterBank
Offered Rate)—The interest rate
at which banks lend to each
other in the interbank market in
Paris.

The nature of the LIBOR-based SCL lending rate



When evaluating a floating lending rate (like the IBRD's LIBOR-based SCL lending rate), you need to look at two things:

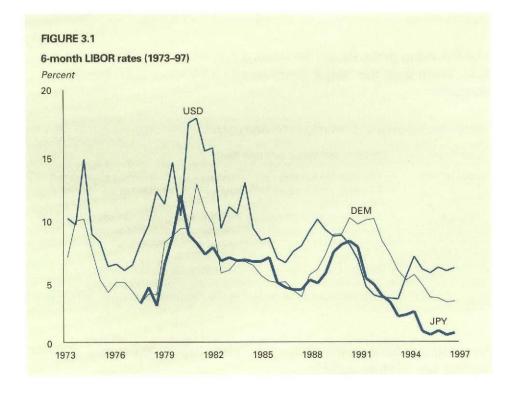
- The nature of the index on which the rate is based.
- The margin charged relative to that index.

You shouldn't focus simply on the current lending rate. This will change in 6 months and will vary over the life of your loan, which can range from 15 to 20 years.

The index on which the lending rate is based

The index is 6-month **LIBOR**, which stands for the London InterBank Offered Rate. Market determined, it is the rate at which commercial banks lend to each other in the interbank market for a 6-month period. On a LIBOR-based loan, the lending rate is reset every 6 months, based on 6-month LIBOR on the reset date, and is applied to the outstanding balance of the loan during the following 6 months. Thus, borrowers selecting LIBOR-based SCLs would see their cost of borrowing move up and down with the market.

The IBRD uses the LIBOR interest rate posted by the British Bankers' Association (BBA), except for FRF, for which it uses the **PIBOR** rate (Paris InterBank Offered Rate) posted by the Association française des banques (AFB).



In its Loan Agreements, the Bank refers to this index as the "base rate."

Under normal market conditions, yield curves are upward sloping; that is, short-term rates are usually lower than long-term rates. So, if recent historical trends were to continue, a borrower selecting LIBOR might expect to have a lower average borrowing cost than one selecting a fixed-rate SCL or CPL, measured over a long time period (20+ years). But since LIBOR is a short-term money market rate, you should consider whether you are able to withstand the potential variability of your debt service, which comes with a LIBOR index.

For example, over the past two decades, 6-month USD LIBOR has ranged from as low as 3% to as high as 20% (see Figure 3.1). Over the same period DEM LIBOR has ranged from 3% to 12%, and 6-month JPY LIBOR has ranged from 0.50% to 12%.

The margin of the IBRD's LIBOR-based SCL lending rate relative to LIBOR

As mentioned earlier, 6-month LIBOR is the index on which the LIBOR-based SCL lending rate is based. The LIBOR-based SCL lending rate is equal to the LIBOR index (base rate) plus a margin relative to the index, which the Bank calls the "total spread." The "total spread" component of the LIBOR-based SCL lending rate comprises the Bank's funding cost margin relative to 6-month LIBOR plus a contractual lending spread of 0.50% (50 basis points)—the same lending spread it charges on all of its products.

Most commercial banks have credit ratings of AA and below, while the IBRD has the highest credit rating of AAA. Because the Bank has a higher credit rating, it is able to borrow at an interest rate that is lower than that paid by most commercial banks.

Since the Bank began offering LIBOR-based SCLs in 1993, its funding cost margin has ranged from 21 to 34 basis points (0.21% to 0.34%) below LIBOR, with an average of about 25 basis points below LIBOR. (That is, the Bank has funded the LIBOR-based SCLs at an average cost of LIBOR minus 0.25%).

Adding 50 basis points to the Bank's funding cost margin would give you the spread over LIBOR, which has ranged from 0.16% to 0.29% over LIBOR, with an average of about 0.25%. Consequently, the Bank's LIBOR-based SCL lending rate has averaged about LIBOR + 0.25% for maturities ranging from 15 to 20 years (before the subtraction of any annual interest waiver that may be granted).



"A market-based floating rate is a good choice when you're lending for shorter maturities and recycling the funds at market rates as they get repaid."

—John Balafoutis Financial Officer, Financial Products and Services Department

DEFINITION

Basis point (b.p.)—One one-hundredth of a percent. For example, one-tenth of a percent would be 10 basis points.

LIBOR-based SCL lending rate = Base rate + Total spread

Total spread = IBRD cost margin + 0.50% Taken together, the LIBOR base rate plus the cost margin equals the Bank's cost of borrowing. The lending rate for LIBOR-based SCLs is based on a cost-pass-through formula—that is, it consists of the IBRD's cost of borrowing plus a lending spread of 0.50%.

EXAMPLE OF LENDING RATE RESETS

Suppose that you had a LIBOR-based SCL with interest payment dates of March 15 and September 15. On March 15 the interest rate on your loan would change. It would be equal to the sum of the 6-month LIBOR quote of the BBA for value on March 15, the funding margin calculated by the Bank on December 31, and 0.50%. On September 15 the interest rate on your loan would change again. It would be equal to the sum of the 6-month LIBOR quote of the BBA for value on September 15, the funding margin calculated by the Bank on June 30, and 0.50%.

Changes in the lending rate

As the average cost of the debt funding the LIBOR-based SCLs changes over time, the Bank resets the funding margin every 6 months on January 1 and July 1 based on the average sub-LIBOR cost of the debt during the previous semester. Consequently, two components of the lending rate will change every semester on the rate reset date: the index (or underlying 6-month LIBOR rate) and the IBRD's funding margin against LIBOR. (The IBRD's 0.50% lending spread remains the same.)

The index is based on the LIBOR rate for the applicable date as calculated by the BBA. The IBRD's funding margin is calculated and reset twice a year (every June 30 and December 31), as the weighted average spread to 6-month LIBOR/PIBOR of all outstanding borrowings funding this product during the previous semester, averaged across all currencies.

For a chronology of the Bank's LIBOR-based SCL lending rates, see Annex 2, Table A2.1, or "Topics in Development/Major Terms and Conditions of IBRD Loans/LIBOR-based Single Currency Loans/lending rates" at the Bank's website at www.worldbank.org.

3.2 Repayment terms of LIBOR-based SCLs



LIBOR-based SCLs are normally made for 15 to 20 years, including a 3- to 5-year grace period when a borrower pays only interest on outstanding loan balances and is not required to make principal repayments. These "standard" repayment terms (see Table 3.1) are based on country

criteria, particularly per capita income and other country creditworthiness indicators.

LIBOR-based S	SCL: Repayment terms	(years)	
Country category	Grace period	Final maturity	Amortization pattern
1–11	5	20	Annuity
	4	17	Annuity
III	5	17	Level principal repayment
	3 5	15	Annuity
IV-V	5	15	Level principal repayment

The Bank reviews country classifications annually. If a country is reclassified, the new repayment terms apply to new loan commitments only. Existing loans are not affected. Standard country terms apply not only to LIBOR-based SCLs, but also to currency pool loans and to loan amounts converted to LIBOR-based SCL or single currency pool terms.

Borrowers in countries in categories I and II have amortization based on an annuity structure. Borrowers in countries in categories III, IV, and V have the option of selecting from 2 types of repayment terms for LIBOR-based SCLs:

- Annuity amortization.
- Level repayment of principal.

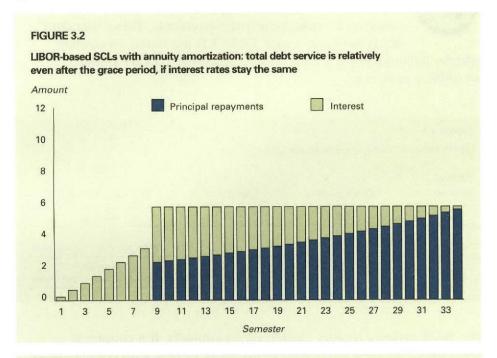
DEFINITION

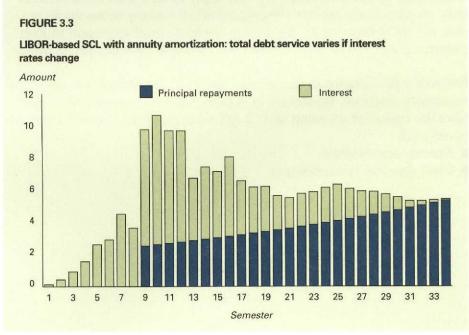
Annuity amortization—A

method of principal amortization wherein the principal is repaid in installments over time, and the sum of the principal and interest of each installment (using a discount rate determined at the time of loan negotiation) is the same, assuming interest rates do not change over the life of the loan.

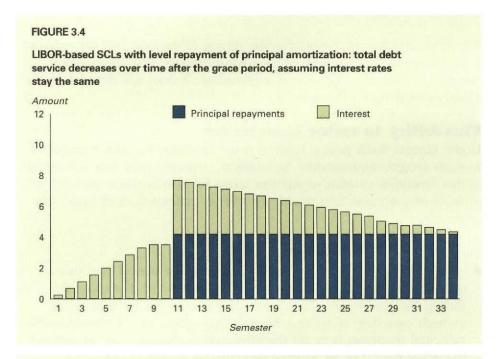
Figures 3.2 and 3.3
illustrate an annuity
amortization structure for a
(Category III borrower) loan
with a 17-year final
maturity.

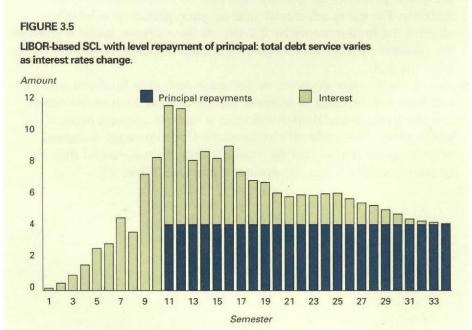
With the same interest rates, total debt service is relatively even. In **annuity amortization**, the principal repayments increase over time, while the interest payments decrease, so that the total debt service is relatively level over time, provided that interest rates do not change substantially. The annuity principal amortization schedule is developed using the average of the previous 6 months' LIBOR-based SCL lending rates as a discount rate.





But if the interest rate fluctuates, total debt service can vary dramatically. In **level repayment of principal** amortization, principal is repaid in equal semesterly installments. The total debt service is largest during the earliest part of the principal repayment period, and decreases over time. Since principal is repaid faster under this alternative, the grace period is longer than that for annuity-type amortization.





DEFINITION

Level repayment of principal— A method of principal amortization wherein the principal is repaid in equal installments over time.

Figures 3.4 and 3.5 illustrate a level repayment of principal structure for the same borrower, with the same interest rate assumptions as in Figures 3.2 and 3.3.

Here, total debt service declines steadily after the grace period.

And here, total debt service varies.

The data needed to produce these cash flows and perform other types of analysis of your loans can be produced with the Loan Product Spreadsheet model, which is included in your course materials.

DEFINITION

Bullet maturity—A method of principal amortization wherein the principal is repaid in one installment.

As Figures 3.2 to 3.5 show, debt service is mainly made up of 2 parts: the principal repayments and the interest. The loan amortization schedule in your Loan Agreement reflects only the principal repayments, since future interest rates are not known at the time a loan is negotiated. When you are evaluating the cash flow implications of your loan, you should take into account both the principal and the interest under a range of assumptions.

It is important to understand that the timing of the principal repayments is independent of the timing of the disbursements. The amortization schedule is agreed at the time of negotiation. It does not depend on the expected or actual disbursements.

Flexibility to tailor loan terms

Under current Bank policy, there is some flexibility to tailor loan terms to meet project requirements. In addition, countries may take advantage of this flexibility to tailor repayment terms for non-revenue generating projects or programs to promote the overall management of their debt portfolios.

There are two areas of flexibility:

- Within the loan—You may need a longer grace period than that specified by the standard country repayment terms. For example, during the investment phase, your project may not be generating enough cash flow to service the debt. You don't have to select level principal repayments to get the longer grace period; you can extend the grace period of an annuity structure by shortening the final maturity. For every additional year of grace period, you have to shorten the final maturity by 2 years. At the extreme, bullet maturities are possible. You cannot lengthen the final maturity by shortening the grace period.
- Across loans—Any decrease in the grace period or final maturity for one loan can be used to increase that of another loan to the same country in the same Bank fiscal year, if there is a strong project justification. This trade-off can be made if the currency-weighted average grace period and the final maturity do not exceed that country's standard loan repayment terms (see Table 3.1).

Moreover, under current Bank policy for income category I and II countries, the grace period and final maturity of a loan may be modified to meet project needs as long as the loan's average life is not expected to exceed a maximum term, prior to loan approval, as specified by Bank policy (10.60 years for the fiscal year ended June 30, 1998). The average loan life is a measure of the period in which a borrower has use of the loan proceeds and is calculated as the sum of the annual loan balances outstanding divided by the face value of the loan.



At this point you should review Unit 3 of the video tape—or, if you like, Units 2 and 3—to have a complete picture of all the LIBOR-based SCL features.



Now review the LIBOR-based SCL column of the "Major Terms and Conditions" brochure, which contains all the features you have just learned about in one place. If any of them are still unclear, review the appropriate section in Unit 2 or Unit 3.



To test your understanding of these features, complete Exercise 3.

Exercise 3

Choose only one answer for each question.

- 1. The LIBOR-based SCL lending rate is equal to:
 - a. LIBOR.
 - b. LIBOR + the IBRD cost margin + the IBRD lending spread.
 - c. LIBOR + 0.50%.
 - d. None of the above.
- 2. The base rate for LIBOR-based SCLs is:
 - The weighted average semester cost of IBRD debt funding these loans.
 - b. Announced every January and July.
 - c. Announced every 15th of the month for debt service periods beginning on such date.
 - d. Only a and b.
 - e. Only b and c.
- 3. The cost margin for LIBOR-based SCLs is:
 - The weighted semester average funding cost spread relative to 6-month LIBOR for IBRD debt funding all LIBOR-based SCLs, calculated separately for each currency.
 - The weighted semester average funding cost spread relative to 6-month LIBOR for IBRD debt funding all LIBOR-based SCLs, averaged across currencies.
 - Announced every January and July and applies to all debt service periods commencing in the semester it is announced.
 - d. Announced every 15th of the month for debt service periods beginning on such date.
 - e. Only a and c.
 - f. Only b and c.
 - g. Only a and d.
 - h. Only b and d.
- 4. The cost margin for LIBOR-based SCLs (over the 1993–97 period) has ranged between:
 - a. 21-34 basis points above LIBOR.
 - b. 21-34 basis points below LIBOR.
 - c. 0.21%-0.34% below LIBOR.
 - d. Either b or c.

- 5. Standard repayment terms on LIBOR-based SCLs provide for:
 - a. 0-3 year grace periods.
 - b. 3-5 year grace periods.
 - c. 6-12 year maturities.
 - d. 15-20 year maturities.
 - e. Annuity or level repayment of principal amortization.
 - f. Only a, c, and e.
 - g. Only b, d, and e.
 - h. Only b and d.
- 6. Annuity principal repayment implies (assuming no change in interest rates):
 - a. Equal principal repayments.
 - b. Equal interest payments.
 - c. Equal repayment amounts for principal and interest combined after the grace period.
 - d. None of the above.
- Level repayment of principal implies (assuming no change in interest rates):
 - a. Equal principal repayments.
 - b. Equal interest payments.
 - Equal repayment amounts for principal and interest combined after the grace period.
 - d. None of the above.
- 8. In terms of flexibility to tailor loan repayment terms to match project requirements,
 - Borrowers may extend their final maturity by shortening their grace period.
 - b. Borrowers may extend their grace period by shortening their final maturity.
 - c. Borrowers may extend the final maturity in one loan by shortening another loan to the same country in the same fiscal year.
 - d. Only a and c.
 - e. Only b and c.
- 9. In trading off grace period and final maturity,
 - a. There is no set formula for such trade-offs; they are determined on a case-by-case basis according to project needs.
 - b. A 1-year reduction in final maturity would allow for a 1-year increase in the grace period.
 - c. A 1-year reduction in final maturity would allow for a 2-year increase in the grace period.
 - A 1-year reduction in the grace period would allow for a 1-year increase in the final maturity.
 - e. None of the above.

- 10. LIBOR-based SCLs may be prepaid:
 - a. On any interest payment date.
 - b. Only after the loan is fully disbursed.
 - c. At any time.
 - d. None of the above.

See the exercise solutions in your Readings pocket.

- 11. The prepayment premium for LIBOR-based SCLs:
 - a. Is based on a schedule of prepayment premiums and prepayment dates specified in the Loan Agreement.
 - b. Is based on the Bank's cost of redeploying the prepaid funds.
 - c. Will be waived in case of currency substitution.
 - d. Only a and c.
 - e. Only b and c.



Now that we've looked at the LIBOR-based SCL, let's turn to the distinguishing features of the fixed-rate SCL, the subject of Unit 4.

UNIT

Distinguishing
features of the
features of the
fixed-rate SCL lending rate
fixed-rate
single currency
loan

UNIT OVERVIEW

Unit 4 covers the distinguishing features of the fixed-rate SCL product.

This should take you about 10 minutes

This, about 10 minutes

This, another 15 minutes

The videoconference session

will take about 2 hours

00

First, you will view Unit 4 of the video to familiarize yourself with the material. Take note of the 2 distinguishing features covered by the video:

- Lending rate.
- Repayment terms.

This, about 60 minutes

Next, you will read Unit 4 of the Study Guide. This section contains the features where the fixed-rate SCL differs from the LIBOR-based SCL.



After going through the Study Guide, you will review Unit 4 of the video. The video also contains examples of how clients have used the fixed-rate SCL.



Having gone through the Study Guide and video, you will read through the fixed-rate SCL section of the "Major Terms and Conditions of IBRD Loans" brochure, which summarizes the main product features. If any of the features are still unclear to you, review the Study Guide and video tape.



Then, you will test your understanding by completing Exercise 4.





Finally, you will participate in a live teleconference with course leaders and other participants in the course. During this teleconference, you will discuss the materials covered in Units 2–4, as well as the case studies you will have completed to give you practice on assessing when each product would be more appropriate.

UNIT 4



The fixed-rate SCL was introduced in 1995 in response to demand from IBRD clients for a loan product bearing a fixed interest rate.

In designing this product, the IBRD endeavored to preserve product features that its clients liked—the long grace period and maturity, and the flexibility to disburse over an extended period as the project or program is implemented. To meet these requirements, the fixed-rate SCL, unlike other fixed-rate instruments you may find in the market, does not have a fixed rate set at the time of commitment that applies to the entire loan amount. Instead, the interest rate is fixed for portions of the loan as disbursements are made.

The fixed-rate SCL can be described as a series of fixed-rate subloans, with each subloan comprising the disbursements during a given semester. In this way a fixed-rate SCL is like a line of credit, with disbursements made during each semester constituting a subloan, whose rate is fixed at the end of the semester and remains fixed until the subloan is repaid.

This product has a fixed lending rate that:

- Is not fixed at commitment, but instead is fixed on semiannual rate-fixing dates for amounts disbursed in the previous semester.
- Consists of a base rate plus a total spread comprising the IBRD's funding cost margin, a market risk premium, and a lending spread of 50 basis points.

As was discussed in Unit 2, the fixed-rate SCL and the LIBOR-based SCL are identical with respect to:

- Currency.
- Payment dates.
- Prepayment terms.
- Commitment fees.
- Loan charge waivers.



"Since their exports were largely denominated in U.S. dollars, they wanted a loan in U.S. dollars to reduce their currency risk. They also wanted to introduce some interest rate stability to their external liabilities, which had a lot of LIBOR-based commercial bank debt."

— Doris Herrera-Pol, Principal Financial Officer, Financial Products and Services Department

Please refer to Unit 2 for a discussion of the features common to both SCL products.

Now we'll turn to the main differences between the fixed-rate SCL and the LIBOR-based SCL.

- Repayment terms.
- Lending rate.



Begin by viewing Unit 4 of the video to familiarize yourself with the material. Take note of the 2 distinguishing features covered by the video:

- Lending rate.
- Repayment terms.

Please rewind the tape to the beginning of Unit 4 when you are through, and return to the Study Guide.



Now read Units 4.1 and 4.2 of the Study Guide.

4 1 Repayment terms of fixed-rate SCLs



Each semester's disbursements are grouped together and defined in your Loan Agreement as a **Disbursed Amount**. Each Disbursed Amount has its own fixed rate and its own repayment schedule. The fixed rate on each Disbursed Amount is set on the next interest payment date (the rate-

fixing date) for loan amounts disbursed during the preceding 6-month period. This lending rate remains fixed for each Disbursed Amount until it is repaid.

Each Disbursed Amount has a grace period of 3 years, beginning on the rate-fixing date, and will amortize based on level repayment of principal after the grace period expires. The final maturity of each Disbursed Amount depends on the expected total disbursement period of the loan.

TABLE 4.1 Fixed-rate SCL: repayment terms (years)

Expected total disbursement period	Grace period for each Disbursed Amount	Final maturity for each Disbursed Amount ^a	Final overall loan maturity from date of approval
0–3	3	12	12–15
3-6	3	9	12-15
More than 6	3	6	12-20 ^b

- Including grace period. The amortization pattern for fixed-rate SCLs is level repayment of principal for each Disbursed Amount.
- For middle and higher income borrowing members, overall loan repayment terms would be limited to 17 years and 15 years, respectively.

Table 4.1 summarizes the standard repayment terms for fixed-rate single currency loans.

- For fast-disbursing loans (those expected to disburse between loan approval to 3 years), each Disbursed Amount will have a maturity of 12 years, including the 3-year grace period. The overall loan will have a final maturity of up to 15 years. (For example, if a loan took 2 years to be fully disbursed, the final maturity would be 14 years).
- For medium-disbursing loans (those expected to disburse over 3 to 6 years), each Disbursed Amount will have a maturity of 9 years, including the 3-year grace period. The loan will have a final maturity of up to 15 years.

DEFINITION

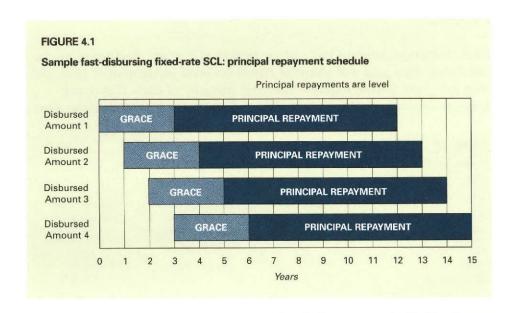
Disbursed Amount—As defined in the Loan Agreement for fixed-rate SCLs, one semester's group of disbursements. The semester begins on the Interest Payment Date preceding the disbursement and ends on the day before the next Interest Payment Date.

Principal repayment terms are based on the project's anticipated disbursement period. There are 3 types of fixed-rate SCLs: the fast-disbursing, medium-disbursing, and slow-disbursing variants. The principal repayment is based on the timing of the disbursements.

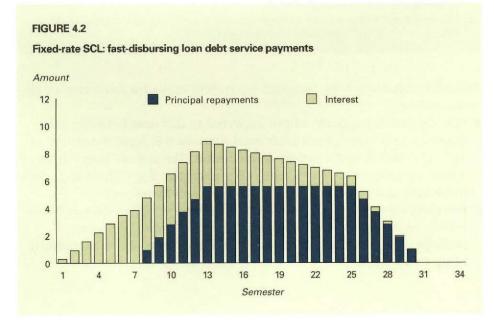
■ For slow-disbursing loans (those expected to disburse over a period exceeding 6 years), each Disbursed Amount will have a maturity of 6 years, including the 3-year grace period. The loan may have a final maturity of up to 15, 17, or 20 years, in accord with the borrower's standard country loan terms.

The expected disbursement period and the type of fixed-rate SCL are determined before the loan is approved.

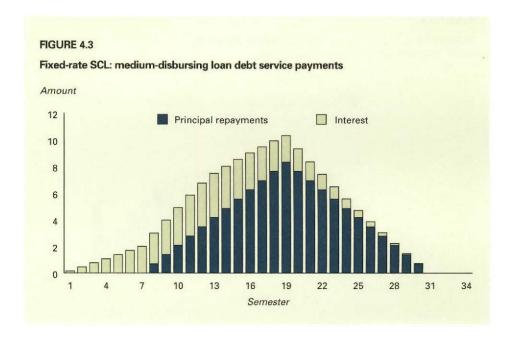
Figure 4.1 presents how the amortization schedule of a fast-disbursing fixed-rate SCL might look.



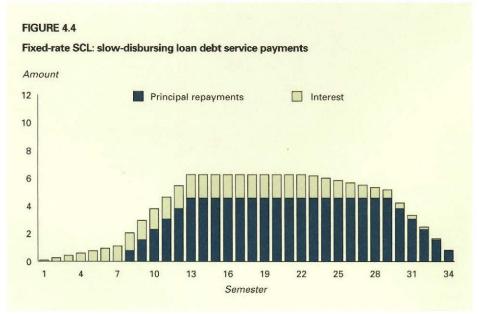
Note that the debt service cash flow of the fastdisbursing fixed-rate SCL is humped toward the left.



Figures 4.2 to 4.4 present the debt service on the 3 types of fixed-rate SCLs—the fast-disbursing, medium-disbursing, and slow-disbursing variants. These examples assume that disbursements are evenly distributed; the actual repayment profile for an individual loan depends on the actual volume of disbursements each semester. In general, the fast- and medium-disbursing fixed-rate SCLs produce a debt service cash flow that is more "humped" than that of the LIBOR-based SCL. The project's ability to generate enough cash flow to service this type of debt service pattern may be an important consideration for some projects.



The debt service cash flow pattern of the medium-disbursing fixed-rate SCL is also humped, but the highest point of the hump occurs toward the middle.

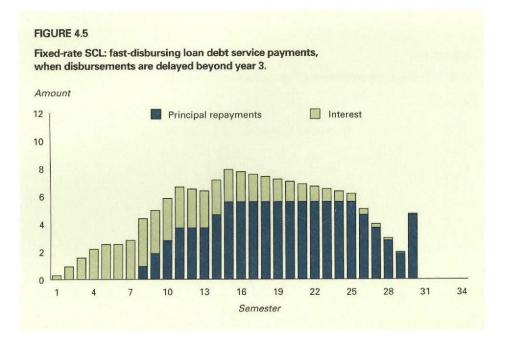


For projects with very long disbursement periods, the slow-disbursing fixed-rate SCL has a relatively even debt service cash flow pattern.

What happens if disbursements are delayed?

While the repayment terms are based on the expected disbursement period for the loan, the timing of actual repayments depends on when disbursements take place. So, if disbursements are delayed, the principal repayments are pushed back. But the final loan maturity date cannot be exceeded. Any principal repayments whose repayment dates would exceed the final loan maturity date will be accumulated and repaid in a balloon payment in the final semester (see Figure 4.5).

Any principal repayments whose repayment dates would exceed the final loan maturity date will be accumulated and repaid in a balloon payment in the final semester.



4 2 The fixed-rate SCL lending rate



As previously discussed, a fixed-rate SCL is divided into a series of Disbursed Amounts, with each Disbursed Amount composed of the disbursements in a given semester. Each Disbursed Amount has an interim and a permanent lending rate.

- In the interim period from the disbursement date until the rate-fixing date, each disbursement will bear the LIBOR-based SCL lending rate applicable for the period ending on the rate-fixing date. (For example, your rate-fixing dates are every February 15 and August 15, with your next rate fixing falling on August 15, 1998. All disbursements in the period February 15, 1998 through August 14, 1998 will pay interest at the LIBOR-based SCL lending rate applicable for the interest period beginning February 15, 1998, for the interim period from the disbursement date until August 14, 1998.)
- On the rate-fixing date, the interest rate will be fixed for that Disbursed Amount for the remaining maturity of the loan.

Please refer to Unit 3 for a discussion of the LIBOR-based SCL lending rate. The remainder of this section will discuss the fixed lending rate.

As you have seen, fixed-rate SCLs have an amortizing repayment structure. Since this is the case, the lending rate for this product is different from the fixed rate associated with bond transactions that have a single bullet maturity. The fixed-rate SCL lending rate is a single fixed rate, based on a maturity-weighted average of market rates corresponding to the maturities of your Disbursed Amount. To this base rate, the Bank adds a total spread comprising a funding cost margin, a market risk premium, and its standard lending spread of 0.50%. The total fixed lending rate is then applied to the Disbursed Amount until it is repaid.



"They wanted a fixed interest rate because the rates they charged for their electricity were stable and regulated."

— Rebecca Sekse, Operations Analyst, East Asia Energy and Mining Sector Unit

The fixed-rate SCL lending rate is a single fixed rate, based on a maturity-weighted average of market rates corresponding to the maturities of your Disbursed Amount.

The Loan Product

Spreadsheet model included in your course materials also includes a Base Rate

Calculator program. You may wish to look at this program and its documentation to enhance your understanding of how the Bank uses market rate quotes to calculate the base rate for your fixed-rate SCL lending rate.

The following is the "Lending Rate" section for fixed-rate SCLs, taken from the "Major Terms and Conditions" brochure.

PRINCIPAL TERMS AND CONDITIONS OF IBRD LOANS Fixed-rate single currency loans Loan type · The fixed lending rate comprises a base rate and a total spread. It Lending rate is set on the semiannual rate-fixing date for loan amounts disbursed during the preceding 6-month period (Disbursed Amount). The lending rate remains fixed for each Disbursed Amount until it is repaid. The base rate is defined as the equivalent of 6-month LIBOR in the single currency for value on the rate-fixing date, expressed as a single fixed interest rate based on the fixed interest rates that correspond to the maturities of the Disbursed Amount. The total spread (determined each June 30 and December 31) comprises the Bank's cost margin for funding allocated to fixedrate single currency loans in the loan currency, a market risk premium, and a lending spread. The contractual lending spread is 50 basis points. For the interim period from the date each disbursement is made until its rate-fixing date, interest accrues at the same rate as is applicable to LIBOR-based single currency loans for such period.

A technical definition of the IBRD fixed-rate SCL lending rate is given in Box 4.2. For our purposes, you should know that this rate is a market-based rate, and is determined in the same way as the fixed rate at which commercial banks would lend to each other for an amortizing loan structure with the same maturity profile as your Disbursed Amount. The market calls this an amortizing swap rate. In your SCL Loan Agreement, the Bank calls this the base rate.



If you are interested in learning more about how the base rate is determined, please read Annex 3.

BOX 4.2

Technical definition of the IBRD fixed-rate SCL lending rate

The fixed lending rate for each Disbursed Amount of a fixed-rate SCL is equal to the amortizing swap rate corresponding to the repayment maturities of that Disbursed Amount for the currency in which the fixed-rate SCL is denominated, for value on the Rate Fixing Date, plus a total spread which is composed of the semester cost margin relative to LIBOR of the Bank's debt allocated to fund the fixed-rate SCLs in that currency, a currency-specific risk premium, and a contractual 0.50% lending spread. The fixed-rate SCL lending rate is quoted in semiannual terms.

As noted above, the fixed-rate SCL lending rate comprises a base rate and a total spread. The base rate is determined on the rate-fixing date. The total spread is announced in early January and early July each year and applies to rate-fixing dates occurring in the first half and second half of the calendar year. It has 3 components:

- The IBRD cost margin reflects the margin under LIBOR at which the Bank is able to fund the fixed-rate SCL product. This cost margin is recalculated twice a year, every June 30 and December 31, and announced shortly thereafter. Unlike the cost margin for LIBOR-based SCLs, the cost margin for fixed-rate SCLs is a currency-specific margin.
- The market risk premium is meant to compensate the Bank for the risk it runs in funding the fixed-rate SCL product; it is not a credit risk premium based on the borrower's credit standing. The risk consists mainly of refunding risk, which would arise to the extent that the maturities of the fixed-rate SCL loan portfolio exceed those of the Bank's liabilities funding this product. The risk spread represents an estimate of the Bank's long-term average exposure to this risk. (Since the Bank introduced fixed-rate SCLs in 1995, this market risk premium has ranged between 10–15 b.p. (0.10%–0.15%), depending on the SCL currency.)
- The lending spread is the same 0.50% spread the IBRD charges on all of its loan products.

<u>oo</u>

Watch Unit 4 of the video tape again to reinforce your understanding of this product.



Now read the fixed-rate SCL sections of the "Major Terms and Conditions of IBRD Loans" brochure. If any of the fixed-rate SCL's features are unclear, review Units 2 and 4 of the Study Guide.



Then, complete Exercise 4.

Fixed-rate SCL lending rate = Base rate + Total spread

Total spread =

IBRD cost margin +

Market risk premium + 0.50%

Exercise 4

Choose only one answer for each question.

- 1. The rate on the fixed-rate SCL:
 - a. Is fixed at the time of commitment for the life of the loan.
 - b. Is fixed at the time of disbursement for the life of that disbursement.
 - c. Is fixed at the end of the semester in which the disbursement takes place for the life of that disbursement.
 - d. None of the above.
- 2. The fixed lending rate on the fixed-rate SCL is:
 - Composed of a base rate, the Bank's cost margin, and a lending spread.
 - b. Equal to the amortizing swap rate.
 - c. Reset every 6 months on the interest payment date.
 - d. None of the above.
- The fixed-rate SCL accrues at the LIBOR-based SCL rate from the disbursement date through the rate-fixing date. This LIBOR-based SCL rate:
 - a. Is equal to the prevailing 6-month LIBOR-based SCL rate on the disbursement date.
 - b. Is interpolated from the closest available LIBOR rates.
 - c. Is based on the LIBOR rate whose maturity corresponds most closely with the length of time between the disbursement date and the ratefixing date.
 - d. Is equal to the 6-month LIBOR-based SCL rate for the period that began 6 months before the rate-fixing date.
- 4. The base rate on the fixed-rate SCL is:
 - Based on the weighted average semester cost of IBRD debt funding these loans.
 - b. Announced every January and July.
 - c. Announced every 15th of the month for debt service periods beginning on such date.
 - d. Both a and c.

- 5. The market risk premium for fixed-rate SCLs is:
 - a. Averaged across currencies.
 - b. Currently 0.10%.
 - c. Meant largely to compensate the Bank for the refunding risk it runs on these loans.
 - d. All of the above.
- 6. The principal amortization pattern for fixed-rate SCLs is:
 - a. Annuity-type amortization.
 - b. Level principal repayment.
 - Either a or b above, depending on the country's per capita net income.
 - d. Specified in the Loan Agreement.
- 7. The grace period for fixed-rate SCLs:
 - a. Depends on the project's expected disbursement period.
 - b. Is equal to 3 years from the rate-fixing date.
 - c. Is the same as those for LIBOR-based SCLs.
 - d. None of the above.
- 8. The maturity for each Disbursement Amount on a fixed-rate SCL:
 - a. Depends on the project's expected disbursement period.
 - b. Is based mainly on the country's per capita net income.
 - c. Is identical to that of LIBOR-based SCLs.
 - d. None of the above.
- 9. The final maturity date for fixed-rate SCLs:
 - a. For all 3 types of fixed-rate SCLs is based on standard country criteria, including the country's per capita net income.
 - b. Cannot exceed 15 years.
 - c. May exceed the maximum allowable under the country's standard repayment terms, if one trades off final maturity across loans to the same country in the same fiscal year.
 - d. None of the above.
- 10. The grace period for fixed-rate SCLs:
 - a. Begins on the loan's effective date.
 - b. May be extended by shortening the loan's final maturity.
 - c. Both a and b.
 - d. None of the above.

- 11. The cash flow characteristics of the fixed-rate SCL's debt service:
 - a. Always have a humped shape, with the hump occurring toward the earlier part of the repayment period.
 - b. Depend on the expected disbursement period of the loan.
 - c. Depend on the actual timing of the disbursements.
 - d. Both b and c.
 - e. All of the above.
- 12. The fixed lending rate for fixed-rate SCLs:
 - a. Is accrued on the disbursed and outstanding balance of each Disbursed Amount.
 - b. Is reset every 6 months, on the interest payment date.
 - c. Is based on a formula developed by the Bank specifically for this instrument, called the amortizing swap rate.
 - d. None of the above.
- 13. When fixed-rate SCLs are prepaid,
 - a. There is a prepayment premium, as specified in the Loan Agreement.
 - b. There is a prepayment premium, as specified in the General Conditions, based on the Bank's deployment costs.
 - c. The prepayment premium is likely to be zero.
 - d. Both b and c.



You will next take part in the second of the teleconferences to discuss the solutions to case studies on the two SCL products—and ask the course leader to address any questions you have. The course leader will notify you of any cases to be covered in the third teleconference.

See the exercise solutions in your Readings pocket.

N I T

U

Currency obligation on a CPL

CUITTEINCY
The CPL lending rate

CPL repayment terms

CPL prepayment premium

UNIT OVERVIEW

Unit 5 presents the third product, the currency pool loan.

This should take you about 10 minutes



First, you will view Unit 5 of the video to familiarize yourself with the material. Take note of the 3 main product features covered by the video tape:

- Currency of obligation.
- Lending rate.
- Repayment terms, which are the same as those for LIBOR-based SCLs.

This, about 60 minutes



Next, you will read Unit 5 of the Study Guide. This section contains the features where the CPL differs from the two SCL products:

- Currency characteristics.
- Lending rate.
- Payment dates.
- Prepayment terms.

The most important aspect of the CPL is the currency composition. You should gain a clear understanding of the currency features of the CPL. The video gives an overview of this topic, and the Study Guide gives more explanation and an example of how to calculate the currency obligation in a CPL. Annex 4 shows how to calculate your specific currency obligation from your bill.

This, another 10 minutes



After going through the Study Guide, you will then review Unit 5 of the video tape. Again, take note of the 3 main product features mentioned earlier, paying special attention to the currency and lending rate aspects.

This, another 15 minutes



Then, you will review what you have learned by reading the CPL sections of the "Major Terms and Conditions of IBRD Loans" brochure. You may also be interested to read "Pool Unit Approach to Currency Pool Loans," included in your Readings pocket. If any of these features are still unclear to you, review the Study Guide and video tape, or prepare questions to ask your course leaders.

And this, 30 minutes



To test your understanding, you will then complete Exercise 5.3.

UNIT 5



In this unit you will learn more about the main features of the currency pool loan (CPL). As you have already seen in the video, the most important CPL feature is its currency characteristics.

The icon reflects the targeted currency composition of your CPL obligation.

You need to understand the CPL product for 2 reasons:

- First, you may need to evaluate its suitability for new loan commitments.
- Second, as you will learn in Unit 6, your existing CPLs may be converted to single currency terms.

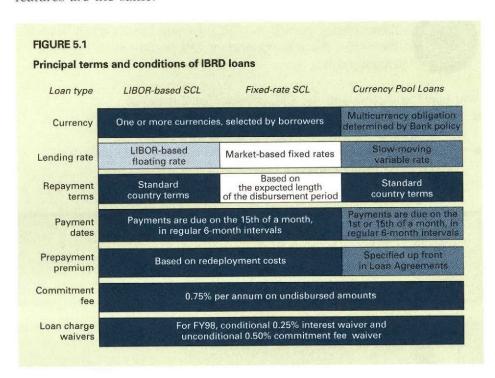


View Unit 5 of the video tape. When you have finished, rewind the tape to the start of Unit 5 and return to the Study Guide.



Now, read Unit 5 of the Study Guide.

Let's take a look at the similarities and differences between CPLs and the 2 SCL products. Figure 5.1 shows the main features of these 3 loan products. Again, where the colors are the same across products, the features are the same.



If you need to review these features, please refer to Unit 2 and Unit 3. As Figure 5.1 shows, the following features are common to CPLs and SCLs:

- Commitment fees.
- Loan charge waivers.

In addition, CPLs have the same repayment terms as LIBOR-based SCLs.

CPLs differ from SCLs in the following areas:

- Currency of obligation.
- Lending rate.
- Payment dates.
- Prepayment terms.

Let's take a closer look at the features that differentiate the CPL from the SCL.

5 1 Currency obligation on a CPL



The most important characteristic of CPLs is that your loan obligation is measured in a group of currencies. CPLs are multicurrency obligations. Although CPLs are committed in USD equivalents, they are not USD obligations.

The following is the CPL "Loan Currencies" section of the "Major Terms and Conditions" brochure.

PRINCIPAL TERMS AND CONDITIONS OF IBRD LOANS

Loan type

Currency pool loans

Loan currencies

- Currency pool loans are multicurrency obligations, committed in U.S. dollars equivalent.
- Each borrower's loan obligation is a share of the currency pool and has the same currency composition as all other currency pool loans.
- At least 90% of the U.S. dollar equivalent value of the currency pool is maintained in fixed currency ratios of 1 U.S. dollar:
 125 Japanese yen: 2 Deutsche mark equivalent (comprising Deutsche mark, Swiss francs, and Netherlands guilders).
- Currencies recalled by the Bank for borrowers' debt service are based on the currency composition of the pool.
- The Bank retains the right to revise the targeted currency ratios for the currency pool. The targeted currency ratios are next expected to be reviewed by the Bank's Executive Directors in 2001.

The currency composition of borrowers' CPL obligations reflects that of the currency pool and is the same for all borrowers. At least 90% of the USD equivalent value of the currency pool comprises USD, JPY, and DEM group currencies (composed of DEM, CHF, and NLG), in targeted currency ratios of:

1 USD: 125 JPY: 2 DEM equivalent.

These ratios, maintained since 1991, are set by Bank policy and are subject to review by the Bank's Executive Directors every 5 years, or sooner if warranted. The targets can be changed if the Bank's Executive Directors decide to do so.

With its targeted currency composition, the CPL provides a stable currency mix across the three major currency groups. The currency characteristics of this product may be attractive, from a risk management perspective, to certain IBRD borrowers, especially those with a projected debt-servicing capacity of either uncertain or diverse currency composition.



"When a country faces uncertainty over the currency composition of its net export earnings, it may want to owe a balanced mix of the major foreign currencies to reduce its risk. The CPL product provides a balanced currency composition. Borrowers may also achieve this mix by combining SCLs in different currencies."

—Hemant Shah Principal Financial Officer, Financial Products and Services Department

This section may seem long compared with the previous ones. The currency aspect is the most important feature of the CPL, and is often misunderstood. It is vital that you understand the currency characteristics of the CPL, so that you will be able to forecast your future CPL obligations.



This is a simplification of the currency composition of this product. For appropriate caveats, see Annex 1 of "Offer of Currency Choice for Existing IBRD Currency Pool Loans."

For risk management purposes, you may consider the CPL as if it were three separate loans, one each in USD, JPY, and DEM. The ratio of:

1 USD: 125 JPY: 2 DEM

gives a general idea of how the loan obligation will be divided. If you borrow 1,000 USD equivalent, you do not owe USD 1,000. The ratio implies that for every dollar you owe, you will also owe 125 yen and 2 Deutsche mark with the total adding up to 1,000 USD equivalent (expressed in terms of exchange rates prevailing at the time of disbursement).

You can use this information to estimate what you owe by:

- 1. Defining a "synthetic currency," which we call a CPU (currency pool unit).
- 2. Breaking down the obligation into its three component currencies.

The value of the CPU in U.S. dollar equivalent terms is calculated based on the current exchange rate. If you know how many CPUs you owe, you will know how many USD, JPY, and DEM you owe. Alternatively, if you know how much you owe expressed in current USD equivalents and you know that your obligation is in targeted ratios of 1 USD: 125 JPY: 2 DEM, you can calculate how much you owe in each of the three currencies.

Estimating your CPL obligation

When you contract for a loan, you want to know how much you owe. Borrowers often ask us why the USD equivalent amount of principal they pay, expressed in current exchange rates, is different from the USD equivalent amount of the loan originally agreed to. This difference occurs because the CPL obligation consists of USD, JPY, and DEM—and because the amount owed, expressed in USD equivalents, changes over time as JPY/USD and DEM/USD exchange rates change.

Let's imagine that you negotiate to borrow money from the IBRD and agree on a payment schedule expressed in USD equivalents. Since your obligation is denominated largely in 3 currencies and exchange rates fluctuate over time, you want to get a good idea of what you will owe at the time of repayment.

We will make two simplifying assumptions: first, that the DEM group comprises just Deutsche mark (not DEM, CHF, and NLG), and second, that the USD, JPY, and DEM, split in proportions of 1:125:2, make up 100% of the loan amount and not the policy-specified minimum share of 90%.

You will use the synthetic currency approach (currency pool unit, or CPU) to calculate the amount owed.

- 1. The value of the synthetic currency has to be calculated on the basis of exchange rates at the time of each disbursement to determine the number of CPUs disbursed.
- 2. After getting the CPU value at the time of each disbursement, you will aggregate the disbursements, giving you the total value of the principal amount owed in CPUs.
- 3. This aggregated value will now be allocated across the payment schedule.
- 4. Using the target ratios, you can calculate what you owe in USD, JPY, and DEM.



While this example illustrates conceptually how the CPL obligation is calculated, a more accurate description is contained in the booklet "Pool Unit Approach to Currency Pool Loans," published by the Bank's Loan Department and included in your course materials.

Let's work through an example of how to calculate the CPL obligation.

You have arranged for a loan of USD 90 equivalent with a level principal repayment schedule of:

Year	3	4	5
Amount	30	30	30

and two disbursements of USD 45 equivalent each in years 1 and 2.

Let's assume that on the day of the first disbursement, the exchange rates were:

$$1 \text{ USD} = 117 \text{ JPY} = 1.75 \text{ DEM}$$

Using the target ratios and these exchange rates, you can calculate the value of a CPU as:

$$1 \text{ CPU} = 1 \text{ USD} + \frac{125 \text{ JPY}}{117 \text{ JPY/USD}} + \frac{2 \text{ DEM}}{1.75 \text{ DEM/USD}} = \text{USDeq } 3.21$$

And you can determine the number of CPUs that were disbursed to you and that you will need to repay:

Number of CPUs =
$$\frac{\text{USDeq 45}}{\text{USDeq 3.21/CPU}}$$
 = 14 CPUs

Exercise 5.1



Now you try it. Fill in the blank boxes in the equations for the second disbursements, using the first disbursement as a guide. Let's assume that on the day of the second disbursement, the exchange rates were:

$$1 \text{ USD} = 100 \text{ JPY} = 1.65 \text{ DEM}$$

Using the target ratios and these exchange rates, you will now calculate how many CPUs were disbursed in the same way as above:

(Answer: 1 USD, 125 JPY, 2 DEM, 100 JPY/USD, 1.65 DEM/USD, USDeq 3.46)

Therefore, the disbursement of the second USD 45 equivalent works out to 13 CPUs.

(Answer: USDeq 3.46/CPU, 13 CPUs)

You received and will need to repay more CPUs from the first disbursement (14) than from the second (13). Overall, your obligation is 27 CPUs.

Keeping in mind that your repayment schedule was 1/3 of the loan repayable each year, you can now calculate the CPUs payable on each principal installment:

Year	3	4	5
Principal amount in USD	30	30	30
Principal amount in CPU	9	9	9

Therefore, your obligation for each principal payment, based on the target ratio of 1:125:2, is:

27 CPUs ÷ 3 years = 9 CPUs/year These currency amounts won't change, regardless of how exchange rates move. But the currency equivalent amount of what you owe—expressed in USD equivalent or any other currency—will change as exchange rates change.

Suppose that rather than remaining constant, the exchange rates on each payment date are:

Year	3	4	5
DEM / USD	1.70	1.80	1.60
JPY / USD	108	112.5	96

While your CPU obligation will stay the same each year, the USD equivalent value will change, depending on exchange rates:

Year 3:
$$(9 \div 1) + (1,125 \div 108) + (18 \div 1.70) = 30$$
 USD
Year 4: $(9 \div 1) + (1.125 \div 112.5) + (18 \div 1.80) = 29$ USD

Exercise 5.2



Now try it. In the space below, calculate the USD equivalent value of your schedule based obligation in year 5, using the exchange rate assumptions given above.

(Answer: Year 5:
$$(9 \div 1) + (1,125 \div 96) + (18 \div 1.60) = 32 USD$$
)

The preceding example simplified some of the features of the currency pool in order to illustrate conceptually the basic currency features of the CPL. In fact, the currency pool comprises between 30 to 40 currencies, the targeted currencies currently comprise about 97% of the total, and the DEM group also includes CHF and NLG.

In practice, the Bank uses a different, large unit of account to keep track of CPL balances—the pool unit.



For those of you who want to see how to apply what you have just learned to an actual bill, Annex 4 shows how to calculate your CPL obligation from the information in an actual bill.

Now let's turn to the lending rate characteristics of the CPL product.

5.2 The CPL lending rate

The following is from the "Major Terms and Conditions" brochure.

Loan type Currency pool loans	
Lending rate	 The variable lending rate comprises the semester average cost of outstanding debt allocated to fund these loans (recalculated each June 30 and December 31), plus a lending spread. The contractual lending spread is 50 basis points. The lending rate is reset semiannually each January 1 and July 1



The lending rate for CPLs is variable and comprises:

- 1. The semester average cost of outstanding debt that the IBRD has allocated to fund these loans.
- 2. A lending spread of 50 basis points (0.50%).

Unlike the lending rates for SCLs, the CPL lending rate is not a market rate. It passes through to borrowers the weighted average cost of mostly medium and long-term fixed rate funding plus a lending spread. Thus, at any point in time, the CPL lending rate may be higher or lower than the Bank's current funding cost plus 0.50%.

The lending rate is calculated twice a year, as of June 30 and December 31, and is equal to the weighted semester average cost of the debt funding the currency pool plus 50 basis points. The rate is subsequently reset on July 1 and January 1, and applies to interest periods beginning on or after those dates.

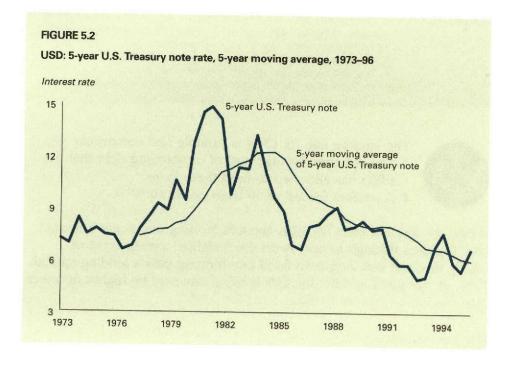
CPL lending rate = Semester average IBRD funding cost + 0.50%



For a chronology of CPL lending rates, see Annex 2, Table A2.3.

It is important to understand that the Bank's CPL lending rate is a moving average rate, which lags market developments. When the market rate is falling, it falls at a slower pace. When the market rate begins to rise, the moving average may continue to fall before starting to rise at a slower pace. Because it smoothes out the ups and downs, the moving average rate is less volatile than the market rate. Figure 5.2, showing the historical and 5-year moving average rates of the 5-year U.S. Treasury note, illustrates this.

The CPL lending rate could be an appropriate choice for borrowers that seek long maturities and interest rate stability—and that do not need a close link to current market interest rates.



The CPL lending rate could be an appropriate choice for borrowers that seek long maturities and interest rate stability—and that do not need a close link to current market interest rates.

Now let's turn to the two other areas where CPLs differ from SCLs—the payment dates and the prepayment terms.

5 3 CPL repayment terms



CPL repayment terms are identical to those of LIBOR-based SCLs (see Unit 3). These repayment terms are based on standard country criteria, which are contained in Table 5.1.

TABLE 5.1	
CPL repayment terms	(years)

Country category	Grace period	Final maturity	Amortization pattern
1–11	5	20	Annuity
III	4	17	Annuity
	5	17	Level principal repayment
IV-V	3	15	Annuity
	5	15	Level principal repayment

PRINCIPAL TERM	IS AND CONDITIONS OF IBRD LOANS	
Loan type	Currency pool loans	
Payment dates	 Debt service payments are due on the 1st or 15th of a month, in regular 6-month intervals. 	

Unlike SCLs, which are payable only on the 15th of the month, borrowers may choose either the 1st or the 15th of the month as the debt service date for their CPL loan.

5 4 CPL prepayment premium

CPLs may be prepaid. A schedule of prepayment premiums is specified in the Loan Agreement for CPLs. The schedule varies depending on the standard country terms. (Standard country terms could entail 15-, 17-, or 20-year loan maturities.) The prepayment premium is multiplied by the interest rate and applied to the principal amount to be prepaid.

Box 5.1 gives 3 schedules of prepayment premiums. Note that the premium declines as the loan approaches its final maturity.

BOX 5.1 CPL PREPAYMENT PREMIUM

Pursuant to Section 3.04 (b) of the General Conditions, the premium payable on the principal amount of any maturity of the loan to be prepaid shall be the percentage specified for the applicable time of prepayment below:

Final loan maturity 20 years Time of prepayment 15 years 17 years 0.20 0.15 Not more than 3 years before maturity 0.18 More than 3 years but not more than 0.35 0.30 0.40 6 years before maturity More than 6 years but not more than 11 years before maturity 0.73 0.65 0.55 More than 11 years but not more than: 0.87 13 years before maturity 15 years before maturity 0.88 16 years before maturity 0.80 More than 13 years 1.00 More than 15 years 1.00 More than 16 years but not more than 18 years before maturity 0.90 More than 18 years before maturity 1.00

Note that the interest rate (expressed as a percentage per annum) applicable to the loan on the day of prepayment is multiplied by the CPL prepayment premium for the respective year.



Review Unit 5 of the video tape. Keeping the main features of this product in mind, note how a borrower used CPLs to pursue its debt management objectives.



Review the CPL section of the "Major Terms and Conditions of IBRD Loans" brochure and then proceed to the following exercise.



To test your understanding of CPLs, you should now complete Exercise 5.3. Part 1 of this exercise tests your understanding of the key concepts. Part 2 gives you more practice in using currency pool units to project your future CPL currency obligations in USD, JPY, and DEM. Being able to do this facilitates planning and budgeting for your CPL.

You may find it useful to review Annex 4 before solving Part 2 of Exercise 5.3.

Exercise 5.3

Choose only one answer for each question.

Part 1

- 1. The currency composition of the Pool:
 - a. Is composed of 1/3 USD, 1/3 DEM, and 1/3 JPY.
 - Will be maintained at the targeted ratios of 1USD: 125JPY: 2DEM equivalent over the life of your loan.
 - c. Will be maintained at the targeted ratios of 1USD: 125JPY: 2DEM equivalent, subject to change by the Bank's Executive Directors.
 - d. None of the above.
- 2. The lending rate on CPLs:
 - a. Is calculated twice a year, based on the cost of outstanding liabilities funding these loans as of June 30 and December 31.
 - b. Is based on the weighted semester average cost of outstanding liabilities funding these loans.
 - Includes the cost of Bank reserves allocated to fund these loans.
 - d. Both b and c.
- 3. The CPL lending rate:
 - a. Will be reset twice a year, every January 1st and July 1st.
 - b. Is recalculated on your interest payment dates.
 - c. Is announced every 15th of the month for debt service periods beginning on such date.
 - d. None of the above.
- 4. The CPL lending rate is a moving average rate. A moving average rate:
 - a. Is normally higher than current rates when rates are rising, but is lower than current rates when rates are falling.
 - b. Is normally lower than current rates when rates are rising, but is higher than current rates when rates are falling.
 - c. Is equal to the average of the market rates at any given moment in time, weighted by maturity.
 - d. Is calculated by taking a random sample from a set of data points over a predetermined time period.

- 5. The principal amortization schedule for CPLs is:
 - a. Annuity-type amortization.
 - b. Level principal repayment.
 - c. Either a or b above, depending on standard country criteria.
 - d. Based on the project's expected disbursement period.
- 6. The grace period for CPLs:
 - a. Depends on the project's expected disbursement period.
 - b. Is equal to 3 years from the disbursement date.
 - c. Is the same as those for LIBOR-based SCLs.
 - d. None of the above.
- 7. The repayment terms for CPLs:
 - a. Depend on the project's expected disbursement period.
 - b. Are the same as for fixed-rate SCLs.
 - c. Are the same as for LIBOR-based SCLs.
 - d. None of the above.
- 8. Prior to loan approval, the grace period for CPLs:
 - a. May be shortened if the final maturity is extended.
 - b. May be extended by shortening the loan's final maturity.
 - c. Both a and b.
 - d. None of the above.
- 9. CPL commitments:
 - a. Are measured in USD equivalent, although the currency obligation is denominated in a group of currencies.
 - Are made in targeted proportions of 1USD: 125JPY: 2DEM equivalent.
 - c. May be made in any of 7 currencies: CHF, DEM, FRF, GBP, JPY, NLG, and USD, or in any currency of sufficient borrower demand in which the Bank can efficiently fund itself.
 - d. None of the above.

Part 2

Assume that you take out a USDeq 100 million CPL from the Bank. The loan is disbursed in 2 installments of USDeq 50 million each.

The principal repayment schedule is annuity based, comprising 3 installments of USDeq 31 million, 33 million, and 36 million, respectively.

Spot exchange rates on the 2 disbursement dates and 3 principal repayment dates are as follows:

		DEM/USD	JPY/USD
Year 1	Disbursement #1	1.70	123
Year 2	Disbursement #2	1.50	120
Year 3	Principal payment #1	1.45	128
Year 4	Principal payment #2	1.80	140
Year 5	Principal payment #3	1.40	95

Assume that the currency pool consists solely of USD, DEM, and JPY, in the targeted proportions of 1 USD: 2 DEM: 125 JPY. Define a currency pool unit (CPU) as comprising 1 USD: 2 DEM: 125 JPY. Give your answer in millions to at least two decimal places. (To help you, we have included the first part of the solutions for questions.)

Question 1: Calculate how much each disbursement was worth in CPU terms, using the exchange rates prevailing on each disbursement date.

Year 1:

Disbursement #1 =
$$\frac{50 \text{ USDeq}}{1 \text{ USD} + 2 \text{ DEM}} + \frac{125 \text{ JPY}}{123 \text{ JPY/USD}} = 15.66 \text{ CPUs}$$

Year 2:

Total: CPUs

Question 2: Calculate how much your principal payments would be in USD, DEM, and JPY in each year.

Year 3: Principal Payment #1 The first step is to determine how many CPUs you owe in the current year. Multiply the number of CPUs outstanding by the ratio of the principal installment due in USD to the principal amount outstanding (expressed in historical USDeq).

$$30.47 \text{ CPUs} \times \frac{31 \text{ USD}}{100 \text{ USD}} = 9.45 \text{ CPUs}$$

Then, multiply the CPU amount due by the currency ratios.

Year 4: Principal Payment #2

$$(30.47 - 9.45) \text{ CPUs } \times \frac{33 \text{ USD}}{(100 - 31) \text{ USD}} = \bigcirc \text{CPUs}$$



Question 3: Calculate how much your principal payments would be in USDeq, using the exchange rates prevailing on the principal repayment dates.

Year 3: Principal Payment #1

$$USD 9.45 + \frac{18.90 \text{ DEM}}{1.45 \text{ DEM/USD}} + \frac{1,181.25 \text{ JPY}}{128 \text{ JPY/USD}} = 31.71 \text{ USDeq}$$

Year 4: Principal Payment #2 (Hint: Multiply the CPU amount by the currency ratios and then divide the currency amounts due by the exchange rate.)



Year 5: Principal Payment #3

How does this compare with the original principal amortization schedule?

Year 3 Year 4 Year 5 Total
Original amortization schedule 31 33 36 100
Actual amount paid in USD 31.71

See the exercise solutions in your Readings pocket.



Now that we've looked at the main product features of the currency pool loan, let's turn to Unit 6 to learn about the options available to IBRD borrowers who wish to change the currency composition of their CPL loans.

UNIT

6

Conversion offer's scope

Conversion of undisbursed loan amounts to SCL terms

EXISTING
Conversion to single currency pool terms

currency pool

loans

UNIT OVERVIEW

In this unit you will learn about the options available to IBRD borrowers who wish to change the currency composition of their existing CPL loans.

This should take you about 10 minutes

This, about 90 minutes



First, you will view Unit 6 Part 1 of the video tape to familiarize yourself with the material, paying special attention to:

- The choices being offered for undisbursed and disbursed loan balances.
- The deadlines for the offer.
- The currency and lending rate characteristics of single currency pool (SCP) terms.
- The repayment terms for converted loans.



Next, you will read Units 6.1 through 6.3 of the Study Guide. Unit 6.1 covers the conversion options for existing loans, eligibility, and the conversion timetable. Unit 6.2 shows how the original amortization schedule is modified when the undisbursed amounts are converted to SCL terms, and Unit 6.3 shows how the original amortization schedule is modified when the CPLs are converted to SCP terms.

This, about 20-30 minutes



Read Appendix 1 and Annexes 1-4 of "Offer of Currency Choice for Existing IBRD Currency Pool Loans."

This, about 15 minutes



Next, you will review Unit 6 Part 1 of the video to reinforce the concepts you have learned. You will continue and view Unit 6 Part 2 of the video, which illustrates the conversion process. Note that the Bank has designed a streamlined conversion process to amend your Loan Agreement.

This, about 10 minutes



Then, you will read Unit 6.4 of the Study Guide, which gives the operational procedures of the conversion process.

And this, about 30 minutes



Sprinkled throughout the unit are 3 sample problems to test your understanding of the materials presented. At the end of the unit, you will complete Exercises 6.3 and 6.4 to test your understanding and fill out a Letter of Request that will be discussed with your course leaders and other participants during the third teleconference.

UNIT 6



Begin by viewing Unit 6 Part I of the video. When you have finished, return to this Study Guide.



Now read Units 6.1 and 6.2 of this Study Guide.

The conversion offer's scope

Many borrowers have told the Bank that they welcome the availability of currency choice for new loans, but that their larger problem lies with managing the risks of their existing currency pool loans. They said they

their currency risks.

Although the currency targets are intended to facilitate the administration and management of CPL obligations, borrowers that preferred a different currency composition have had limited ability to transform the currency exposure they face with these loans. In many cases, the reason is that the currency swap market requires counterparts to have a higher credit standing than many developing country borrowers have. For those that can tap this market, swaps may be available only in conjunction with new debt offerings. Or they may not be available in the volume or for the maturity that borrowers need—or at a price that borrowers are willing to pay.

would prefer a different currency exposure with these loans—to reduce

In response, the Bank began in September 1996 to offer borrowers the option to amend the terms of existing CPLs to reflect the offered currency of their choice.

Flexibility to change the terms of their IBRD loans can be a valuable option for borrowers. It should be considered not only in the context of individual projects or programs, but also in the light of the borrower's overall portfolio and debt management strategy.



"The country decided that the conversion decision should be made in the country portfolio context, and not on an individual loan basis."

— Doris Herrera-Pol, Principal Financial Officer, Financial Products and Services Department

Conversion options

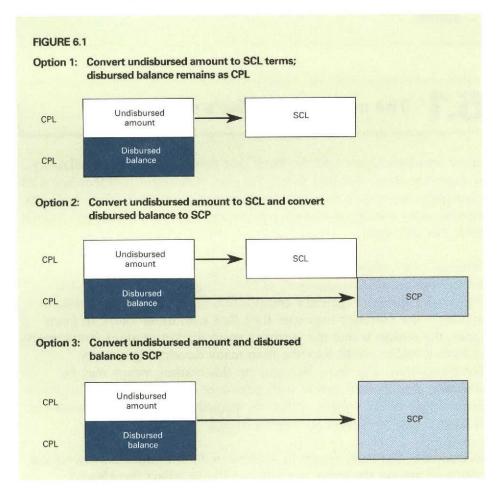
Under the offer, borrowers have the following choices:

- Retain the terms of their existing currency pool loans.
- Convert undisbursed loan amounts to single currency loan terms.
- Convert disbursed loan balances and undisbursed loan amounts not converted to single currency loan terms to 1 of 4 new single currency pools (SCPs).

The offer began in September 1996. It applies to all currency pool loans for which the invitation to negotiate was issued before September 1, 1996. The last date for conversion is July 1, 1998.

The conversion options are illustrated in Figure 6.1.

The last date for conversion is July 1, 1998.



Unless a borrower asks the Bank to amend its currency pool Loan Agreement, the terms of that agreement will remain in effect.

Borrowers that wish to convert the terms of their loans must ask the Bank to amend their Loan Agreements. You will learn more about this in Unit 6.4 of this Study Guide.

Access to single currency pool (SCP) terms is available to all borrowers.

Access to single currency loan terms is also available to all borrowers, provided neither the borrower nor the member (if the borrower is not the member) has any unconverted VLR82 loans. These are the same eligibility criteria that apply to new single currency loan commitments.

Conversion timetable

The timetable for the offer of currency choice for existing CPLs is given in Box 6.1.

BOX 6.1

For individual loans or portfolios of loans	Conversion to SCL terms	1000	onversion t SCP terms	o
(1) Bank receives conversion request	At any time until 6/1/98	by 6/1/97	by 12/1/97	by 6/1/98
(2) Conversion implementation dates	As soon as possible after Bank approval of conversion request	7/1/97	1/1/98	7/1/98
(3) Notification to borrower of completed conversion and applicable lending rate	As soon as possible after (2)	As soon as possible after (2)		
(4) Last date for conversion	7/1/98		7/1/98	
(5) Converted volume is 90% in borrower's currency choice	N/A	elejeo. i potados	by 7/1/99	
(6) Converted volume is 100% in borrower's currency choice	Immediately after (2)	As so	on as pract after (5)	icable

Conversion to single currency loan terms will be implemented as soon as possible after acceptance of the borrower's conversion request by the Bank.

Conversion to single currency pool terms will be implemented on one of three conversion dates. The first conversion date was July 1, 1997. Acceptable conversion requests received by December 1, 1997 will be implemented on January 1, 1998—and those received by June 1, 1998 will be converted on July 1, 1998, the last date for conversion. Implementing conversions on fixed dates will facilitate the associated liability management for these loans.



To find out which of your outstanding loans are available for conversion, please refer to the handout in your course materials, "Outstanding CPLs Available for Conversion."

6_2 Conversion of undisbursed loan amounts to single currency loan (SCL) terms

In designing the conversion offer for existing currency pool loans, the Bank wanted to offer both currency and interest rate choice, wherever possible. While the Bank can offer currency choice for all currency pool loans, its flexibility to offer interest rate choice is limited to portions of loans that have not already been funded at historical costs. This is the case for undisbursed loan amounts.

Borrowers may convert undisbursed currency pool loan amounts to SCL terms. The choice of LIBOR-based and fixed-rate SCL terms is available for undisbursed amounts only; it is not available for disbursed loan balances.

If a loan has begun disbursing, it is divided into 2 portions when a borrower selects SCL terms for the undisbursed loan amount. The first portion (the undisbursed amount) is subject to SCL terms, and the second portion (the disbursed balance) either remains on CPL terms or can be converted to SCP terms.

From a legal perspective, the Loan Agreement is amended to reflect 2 portions of 1 loan. For loan accounting and billing purposes, each portion is treated as a separate loan tranche. (There would be more than 2 portions if a borrower selects a combination of SCL terms for the undisbursed amount.)

The SCL terms that apply to converted CPLs are identical to the terms offered for new loans insofar as currency, interest rate, prepayment terms, commitment fees, and waivers are concerned.

For repayment terms, it is important to recognize that the conversion offer is not a mechanism for rescheduling loans. The final repayment date for loan amounts converted to single currency loan terms will not be later than the final repayment month in the original Loan Agreement.

SCL currency characteristics

As is the case for new loan commitments, SCL terms for converted loan amounts are offered in any currency of sufficient borrower demand in which the Bank determines that it can appropriately fund itself. (For a review of what this means, please refer to Unit 2.1.) Recall that as of the date of this Study Guide, the Bank offered SCLs in 7 currencies: Deutsche mark, French francs, Japanese yen, Netherlands guilders, Pounds sterling, Swiss francs, and U.S. dollars.

It is important to recognize that the conversion offer is not a mechanism for rescheduling loans. Borrowers may select SCL terms in more than one currency to obtain multicurrency liabilities of preferred currency compositions.

You will recall that SCLs are committed in the currency selected by the borrower while CPLs are committed in U.S. dollar equivalents. When borrowers request conversion to SCL terms in a currency other than U.S. dollars, the SCL commitment is expressed in the selected currency.

The Bank converts the commitment currency to the currency selected by the borrower by applying the applicable exchange rate (AER) prevailing on the last day of the month preceding the month in which the conversion is implemented.

EXAMPLE

If a currency pool loan were converted to Japanese yen SCL terms on June 10, 1997, the Bank would use the May 31, 1997 applicable exchange rate. This rate was 116.85 JPY/USD. If the converted loan amount was USD\$50 million, the redenominated SCL committed amount would be JPY 5,842.5 million.

SCL lending rate characteristics

Conversion to LIBOR-based single currency loan terms. The lending rate for loan amounts converted to LIBOR-based SCL terms is determined in the same manner as for new LIBOR-based SCLs and is reset semiannually on the interest payment dates for the loan. You will recall from Unit 3.1 that the rate is based on 6-month LIBOR in each loan currency, plus a total spread comprising the Bank's cost margin and a 0.50% lending spread.

Conversion to fixed-rate single currency loans. The lending rate for loan amounts converted to fixed-rate SCL terms is determined in the same manner as that for new fixed-rate SCLs. For the interim period from the date each disbursement is made until its rate-fixing date, interest accrues at the same rate as is applicable to LIBOR-based SCLs. The fixed lending rate is set on semiannual rate-fixing dates for loan amounts disbursed during the preceding 6-month period (Disbursed Amounts). The rate remains fixed for such Disbursed Amounts until they are repaid.

To review how this rate is determined, please turn to Unit 4.2 of this Study Guide.

The lending rate for CPL amounts converted to SCL terms is the same as for new LIBOR-based or fixed-rate SCLs.

SCL payment dates

As you know, both LIBOR-based and fixed-rate SCLs have payment dates on the 15th day of a month and semiannually thereafter, while currency pool loans have semiannual payment dates on the 1st or 15th day of a month. When

currency pool loans are converted to SCL terms, the payment dates for the SCL portion will be on the 15th day of the months originally selected by the borrower for the currency pool loan.

EXAMPLE

If a currency pool loan had interest payment dates of March 1 and September 1, its interest payment dates would continue to be March 1 and September 1 for the portion of the loan remaining on currency pool loan terms (or being converted to single currency pool terms). But they would be changed to March 15 and September 15 for the loan portion converted to SCL terms.

6.2a SCL repayment terms for LIBOR-based SCLs



Undisbursed loan amounts converted to LIBOR-based SCL terms will maintain the same remaining maturity as the CPL possessed before amending the terms. The amortization schedule will be based on a pro rata share of the

amortization schedule of the original loan. This share is determined by the ratio of the undisbursed amount that is converted to the sum of such amount and any disbursed balances. (Remember that disbursed balance means cumulative disbursements less repayments to date, expressed in historic USD equivalent terms.)

Here is an example to illustrate how this is done. Let's take the simplest example: conversion of a CPL with a level repayment of principal amortization pattern, with conversion taking place during the grace period. For our base case, consider a loan with the following features:

Original principal amount (millions)
Grace period
Final loan maturity
Original repayment obligation
Disbursed balance
Undisbursed amount

USD 100 equivalent
5 years
17 years
USD 8.33 equivalent/year
USD 40 equivalent
USD 60 equivalent

In this example, the original amortization schedule is divided into two parts, corresponding to the two portions of the amended loan. (To simplify the presentation, the cash flows in this example are shown on an annual basis. In fact, all IBRD loans are billed and paid on a semiannual basis, on the interest payment dates for the loan.)

When the undisbursed amount is converted to U.S. dollar LIBOR-based SCL terms, the annual repayment obligation for the LIBOR-based SCL portion is calculated as:

Original CPL x — (I

Undisbursed amount (Undisbursed amount + Disbursed balance)

The amortization schedule for CPL amounts converted to LIBOR-based SCL terms is based on a pro rata share of the original CPL amortization schedule.

DEFINITION

Disbursed balance—The amount of cumulative CPL disbursements, less any repayments, expressed in historic USD equivalent terms, used for determining revised amortization schedules for CPLs converted to single currency terms.

Substituting our base case into this equation gives:

$$8.33 \quad x \quad \frac{60}{(40+60)} \quad = \quad 5.00$$

Likewise, the repayment obligation of the disbursed balance that either remains on currency pool loan terms or is converted to single currency pool terms is calculated as:

Substituting our base case data into this equation gives:

$$8.33 \times \frac{40}{(40+60)} = 3.33$$

The sum of these amortization schedules (5.00 + 3.33) is the same as the original currency pool loan schedule.

If LIBOR-based SCL terms had been selected in another currency, the amortization would be determined in 2 steps. First, you would calculate the amortization schedule as if the SCL were denominated in U.S. dollars. Then you would multiply the SCL amortization by the AER for the selected SCL currency.

Using the above example and converting into Deutsche mark at an AER of DEM 1.50 per U.S. dollar, the SCL amortization schedule would be DEM 7.50/year, calculated as USD 5.00/year x DEM 1.50/USD.

You may be interested to see how amortization schedules would be calculated for other situations, such as: annuity amortization structures and conversion after the grace period. These are given in your readings.

The AER used for converting the loan and its amortization to a non-USD SCL is the AER for the last business day of the month preceding the conversion.



Please pull out the "Offer of Currency Choice for Existing IBRD Currency Pool Loans" booklet in the Readings pocket of your course materials. Turn to Appendix 1, "Revised Amortization Schedules for Converted Currency Pool Loans," beginning on page 26. On page 27, you will see the same base case as described above for level repayment of principal amortization, together with the base case assumptions for annuity amortization. Examples II(a) and II(c) illustrate the conversion of undisbursed loan amounts to LIBOR-based SCL terms during the grace period for these amortization patterns. Examples III(a) and III(c) illustrate the conversion after the grace period. Take a minute or two to review each of these examples, and then return to the Study Guide.

Exercise 6.1



To check your understanding, you will now solve a sample problem where you have to develop a revised amortization schedule when the undisbursed amount is converted to LIBOR-based SCL terms.

Original principal amount (millions) Grace period Final loan maturity Original repayment obligation Disbursed balance Undisbursed amount

USD 300 equivalent 5 years 17 years USD 25 equivalent/year USD 120 equivalent USD 180 equivalent

Calculate the revised USD amortization schedule for the following loan under two assumptions: (1) conversion takes place during the grace period; (2) conversion takes place in year 7. How would your debt service change if undisbursed amounts were converted to Deutsche mark terms at an exchange rate of DEM 1.50/USD?

Do this calculation now in the space below.



You can generate the amortization schedule with the Loan Product Spreadsheet (LPS), a computer model designed to analyze all 3 IBRD loan products. A copy of the LPS and the accompanying documentation are included with your course materials.

Solution: To check your answer, compare your calculations with the amortization schedules in the reading above, multiplied by a factor of 3.

SCL repayment terms 6.2b for fixed-rate SCLs



Undisbursed loan amounts that are converted to fixed-rate SCL terms will have maturities, grace periods, and amortization schedules set in the same manner as new fixed-rate SCLs. As you will recall from our discussion of

fixed-rate SCLs for new loan commitments in Unit 4, the repayment terms depend on the expected disbursement period. The same is true for loan amounts converted to fixed-rate SCL terms.

Repayment terms are determined by the expected overall disbursement period for the fixed-rate SCL portion, measured from the original CPL approval date to the closing date, and in no case will exceed the final maturity month of the original loan.

Thus, it is not possible to know in advance when each loan amount will be repaid. While the repayment terms are known, there is no prespecified amortization schedule.



Refer to the "Offer of Currency Choice for Existing IBRD Currency Pool Loans" booklet. Look at examples II(b), II(d), III(b), and III(d) in Appendix 1 of that booklet. You will see the annotation "Undetermined: depends on the projected disbursement period, timing of disbursements and the Final Date." When you have finished reviewing these examples, please return to this Study Guide.

To get a better idea of what your revised repayment obligations would be when you convert undisbursed loan amounts to fixed-rate SCL terms, let's consider the following example:

EXAMPLE

Original principal amount (millions) USDeq 100 Grace period 5 years 15 years Final loan maturity Original loan approval date 6 years ago 2 more years-that is, 8 years in all from loan Expected disbursement period

> approval USDeq 5

Original semiannual amortization USDeq 54 Disbursed balance USDeq 36 Undisbursed amount

Note that the disbursed balance reflects repayment of USDeq 10 in year 6.

Solution: The first step is to determine the amortization schedule for the portion of the loan that remains on CPL terms (or is converted to SCP terms). After repayment of USD 10 equivalent in year 6, the remaining amortization schedule (for years 7 to 15) for the \$54 outstanding balance would be amended to be 18 semiannual repayments of \$3 million each ((54/90) x \$5 million).

For the undisbursed amount converted to fixed-rate SCL terms, the repayment terms provide that each Disbursed Amount would be repayable in 6 equal semiannual installments, after a 3-year grace period. (These are the terms that apply for fixed-rate SCLs with an expected disbursement period of more than 6 years.) The fixed-rate portion of the loan would be expected to be fully repaid within 14 years, subject to a latest final maturity (in the case of actual disbursements beyond the 8th year) of 15 years.



Now take a look at Appendix 1 of the "Offer of Currency Choice for Existing IBRD Currency Pool Loans" for more examples of how the original amortization schedule gets modified. Then, proceed to Exercise 6.2.

Disbursed Amounts for slow-disbursing fixed-rate SCLs have 6-year maturities, including the 3-year grace period. The 3-year repayment period gives you 6 semiannual installments. Since the last disbursement is expected to take place in year 8 and each Disbursed Amount has a 6-year maturity, 8 + 6 = 14 years.

Exercise 6.2



To check your understanding, solve the sample problem, in which you have to determine the repayment terms when the undisbursed amount is converted to fixed-rate SCL terms.

Calculate the amortization schedule for the portion of the loan that remains on CPL terms (or is converted to SCP terms) and the terms that apply to the portion that is converted to fixed-rate SCL terms if the parameters in the example change, as follows (changes are indicated in bold face).

EXAMPLE

Original principal amount (millions)

Grace period

Final loan maturity

Original loan approval date

USDeq 100
5 years
15 years
4 years ago

Expected disbursement period 2 more years—that is, **6** years in all from loan

approval USDeq 5 USDeq 64 USDeq 36

Original semiannual amortization Disbursed balance Undisbursed amount

Do this calculation here.

Solution: The revised amortization schedule for the \$64 million outstanding balance would be amended to be 20 semiannual repayments of \$3.2 million each (64/100) x \$5 million).

For the undisbursed amount converted to fixed-rate SCL terms, the repayment terms provide that each Disbursed Amount would be repayable in 12 equal semiannual installments, after a 3-year grace period. (These are the terms that apply for fixed-rate SCLs with an expected disbursement period of 3 to 6 years.) The fixed-rate portion of the loan would be expected to be fully repaid within 15 years, even if actual disbursements occurred beyond the 6th year.

Since this is a medium-disbursing loan, the Disbursed Amounts will have 9-year maturities, including the 3-year grace period. This gives 12 semiannual principal installments for each Disbursed Amount.

If you had difficulty with this calculation, please review the table on repayment terms for fixed-rate SCLs in Unit 4.1 of the Study Guide.



For a summary presentation of the principal terms and conditions of LIBOR-based and fixed-rate SCL terms for new and converted loans, read "Offer of Currency Choice for Existing IBRD Currency Pool Loans," Annexes 2 and 3.



Now read Unit 6.3, which presents details on conversions to Single Currency Pool (SCP) terms. Note that:

- The SCP's currency composition will shift over time.
- Each SCP will have its own lending rate.

It is easier to understand the concept if you think of conversion to SCP terms as a phased transformation from a multicurrency, pooled obligation to a single currency obligation.

6.3 Conversion to single currency pool (SCP) terms



The name "single currency pool" may sound like a contradiction in terms. It is easier to understand the concept if you think of conversion to SCP terms as a phased transformation from a multicurrency, pooled

obligation to a single currency obligation. This transformation cannot happen immediately, as is the case for conversion to SCL terms. The reason? The Bank needs to transform the currency composition of its funding for these loans, and this takes some time.

During this transition period, exchange risk will continue to be pooled. Although the currency composition will differ across the 4 SCPs, loans in each of the single currency pools will have the same currency composition.

SCP currency characteristics



SCP terms are offered in four designated currencies—
Deutsche mark, Japanese yen, Swiss francs, and U.S. dollars—the principal component currencies of the targeted currency pool. Unlike conversion to SCL terms, each loan rested to one SCP only. Porrowers that wish to obtain multi-

may be converted to one SCP only. Borrowers that wish to obtain multicurrency portfolios may select different SCP currencies for different loans.

When an individual currency pool loan is converted to SCP terms, the entire loan is converted unless the borrower has requested conversion of the undisbursed loan amount to SCL terms. When both the disbursed and undisbursed loan balances are converted to SCP terms, there is no need to divide the loan into two portions.

The icon reflects the Bank's undertaking to transform the SCP currency composition to the currency selected by the borrower.

Because of the transition period, any undisbursed loan amount converted to SCP terms will continue to be denominated in U.S. dollar equivalents for disbursement purposes, just as the disbursed balance was, even if non-U.S. dollar SCP terms are selected.

SCP obligations are created by moving loans out of the targeted currency pool into one of 4 single currency pools (in CHF, DEM, JPY, and USD). The size of each pool will be determined by the extent of borrower demand during the offer period.

SCP obligations are multicurrency obligations initially. The Bank is undertaking to reach, not later than July 1, 1999, a currency composition for each SCP that will be at least 90% in the borrower's designated currency—and to maintain it at or above 90% thereafter. This undertaking is subject to the availability of funding and swap access in the necessary currencies. (To mitigate any access risk, the Bank has received **evergreen consents** from the governments whose currencies are offered.) *Over time, the Bank intends to shift the currency composition of each SCP to 100% in the designated single currency.*

The speed with which the Bank will be able to transform the currency composition of each SCP to 100% in the designated currency will depend on several factors. The most important factor is the speed with which existing IBRD funding can be transformed to the currencies designated by borrowers. This funding will be transformed by:

- Recalling non-designated currencies for borrowers' debt service.
- Undertaking new funding in designated currencies.
- Swapping out of non-designated currency funding.

DEFINITION

Evergreen borrowing consent—
Permission from the shareholder government for the Bank to access their currency markets and borrow in amounts sufficient to fund any SCL or SCP commitment until those loans have been repaid.

SCP lending rate characteristics



Conversion of fixed-rate currency pool loans. The lending rate for fixed-rate CPLs that are converted to SCP terms will not change. It will remain fixed at the original lending rate fixed in 1980–82, regardless of the SCP

currency designated by the borrower.

Conversion of variable rate currency pool loans. All variable rate CPLs converted to SCP terms will accrue interest at a variable interest rate. This rate will be determined separately for each of the 4 SCPs.

The variable lending rate will be calculated in a manner similar to that for CPLs. It will be the weighted average cost of the IBRD's outstanding borrowings allocated to fund that SCP, as recalculated each June 30 and December 31, plus the Bank's standard lending spread of 0.50%. The variable lending rate will be reset semiannually on the interest payment dates for the loan. Like the variable lending rate for currency pool loans, the variable SCP lending rate will reflect historic funding costs, not current market rates.

Over time, as the currency composition of each SCP shifts toward 100% in the designated currency, the lending rate will increasingly be based on the cost of funding in that currency.

Variable SCP lending rate = IBRD funding cost + 0.50%

Over time, as the currency composition of each SCP shifts toward 100% in the designated currency, the lending rate will increasingly be based on the cost of funding in that currency.

Box 6.2 is an excerpt from pages 10–11 of the "Offer of Currency Choice for Existing IBRD Currency Pool Loans" booklet. It describes how the variable SCP lending rate will be calculated for the interest period in which the loan conversion occurs and thereafter.

BOX 6.2 HOW THE SCP LENDING RATE IS CALCULATED

Loans converted on July 1, 1997. Loans converted to SCP terms on July 1, 1997 will most likely be in the midst of a semiannual interest period. Since the loan conversion does not affect a loan's interest payment dates and the lending rate is reset at the beginning of an interest period, such loans will continue to carry their existing CPL variable lending rate until the next interest period commences. In July 1997 the IBRD will notify borrowers of the SCP lending rate in each designated currency that will apply for interest periods commencing between July 1, 1997 and December 31, 1997. Those SCP lending rates will reflect the semester average cost of the IBRD's outstanding borrowings allocated to fund those loans as calculated on June 30, 1997. Accordingly, the SCP lending rates announced in July 1997 will be the same as the VLR89 rate.

For 6-month interest periods beginning on or after January 1, 1998 and thereafter, loans that were converted to SCP terms on July 1, 1997 will accrue interest based on the semester average cost of funding allocated to that SCP, as described above.

Loans converted on January 1, 1998. Loans that are converted to SCP terms on January 1, 1998 will accrue interest at the then-existing CPL variable lending rate until the next interest period commences. In January 1998 the IBRD will notify borrowers of the SCP lending rate in each designated currency that will apply for interest periods commencing between January 1, 1998 and June 30, 1998. Those SCP lending rates will reflect the semester average cost of the IBRD's outstanding borrowings allocated to fund those loans as calculated on December 31, 1997.

For 6-month interest periods beginning on or after July 1, 1998 and thereafter, loans that were converted to SCP terms on January 1, 1998 will accrue interest based on the semester average cost of funding allocated to that SCP, as described above.

Loans converted on July 1, 1998. Loans that are converted to SCP terms on July 1, 1998 will accrue interest at the then-existing CPL variable lending rate until the next interest period commences. In July 1998 the IBRD will notify borrowers of the SCP lending rate in each designated currency that will apply for interest periods commencing between July 1, 1998 and December 31, 1998. Those SCP lending rates will reflect the semester average cost of the IBRD's outstanding borrowings allocated to fund those loans as calculated on June 30, 1998.

For 6-month interest periods beginning on or after January 1, 1999 and thereafter, loans that were converted to SCP terms on July 1, 1998 will accrue interest based on the semester average cost of funding allocated to that SCP, as described above.

As the SCPs approach 90% in the designated currency, the SCP rate will increasingly reflect the average cost of funding for the designated currency.

SCP repayment terms



Determining the repayment terms for CPLs converted to SCP terms is straightforward. You have already seen how to calculate the revised amortization schedule for disbursed loan balances when undisbursed loan amounts are

converted to SCL terms. These revised schedules are the same—whether the disbursed balances are retained on CPL terms or converted to SCP terms

As you calculated earlier, the remaining maturities and amortization schedules of the disbursed balances will be adjusted pro rata, with the share determined by the ratio of balances converted to SCP terms to the sum of those converted to SCP and SCL terms.

For borrowers that elect to convert entire loans to SCP terms, maturities, grace periods, and amortization schedules will remain unchanged from the original CPL Agreement.



Take a look at "Offer of Currency Choice for Existing IBRD Currency Pool Loans," Appendix 1, examples IV(a)–IV(d) to see that this is the case. For a summary presentation of the principal terms and conditions of CPLs and SCPs, see "Offer of Currency Choice for Existing IBRD Currency Pool Loans," Annexes 1 and 4.

It is important not to misinterpret these amortization schedules. You will recall in our discussion of currency pool loans that we stressed that the amortization schedule in the Loan Agreement was useful only to indicate the *share* of your overall currency pool obligation that would be due and payable in any semester. The U.S. dollar amounts allow you to determine this share.

However, because the value of your loan obligation changes as exchange rates change, you know that your obligation is likely to be higher or lower than the U.S. dollar figure shown in your Loan Agreement, even as the share of currency pool units you owe each semester does not change.

For non-USD SCPs, once your loan has reached 100% in the designated currency, you may restate your amortization schedule in terms of that currency.

For borrowers that elect to convert entire loans to SCP terms, maturities, grace periods, and amortization schedules will remain unchanged from the original CPL Agreement.



Review Unit 6 Part 1 of the video, noting how a borrower used the conversion option to improve its debt management. Think about how the conversion offer might assist you in managing your own portfolio.



Continue to Unit 6 Part 2 of the video. This section illustrates the process of converting outstanding CPLs to single currency terms. Note that conversions are implemented by amending the Loan Agreement. This is accomplished by an exchange of standard letters.



After viewing the video, return to the Study Guide and read Unit 6.4. This unit describes the conversion process in more detail, and the exercise will let you practice filling out a conversion request.

6 4 The conversion process

So far in this unit, you have learned about the conversion options for existing currency pool loans. Now you will learn about the procedure for processing conversion requests.

In September 1996 the Bank sent a letter to each borrower with IBRD currency pool loans (with a copy to any guarantor), making the offer of currency choice. The letter contained:

- Information about the currency choice options.
- Instructions on the conversion process.
- Model legal provisions for amending your Loan Agreement.
- A list of the borrower's currency pool loans eligible for conversion.
- A model letter by which the borrower could request conversions.

Conversion involves amending the Loan Agreement

Conversion of an existing currency pool loan to SCL or SCP terms involves amending the Loan Agreement. The borrower initiates the conversion process by sending the Bank a Letter of Request, following the model provided by the Bank. This letter is signed by the borrower, any guarantors, and any other parties to the Loan Agreement.

In the letter, the borrower:

- Indicates the loans to be converted.
- Shows the conversion option selected for each loan.
- Explains the rationale for each conversion.
- Confirms that the borrower has been given the opportunity to obtain sufficient information from Bank staff to make informed decisions about loan currency options.
- Provides the name of an appropriate person to contact should the Bank have questions on the conversion request.

If the borrower has several loans outstanding, it may choose to convert some but not all of the loans—or to stagger the conversion. This can be done by sending one Letter of Request for the loans that it wants to convert at one point in time, and another Letter of Request at a later time in the offer period.



Your Readings pocket contains a model offer letter and Letter of Request. You will use this to complete the exercise in this unit. The borrower initiates the conversion process by sending the Bank a Letter of Request. The amendment is completed when the Bank sends the borrower a Letter of Acceptance.

In most cases, this review process is quick and straightforward. If the Bank has questions about your Letter of Request or your request requires special treatment (such as if you request more than one SCL currency for a loan), the Bank will contact you and additional documentation may need to be exchanged.

The amendment is completed when the Bank sends a Letter of Acceptance to the borrower, confirming that the SCL conversion has been implemented and/or that the SCP conversion will be implemented on the next conversion date.

Bank review process

In between the Letter of Request and the Letter of Acceptance, there is an internal review process within the Bank. Borrowers are requested to send the letter to the Financial Products and Services Department of the Bank—to expedite processing of their conversion requests.

On receipt of the Letter of Request, review and clearance are obtained from several parties:

- Legal Department.
- Loan Department.
- Treasury Finance Department.
- Country Department.

Once all parties have cleared the request, the conversion is implemented, and a Letter of Acceptance is sent to the borrower and to any guarantor or third parties.

The Letter of Acceptance conveys the following information to the borrower about each converted loan:

- Conversion date.
- Loan amount converted.
- Any revisions to the amortization schedule.

The Bank also provides information on any revisions to the schedule of disbursement categories arising from the conversion.

Exercise 6.3



You are now ready to prepare a conversion request using the model Letter of Request included in the Readings pocket of your course materials. Please read the Letter of Request and fill it out to request the following conversions. You will discuss this exercise with your course leaders during the third teleconference.

Loan number	Project name	Requesting conversion:
1234-0	Third agriculture	of undisbursed loan amounts to Japanese yen LIBOR-based SCL terms
1235-0	Railway rehabilitation	of undisbursed loan amounts to Deutsche mark fixed-rate SCL terms and disbursed loan amounts to Deutsche mark SCP terms
1345-0	Energy efficiency and environmental mitigation	of undisbursed loan amounts to U.S. dollar and French franc LIBOR-based SCL terms and disbursed loan amounts to U.S. dollar SCP terms
1346-0	SAL II	of undisbursed loan amounts to Spanish peseta fixed-rate SCL terms
1350-0	Primary education	to U.S. dollar SCP terms on January 1, 1998
1356-0	Maternal and child health	to Deutsche mark SCP terms on July 1, 1998

Remember to include the name of a contact person who Bank staff could call if they have questions about your conversion. Also remember to include the rationale for your request and to sign each page as indicated.

During our final interactive session, you will be asked to share how you completed your Letter of Request with particular emphasis on the rationale for your request.



Now, solve Exercise 6.4.

Exercise 6.4

Choose only one answer for each question.

- The following is not an option for conversion of disbursed balances of existing CPLs:
 - a. Disbursed balances may keep CPL terms.
 - b. Disbursed balances may be converted into one or more SCPs.
 - c. Disbursed balances may be converted into one SCP.
 - d. Both a and c.
- 2. The following is not an option for conversion of undisbursed amounts of existing CPLs:
 - a. Undisbursed amounts may keep CPL terms, provided disbursed balances retain CPL terms.
 - b. Undisbursed amounts may be converted into one or more SCLs.
 - Part of the undisbursed amount can be converted to SCL terms, and part can remain on CPL terms.
 - d. Undisbursed amounts may be converted into one SCP, provided disbursed balances are converted to the same SCP terms.
- 3. SCPs are available in the following currencies:
 - a. CHF, DEM, FRF, GBP, JPY, NLG, USD, and any other currency of sufficient demand in which the Bank can fund itself efficiently.
 - b. The 3 main currencies of the currency pool—DEM, JPY, and USD.
 - c. CHF, DEM, JPY, and USD.
 - d. CHF, DEM, JPY, NLG, and USD.
- 4. SCPs will be denominated in:
 - a. USD equivalents.
 - Either CHF, DEM, JPY, or USD, depending on the designated currency.
 - c. In USD, JPY, and DEM initially, to be transformed into the designated currency.
 - d. One of 7 available currencies: CHF, DEM, FRF, GBP, JPY, NLG, or USD.
- 5. The SCP lending rate:
 - a. Is fixed for the remaining life of the loan.
 - b. Is a variable rate, depending on the cost of IBRD debt funding the SCP.
 - c. May be based on LIBOR, at the option of the borrower.
 - d. Either a or b, depending on the original interest rate basis for the currency pool loan.

6. Conversions into SCPs:

- a. May be done at any time.
- b. May be done at any of three conversion dates—July 1, 1997, January 1, 1998, or July 1, 1998.
- c. Must be approved by the Bank's Executive Directors.
- d. Both b and c.

7. Which of the following is false?

- a. For undisbursed amounts converted to fixed-rate SCLs, the repayment terms will be determined by the expected overall disbursement period for the original CPL, measured from the original CPL approval date to the closing date, and in no case will exceed the final maturity month of the original loan.
- b. For conversions to LIBOR-based SCLs, the amortization schedule will be split pro rata between the disbursed and undisbursed portions.
- c. For conversions to LIBOR-based SCLs denominated in currencies other than USD, the original amortization schedule will be redenominated in the SCL currency using the AER prevailing on the last day of the month previous to the conversion date.
- d. For conversions to SCPs denominated in currencies other than USD, the original amortization schedule will be converted to the designated currency using the AER prevailing on the last day of the month previous to the conversion date.
- e. None of the above.

8. Which of the following is true?

- Conversion to SCL terms can take place at any time up to July 1, 1998.
- You may convert the undisbursed portion to SCL terms before converting the disbursed portion to SCP terms.
- c. You may convert the disbursed portion to SCP terms before converting the undisbursed portion to SCL terms.
- d. You may convert part of the undisbursed amount to SCL terms.
- e. Both a and b.
- f. Both a and c.
- 9. The purpose of offering borrowers a currency choice for existing loans is:
 - a. To reduce the Bank's risks.
 - b. To reduce the Bank's costs.
 - c. To provide borrowers with flexibility to manage the currency risk they may face with currency pool loans.
 - d. To provide borrowers with an opportunity to speculate on future exchange rate and interest rate movements.

See the exercise solutions in your Readings pocket.



Now that you have completed Units 1 through 6, turn to Unit 7 to review what you have learned in this distance education program.

UNIT

Closing Comments

UNIT 7

Now that you have completed Units 1 through 6, let's take a few minutes to review what you have learned.

When you contract a loan, you are assuming a liability that will be part of your balance sheet for a long time, and it may be hard for you to change the financial terms once the loan is in place. This makes it important that you consider the loan terms carefully, so that you select the product that best fits your needs. This program was developed to help you understand the financing choices available to you for your World Bank loans, along with financial risks to consider in selecting your loan terms.

The World Bank offers you a choice of loan products to suit your needs—the LIBOR-based SCL, the fixed-rate SCL, and the currency pool loan. In addition, the Bank is giving you the opportunity to change the currency composition of your existing currency pool loans. This program should provide you with an understanding of the key characteristics of these instruments—and help you to make an informed, appropriate choice.

You may face several financial risks over the life of your loan: currency risk, interest rate risk, cash flow risk, and credit risk. We feel that borrowers should adopt strategies to reduce risk, rather than try to predict and take advantage of currency or interest rate movements. However, decisions on risk reduction are not made in a vacuum—there are trade-offs to consider. The risk reduction objectives should be balanced against your other goals, such as cost minimization within your risk tolerance.

There are no hard and fast, cut and dried solutions, for debt management is an evolving field that mixes art and science. Every borrower's solution is different, and a choice that may be right for one borrower may not be for someone else. You may also find that the choices you made in the past are no longer appropriate, because your circumstances may have changed. Although you may use more sophisticated tools as you enhance your debt management capabilities, the basic principles we have set forth in this Study Guide will continue to be valid. These principles would be applicable not just to your IBRD loans, but to your entire debt portfolio.



"Almost all borrowers wanted to know how others were thinking about the offer and how they were making their decisions. For me, this richer strategic dialogue has greater value than the offer itself, because principles that apply to evaluating Bank alternatives also hold true for other borrowing and debt management decisions you will make."

—Jan Wright, Senior Manager, Financial Products and Services Department

Final exercise



Now, to put together everything you've learned, complete the following exercise. You will discuss this exercise with your course leaders and other participants during the third teleconference.

Borrowers reduce their risks when they are able to match more closely the currency, interest rate, and cash flow characteristics of their earnings and expenses, or their assets and liabilities.

Use Table 7.1 to rank each IBRD loan product to show the degree of matching a borrower could achieve by selecting that alternative if its net earnings position had the indicated currency and interest rate characteristics. Cross-reference the currency and interest rate characteristics of the net earnings position, which are given in the first two rows of the table, against each of the IBRD loan products. In this exercise, a "1" indicates the best match, "2" a good degree of matching, "3" a lower degree of matching, and "4" a poor degree of matching. The higher the degree of matching, the greater the reduction in financial risk.

For example, the LIBOR-based SCL in one currency would be ranked "1" against single foreign currency earnings and a market-based floating rate, as its currency and interest rate characteristics match very well against those of the earnings stream. A fixed-rate SCL in one currency might be ranked "2" in the same column, because while its currency characteristics are a good match, its interest rate is not. A currency pool loan might be ranked "4" in the same column because of the mismatch in currency and interest rate terms.

In addition to serving as a review for what you've learned, this table can also serve as a handy quick-reference tool for you to use in the future—both for World Bank loans as well as for debt instruments from other financing sources.

Fill out Table 7.1 now.

Currency characteristics of earnings	Single foreign currency earnings			Multiple foreign currency earnings		
Interest rate characteristics of earnings	Market- based floating	Market- based fixed	Moving- average variable	Market- based floating	Market- based fixed	Moving- average variable
IBRD Ioan product	rate	rate	rate	rate	rate	rate
LIBOR-based SCL in one currency	1	and the last				
LIBOR-based SCL in currency tranches						
Fixed-rate SCL in one currency	2					
Fixed-rate SCL in currency tranches						
Currency pool loan	4					

Questions:

to SCP terms

Look at the currency and interest rate characteristics headings and select the column that best describes your net foreign currency earnings situation, and then look at the rankings you have given each IBRD loan alternative.

1. Given your own situation, which product(s) would most likely help you to reduce the financial risks you face? What remaining risks would you face with this product (these products)? What would be the likely cost implications?

See the exercise solutions in your Readings pocket.

2. Which product alternatives would increase your risks? Why?
3. Which currency or currencies are most appropriate for you when you evaluate foreign currency liabilities? Which interest rate basis or combination of interest rate bases is most appropriate? What cash flow considerations do you keep in mind?
4. Considering your portfolio of existing currency pool loans, have you ranked other IBRD loan alternatives more highly than the currency pool loan product? What implications does this have for your consideration of the Bank's offer of currency choice for existing currency pool loans?
5. Are there products other than those listed above that would be more suitable for your debt management objectives? What features would they have? Please share your feedback with your course leaders, as input to futur IBRD product development.



You will next have your final teleconference. You will discuss the conversion offer and Table 7.1, as well as any other questions you may have.

For questions on the offer of expanded currency choice, please contact:

Financial Products and Services Department

Phone: 202-458-1122 Fax: 202-522-3264

email: fps@worldbank.org

For questions on other distance education programs offered, please contact:

Learning and Leadership Center

Phone: 202-473-6614 Fax: 202-522-2619

email: Ilc@worldbank.org

A N N E X E S

Annex 1 Currency substitution

Your obligation and debt service on an SCL will be denominated in the currency you selected, except in the case of currency substitution. The currency substitution clause in your Loan Agreement will come into effect in the very unlikely event that the Bank cannot gain access to the currency in which your loan is denominated ("access constraint"). This is required by the Bank's Articles of Agreement, which state, among other things, that (1) the Bank cannot incur foreign exchange risk and (2) the Bank must obtain the consent of the member country before accessing its currency markets to borrow funds.

In the unlikely event of currency substitution, the Bank will replace a loan currency with a substitute currency until such time as access is restored. Disbursements in the substitute loan currency will be pooled with other outstanding LIBOR-based SCLs in that currency. All affected SCL borrowers will be treated equally—that is, the exchange risk of all SCL borrowers in the substitute currency will be pooled. The prepayment premium will be waived in the event of currency substitution.

Currency substitution cannot affect fixed-rate SCL amounts for which the rate has been fixed. It can affect amounts that have not yet been fixed, which will continue to accrue at a LIBOR-based SCL lending rate until currency access is restored.

Borrowers should take note that they could be affected by currency substitution even if their loan is fully disbursed. This is because if the underlying funding matures and has to be refinanced prior to the maturity of the loan, the Bank would still need to access the designated currency.

The likelihood of this happening has been substantially reduced because the Bank has obtained evergreen borrowing consents from all seven of the shareholders whose currencies are now offered by the Bank. This consent means that the Bank has obtained permission to access these currency markets and borrow in amounts sufficient to fund any SCL commitment until those SCLs have been repaid.

Annex 2 Chronology of IBRD lending rates

TABLE A2.1 IBRD lending rates for LIBOR-based^a single currency loans (SCLs) and for Disbursed Amounts on fixed-rate SCLs prior to rate fixing

Currency and Lending Rates^b CHF DEM FRF GBP JPY NLG USD Date 15-Oct-97 3.96 2.15 3.90 3.89 7.61 0.70 5.97 15-Sep-97 1.78 3.56 3.62 7.54 0.74 3.68 6.01 1.78 3.70 0.77 3.67 6.03 15-Aug-97 3.56 7.50 15-Jul-97 1.65 3.34 3.60 7.37 0.84 3.41 5.99 15-Jun-97 3.68 3.50 6.16 1.60 3.38 7.09 0.91 3.66 0.90 3.51 6.20 15-May-97 2.06 3.45 6.91 15-Apr-97 2.16 3.50 3.59 6.91 0.81 3.49 6.22 15-Mar-97 2.16 3.50 3.66 6.66 0.74 3.52 5.95 15-Feb-97 1.91 3.38 3.53 6.66 0.72 3.27 5.82 15-Jan-97 2.04 3.35 3.53 6.88 0.72 3.28 5.92 15-Dec-96 2.38 3.50 3.74 0.75 3.35 5.86 6.82 15-Nov-96 2.18 3.44 3.79 6.89 0.78 3.31 5.79 15-Oct-96 1.88 3.38 3.91 6.35 0.79 3.13 5.92 15-Sep-96 2.40 3.42 4.09 6.14 0.80 3.18 6.13 2.69 3.47 5.91 15-Aug-96 3.59 4.44 6.20 0.96 15-Jul-96 3.02 3.72 4.19 6.07 1.02 3.58 6.14 2.96 6.20 0.92 3.21 6.07 15-Jun-96 3.64 4.40 15-May-96 2.28 3.51 4.22 6.45 1.12 2.95 5.85 15-Apr-96 2.15 3.57 4.41 6.39 0.99 3.26 5.89 3.45 5.70 15-Mar-96 2.10 3.59 4.58 6.40 0.89 15-Feb-96 2.03 3.52 4.75 6.39 0.91 3.28 5.38 15-Jan-96 1.96 3.82 5.07 6.69 0.81 3.64 5.76 15-Dec-95 2.22 4.07 5.78 6.60 0.69 3.92 5.88 4.10 5.97 15-Nov-95 2.24 4.20 6.22 6.91 0.67 15-Oct-95 6.85 7.10 0.67 4.22 6.13 2.53 4.30 15-Sep-95 3.16 4.41 6.00 6.94 0.78 4.16 6.10 6.16 7.26 1.03 4.35 6.10 15-Aug-95 3.13 4.67 15-Jul-95 3.25 4.72 6.48 7.22 1.10 4.47 5.97 4.54 3.54 7.17 7.04 1.36 6.23 15-Jun-95 4.73 3.67 7.36 4.79 6.36 15-May-95 4.79 7.07 1.67 15-Apr-95 3.86 5.00 7.36 7.27 1.86 5.11 6.67 15-Mar-95 4.17 8.80 7.33 2.36 5,54 6.73 5.42 5.54 15-Feb-95 4.36 5.48 6.29 7.42 2.54 6.86 15-Jan-95 5.54 6.69 7.23 2.66 6.98 15-Jul-94 5.20 6.07 5.76 2.45 5.64 3.66 15-Jan-94 5.91 6.28 5.72 2.41 15-Jul-93 7.32 6.15 3.46 3.77 7.47 3.72 15-Jan-93 8.35 10.99 7.20 3.86

Source: IBRD website at www.worldbank.org.

a. Stated on LIBOR Actual/360 day count basis, except for GBP, which is on Actual/365 day count basis.

For loans negotiated in the current month, annuity-type amortization schedule is developed using the average of LIBOR-based SCL lending rates for the previous 6 months.

TABLE A2.2 IBRD lending rates for fixed-rate single currency loans (SCLs)

	Stru	USD Structure Type ^b		FRF Structure Type ^b			DEM Structure Type ^b		
Date	3/12	3/9	3/6	3/12	3/9	3/6	3/12	3/9	3/6
15-Oct-97	6.99	6.92	6.83	6.08	5.91	5.68	6.13	5.95	5.71
15-Sep-97	7.18	7.10	7.00	5.97	5.72	5.38	6.09	5.84	5.49
15-Aug-97	7.20	7.11	7.01	5.99	5.74	5.39	6.13	5.86	5.48
15-Jul-97	7.02	6.95	6.86	5.83	5.53	5.13	5.92	5.61	5.17
15-Jun-97	7.23	7.15	7.06	5.97	5.68	5.25	6.12	5.80	5.32
15-May-97	7.42	7.33	7.22	5.91	5.62	5.19	6.06	5.76	5.30
15-Apr-97	7.75	7.67	7.57	6.14	5.85	5.40	6.26	5.96	5.50
15-Mar-97	7.40	7.30	7.19	6.00	5.75	5.32	6.12	5.83	5.41
15-Feb-97	7.07	6.96	6.83	5.75	5.45	5.01	5.94	5.63	5.15
15-Jan-97	7.31	7.21	7.08	6.02	5.68	5.17	6.22	5.87	5.34
15-Dec-96	7.05	6.94	6.80	6.21	5.89	5.40			
15-Nov-96	6.90	6.79	6.67	6.19	5.90	5.45			
15-Oct-96	7.24	7.13	6.98	6.36	6.05	5.58			
15-Sep-96	7.59	7.49	7.38	6.66	6.37	5.93			
15-Aug-96	7.23	7.13	7.00	6.76	6.50	6.12			
15-Jul-96	7.66	7.55	7.40	6.86	6.61	6.23			
15-Jun-96	7.79	7.68	7.54	7.05	6.75	6.38			
15-May-96	7.51	7.38	7.22	6.92	6.61	6.21			
15-Apr-96	7.55	7.43	7.26	7.06	6.78	6.40			
15-Mar-96	7.16	7.02	6.86	7.20	6.94	6.59			
15-Feb-96	6.27	6.09	5.87	7.01	6.73	6.34			
15-Jan-96	6.55	6.41	6.24	6.97	6.75	6.40			
15-Dec-95	6.51	6.42	6.30	7.29	7.06	6.77			
15-Nov-95	6.71	6.59	6.45	7.51	7.31	7.03			
15-Oct-95	6.85	6.75	6.64	7.96	7.76	7.48			
15-Sep-95	6.96	6.85	6.74	7.73	7.53	7.26			
15-Aug-95	7.34	7.22	7.09	7.73	7.57	7.33			
15-Jul-95	6.85	6.72	6.58	7.87	7.71	7.48			

a. Some of the lending rates, on dates for which actual rate-fixings have not been done, are indicative

b. The structure type indicates the grace period and final maturity for each Disbursed Amount of the loan, as approved in the Loan Agreement. Thus, a "3/12" structure means a grace period of 3 years and a final maturity of 12 years for each Disbursed Amount of the loan whose rate has been fixed. Source: IBRD website at www.worldbank.org.

TABLE A2.3 Chronology of lending rates for currency pool loans

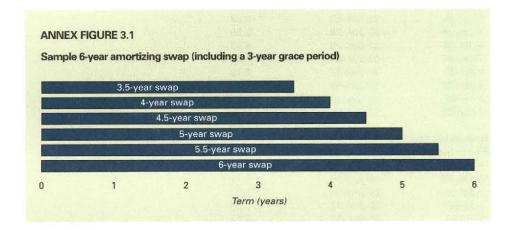
From	То	Rate
Fixed-rate currer	ncy pool loans	
(For loan comm	itments)	
1-Jul-80	12-Jan-81	9.25
13-Jan-81	30-Jun-81	9.60
1-Jul-81	17-Sep-81	10.60
18-Sep-81	30-Jun-82	11.60
Variable lending	rate 1982 (VLR82 loans	;)
(For interest per	riods beginning)	
1-Jul-82	31-Dec-82	11.43
1-Jan-83	30-Jun-83	10.97
1-Jul-83	31-Dec-83	10.47
1-Jan-84	30-Jun-84	10.08
1-Jul-84	31-Dec-84	9.89
1-Jan-85	30-Jun-85	9.29
1-Jul-85	31-Dec-85	8.82
1-Jan-86	30-Jun-86	8.50
1-Jul-86	31-Dec-86	8.23
1-Jan-87	30-Jun-87	7.92
1-Jul-87	31-Dec-87	7.76
1-Jan-88	30-Jun-88	7.72
1-Jul-88	31-Dec-88	7.59
1-Jan-89	30-Jun-89	7.65
Variable lending	rate 1989 (VLR89 loans	;)
(For interest per	iods beginning)	
1-Jul-89	31-Dec-89	7.74
1-Jan-90	30-Jun-90	7.75
1-Jul-90	31-Dec-90	7.72
1-Jan-91	30-Jun-91	7.73
1-Jul-91	31-Dec-91	7.73
1-Jan-92	30-Jun-92	7.73
1-Jul-92	31-Dec-92	7.60
1-Jan-93	30-Jun-93	7.43
1-Jul-93	31-Dec-93	7.43
1-Jan-94	30-Jun-94	7.27
1-Jul-94	31-Dec-94	7.10
1-Jan-95	30-Jun-95	7.09
1-Jul-95	31-Dec-95	7.07
1-Jan-96	30-Jun-96	6.98
1-Jul-96	31-Dec-96	6.94
1-Jan-97	30-Jun-97	6.70
1-Jul-97	31-Dec-97	6.54

Source: IBRD website at www.worldbank.org.

Annex 3 The base rate for fixed-rate single currency loans

An interest rate swap has two sides: one party pays a floating rate and the other party pays a fixed rate. The swap rate is the fixed rate paid on an interest rate swap; it is a fixed rate that is the theoretical equivalent of a stream of LIBOR payments over a certain maturity. In effect, the swap rate is equal to the market's current expectation of what a stream of 6-month LIBOR received over a certain maturity will be worth, expressed as a single interest rate.

The base rate for IBRD's fixed-rate SCL product is based on a widely used market instrument called the amortizing **interest rate swap**. An amortizing swap is a swap transaction based on amortizing (either increasing or decreasing) notional principal amounts. (In a basic interest rate swap, the notional principal amount is outstanding until the final date. An amortizing interest rate swap is equivalent to a series of these swaps maturing at given intervals.) The IBRD uses the amortizing swap rate as the fixed base rate because fixed-rate SCL principal repayment terms feature an amortizing structure.



An amortizing swap is equal to a series of swaps, each with a bullet maturity. Annex Figure 3.1 sets out the profile of maturing notional principal amounts for a 6-year amortizing swap for a slow-disbursing fixed-rate SCL, amortizing in equal principal installments of the Disbursed Amount.

Since an amortizing swap comprises a series of bullet maturity swaps, the amortizing swap can be treated as a number of separate swaps with the total swap price reflecting a weighted average of the individual swap rates corresponding to the maturities of the individual swaps. The swap rates are weighted by the notional principal amounts and corresponding maturities.

But since the IBRD fixed-rate SCL amortizes using equal principal installments, the swap rates for the IBRD's purposes do not need to be weighted by principal amounts. Therefore, the fixed base rate is a maturity-weighted average of the swap rates corresponding to the principal maturities. The example in the following table gives a sample calculation of the fixed base rate.

npie of fixed ba	se rate calculation		
Maturity (years)	Swap rate (%)	Amortization weight (maturity/sum)	Swap rate x amortization weight (%)
3.5	6.82	0.1228	0.84
4.0	6.88	0.1404	0.97
4.5	6.94	0.1579	1.10
5.0	6.99	0.1754	1.23
5.5	7.03	0.1930	1.36
6.0	7.08	0.2105	1.49

The applicable swap rates are taken from specified reference screens for value as of the rate fixing date, as reasonably determined by the IBRD. If some of the swap rates are not quoted on the reference screens, those swap rates will be determined by the IBRD.



You may also use the "Base Rate Calculator," which is included in the Loan Product Spreadsheet model, to calculate this base rate.

Annex 4 Calculating your currency-specific CPL obligation from your bill

Now that you understand conceptually how the CPL works, let's see how you can apply this to your actual bill.

As stated in the "Pool Unit Approach to Currency Pool Loans" brochure, the Bank measures CPL balances in pool units, with one pool unit set at USD 10,000 based on the initial value set when the currency pooling system was introduced in July 1980. (The CPU is a notional synthetic currency used in this Study Guide to illustrate the currency characteristics of the CPL. It is not used in the actual CPL bills.) The amount of pool units you owe is multiplied by an adjustment factor that reflects exchange rate movements. This adjustment factor is called the **pool unit value**. Multiplying the number of pool units you owe by the pool unit value gives you the amount you owe, expressed in USD equivalents at the current applicable AERs.

Let's consider an example.

Assume that your Ministry of Finance took out a 15-year CPL in an amount of USDeq 240 million in June 1993, with a grace period of 5 years. The principal amortizes in level principal repayments of USD 12 million per semester (USD 240 million divided by 20 semesters). The first principal installment is due on September 1, 1998 and the final installment is due on March 1, 2008.

On August 1, 1997, the loan was fully disbursed and the cumulative pool units outstanding was 20,000 pool units. How will you calculate the pool units to be repaid on each due date?

Solution:

As mentioned earlier, the number of pool units to be repaid is given by the following formula:

Pool units to be repaid = (amount due in USD/amount outstanding in US historical amounts) x total pool units outstanding

Due date	Computation		Pool units outstanding	Pool units due	
9/1/98	(USD 12m/USD 240m)	Х	20,000	1,000	
3/1/99	(USD 12m/USD 228m)	×	19,000	1,000	
9/1/99	(USD 12m/USD 216m)	×	18,000	1,000	
	*		7.0	*	
				*	
				*	
3/1/08	(USD 12m/USD 12m)	X	1,000	1,000	

For an annuity amortization, you would replace the USD 12m with the installment amount specified in the Loan Agreement for each due date and the denominator would be adjusted accordingly.

DEFINITION

Pool Unit Value (PUV)—The U.S. dollar equivalent value of one currency pool unit. This value changes daily to reflect the currency composition of the currency pool and daily applicable exchange rates (AERs).

Now that you know how to calculate how many pool units you owe, let's try to calculate how much you owe in USD, JPY, and DEM.

Assume that on September 1, 2003:

- You owe 10,000 pool units.
- The pool unit value is USD 15,000 per pool unit.
- The applicable AERs are 110 JPY/USD and 1.6 DEM/USD.

Your bill would calculate your principal balance outstanding, expressed in current USD equivalents, as follows:

pool units outstanding x pool unit value = USDeq amount outstanding USD 15,000 USDeq 150,000,000

Recall that your currency obligation is in targeted ratios of 1 USD: 125 JPY: 2 DEM. How would you calculate your principal currency obligation?

Solution:

1. Calculate the USDeq value of a CPU, using the prevailing AERs.

$$1 \text{ CPU} = 1 \text{ USD} + \frac{125 \text{ JPY}}{110} + \frac{2 \text{ DEM}}{1.6} = \text{USDeq } 3.3864$$

2. Compute your principal obligation in CPUs.

$$\frac{\text{USDeq outstanding}}{\text{USD/CPU}} = \text{CPUs outstanding}$$

$$\frac{\text{USD 150,000,000}}{\text{USD 3.3864/CPU}} = 44,295,300 \text{ CPUs outstanding}$$

Therefore, your principal currency obligation is approximately:

1 USD	X	44,295,300	=	USD 44,295,300
125 JPY	X	44,295,300	=	JPY 5,536,912,500
2 DEM	×	44,295,300	=	DEM 88,590,600

How do you calculate your current principal repayment obligation? As stated in "Pool Unit Approach to Currency Pool Loans":

The number of pool units to be recalled on a loan will be determined by taking the maturity repayment ratio (MRR) and applying this ratio (expressed as a percentage) by the total number of pool units outstanding on the loan. The MRR is calculated by dividing the repayment amount (from the amortization schedule) by the total historical US dollar equivalent of withdrawals outstanding as of the billing date.

In other words,

- 1. Look up the USD amount due in the current period, as stated in the amortization schedule in your Loan Agreement.
- Look up the US dollar equivalent amount outstanding on your loan, expressed in historical US dollar equivalents. (Note that your bill gives the principal amount outstanding in current and historical USD equivalents.)
- 3. Divide the amount due (obtained in step one) by the amount outstanding (obtained in step two). This gives you the MRR.
- 4. Calculate your principal obligation in CPUs, by dividing the USDeq amount outstanding in current USD equivalents by the USDeq value of a CPU.
- 5. Multiply your principal obligation in CPUs by the MRR. This gives you the principal amount, expressed in CPUs, due in the current period.
- 6. Calculate your currency obligation, by multiplying your CPU obligation by the target ratios.

Note that the Loan Product Spreadsheet uses a procedure similar to this to project your debt service.

Annex 5 Abbreviations and definitions

AER (applicable exchange rate)—The Bank's financial transactions are valued using applicable exchange rates (AERs). AERs are official rates, provided daily by central banks to the IMF, and are used to value financial transactions among the Bank and its borrowing members.

AFB (Association française des banques)—The organization that calculates the FRF PIBOR rates used by the IBRD. AFB PIBOR is the PIBOR reference rate most commonly used in interest rate swaps involving French francs.

Amortizing swap—An interest rate swap whose notional principal amount amortizes (decreases) over time.

Annuity amortization—A method of principal amortization wherein the principal is repaid in installments over time, and the sum of the principal and interest of each installment (using a discount rate determined at the time of loan negotiation) is the same, assuming interest rates do not change over the life of the loan.

BBA (**British Bankers' Association**)—The organization that posts the LIBOR rates used by the IBRD. BBA LIBOR is the LIBOR reference rate most commonly used in interest rate swaps.

B.P. (basis point)—One one-hundredth of a percent. For example, one-tenth of a percent would be 10 basis points.

Bullet maturity—A method of principal amortization wherein the principal is repaid in one installment.

CHF—Swiss franc.

CPL (currency pool loan)—A multicurrency obligation whose currency composition is the same (i.e., pooled) for all borrowers. The currency pooling mechanism ensures that all borrowers share equally in the currency composition of IBRD CPLs and the risk associated with exchange rate fluctuations.

CPU (currency pool unit)—A synthetic currency, as defined in this Study Guide, composed of 1 USD: 125 JPY: 2 DEM.

Currency of sufficient demand—Put simply, the phrase "in any currency of sufficient demand in which the Bank can efficiently fund itself" means any currency chosen by the client as long as there is enough demand for the

currency by the Bank's borrowers. This currency should be available in world markets in large enough amounts and competitively priced to onlend to borrowers in a cost-effective way. The demand should be sufficient for the Bank to raise debt in cost-effective transactions. There should be sufficient certainty about actual disbursements that the Bank can manage any cost of carry from holding liquidity in these currencies. Funding efficiency is size, cost, and risk management of funded amounts.

DEM—Deutsche mark.

Disbursed Amount—As defined in the Loan Agreement for fixed-rate SCLs, one semester's group of disbursements. The semester begins on the Interest Payment Date preceding the disbursement and ends on the day before the next Interest Payment Date.

Disbursed balance—The amount of cumulative CPL disbursements, less any repayments, expressed in historic USD equivalent terms, used for determining revised amortization schedules for CPLs converted to single currency terms.

Evergreen borrowing consent—Permission from the shareholder government for the Bank to access their currency markets and borrow in amounts sufficient to fund any SCL commitment until those loans have been repaid.

Financial risk—The probability that the actual financial outcome is different from the expected outcome.

FRF-French franc.

FY (IBRD fiscal year)—A year beginning July 1 and ending June 30 in the next calendar year.

GBP—Pound sterling.

JPY—Japanese yen.

Level repayment of principal—A method of principal amortization wherein the principal is repaid in equal installments over time, and the sum of principal and interest for each installment declines over time after the grace period.

LIBOR (London InterBank Offered Rate)—The interest rate at which banks lend to each other in the interbank market in London, as posted by the British Bankers' Association (BBA).

MRR (Maturity repayment ratio)—The number of pool units to be recalled on a loan will be determined by taking the maturity repayment ratio (MRR) and applying this ratio (expressed as a percentage) by the total numbers of pool units outstanding on the loan. The MRR is calculated by dividing the repayment amount (from the amortization schedule) by the total historical U.S. dollar equivalent of withdrawals outstanding as of the billing date.

NLG-Netherlands guilder.

P.A.—Per annum.

PIBOR (Paris InterBank Offered Rate)—The interest rate at which banks lend to each other in the interbank market in Paris, as quoted by the Association française des banques (AFB).

PUV (pool unit value)—The U.S. dollar equivalent value of one currency pool unit. This value changes daily to reflect the currency composition of the currency pool and daily applicable exchange rates (AERs).

SCL (single currency loan)—A World Bank loan denominated in a currency of the borrower's choice. SCLs are available with either LIBOR-based or fixed interest rates.

SCP (single currency pool)—Loan terms offered for conversion of existing loans only, principally to enable borrowers to change the currency of their disbursed and outstanding currency pool loans. SCPs are offered in four currencies: CHF, DEM, JPY, and USD. They are multicurrency obligations initially and will continue to be denominated in USD equivalent. The Bank undertakes to reach, by no later than July 1, 1999, a currency composition for each SCP that is at least 90 percent in the borrower's designated currency.

USD-U.S. dollar.

USDeq—U.S. dollar equivalent.

VLR82 (variable lending rate 82)—The lending rate formula for IBRD currency pool loans introduced in 1982 that is based on the semester average cost of all IBRD outstanding borrowings.

VLR89 (variable lending rate 89)—The lending rate formula for IBRD currency pool loans introduced in 1989 that is based on the semester average cost of all IBRD outstanding borrowings, excluding borrowings allocated to fund the IBRD's liquid investments and loan products carrying a different lending rate formulation.

