Chapter 13 – Pricing

Content Outline

Learning Objectives

What you should achieve after completing this chapter:

- Be able to distinguish between revolving and non revolving credit;
- Understand the factors considered in pricing of loans;
- Understand the different methods of computing interest; and
- Understand the concept of cost of funds.

1. Types of Credit

1.1 Non-revolving credit

Non-revolving credit such as term loans has a predetermined loan maturity date and repayment schedule. Maturity dates can be in 90 days, one year 15 years or any specified number of months or years but rarely extend beyond 25 to 30 years.

There a variety of payment schedules are possible, including monthly, quarterly, semi-annually, annually, step-up or balloon repayment and bullet repayment. Though the vast majority require fixed monthly payments, the length of a term loan is generally associated with a particular loan type, which in turn is linked to the economic life span of the underlying asset being purchased. Car loans, for example have maturities up to 5 to 7 years. Housing loans are repayable over 20 to 30 years. Boat loans can have maturities up to 10 to 15 years.

Competitive conditions and the ever-increasing prices of items consumers purchase on credit have led to a seemingly endless lengthening of maturities. One of the primary reasons for extending maturities is to keep monthly payments at an affordable and attractive level. The monthly payment is a key consideration for consumers shopping for a loan.

The non-revolving loan with a fixed repayment allows the customer to do cash budgets, knowing exactly what amount must be set aside for loan payments, when the payments are due, and how long the loan will be open. Most loans provide for equal monthly payment amounts, though some variable rate programmes may call for periodic payment adjustments.

Another characteristic of non-revolving loans is that they are usually related to a specific borrowing need like purchasing a car, house, land, machinery boat or any other asset. The close association between the loan request and the specific borrowing need makes the purpose of the loan a factor to be evaluated in the decision making process. Lenders are in a position to evaluate and judge whether or not the loan purpose is appropriate.

As many non-revolving loans are for purchasing tangible goods, it is customary to use those goods as collateral for the loan. Houses, land, boats, airplanes, cars and machinery are common forms of collateral. They provide some form of protection for the lender should the customer not be able to repay the loan.

Non-revolving loans are generally separated into different categories based on the goods securing the loan. This approach is helpful in monitoring the mix of loans within the portfolio and the characteristics such as – profitability, servicing cost, delinquency and average loan size of specific loan types.

These distinctions also recognise that specific loan policies must be developed for each type of loan made. Although the mix of closed end loans may vary widely from bank to bank, the characteristics and trends for each loan type will be similar.

Personal, unsecured loans often account for a high percentage of the number of loans in a portfolio but a lower percentage of Ringgit outstanding. Typically, these loans are for smaller amounts. On the other hand, housing loans have higher average balances and account for a much larger share of the Ringgit outstanding. Marine and aircraft loans usually have high average balances, but account for a small percentage of the number of loans and Ringgit outstanding in most bank portfolios. The mix depends primarily on the bank's objectives and the opportunities presented within its market area. Grouping loans by the type of collateral helps illustrate the issues loan managers face.

1.2 Revolving credit

Revolving credit accounts, remain open as long as:

- The customer handles the account in an acceptable manner; and
- The lender wishes to offer the product.

Although bank trade finance products, overdrafts or credit cards usually have an expiry date, the overwhelming majority are renewed automatically. The expiry date serves both as a control point to help review the account in order to reduce delinquency, losses, and unauthorised use, and also provides a logical point to increase marketing efforts, raise credit limits and cross sell other services. Many banks have also built periodic reconfirmation features that require updated financial information and a review of the customer's credit record. The intention is to keep the account open while simultaneously, helping manage credit risk more effectively and identifying additional marketing opportunities.

Most revolving credit accounts have a specific credit limit – a maximum amount that can be outstanding at any time. The bank, which establishes the customer's credit limit at the time the account is opened, bases the amount on the type of product and the customer's credit capacity. For example, credit limits on a regular VISA card may range from RM1,000 to RM10,000, a premium or "gold" VISA may range from RM3,000 to

RM25,000. For working capital financing, trade lines and overdrafts would be fixed based on projected annual sales segregated into purchases, expenses and sales financing.

The bank, at its option or in response to a request, can easily increase the credit limit on trade lines or credit cards. In fact, banks often aggressively increase credit limits for creditworthy customers and encourage them to use their credit services rather than that of other competitors. Credit limit increases on secured lines are more dominant. However, increases will entail new security documentation to be signed.

Once a revolving account is established, credit is easily accessed. The customer has the freedom and control to use the credit line as he or she wishes, up to the maximum credit limit. No waiting is required for loan approvals, and no one needs to know that the customer is borrowing money. As payments are made, the credit amount available under the line is replenished. The credit amount represents the customer's future borrowing power.

Revolving credit accounts are attractive to lenders because they:

- can increase profit;
- broaden the bank's market area;
- have a high level of customer acceptance;
- tie in with technological developments;
- offer operational efficiencies; and
- are highly liquid portfolios.

The profitability of revolving loan products varies, depending on type of product, competitive conditions, loan quality, loan volume and outstanding, and the operation's efficiency. Many banks are able to market these products and have achieved desired profit levels. In fact, credit card programmes contribute substantially to a bank's bottom line. Some trade lines such as Banker's Acceptances besides providing fee-based income enable banks to control the usage of lines for the intended purposes. However, the same cannot be said for overdraft lines, which can be used for anything as little control can be exercised over their usage.

With revolving credit products, customers have more control over how they use credit; there is always a need to continually refine credit controls. Unsecured revolving products, particularly credit cards, historically have been associated with higher level of losses than traditional non-revolving products. New control programmes directed at detecting fraud, reviewing accounts and handling exceptions (e.g. delinquencies, deteriorating credit

conditions and excesses over limit) offer methods for decreasing losses. The wide availability of revolving credit also raises the issue of "potential debt". This clearly would affect the borrower's perceived risk and financial position. Banks must address this issue in their credit decision-making policy. Although customers may fully use "potential debt", lenders take comfort in knowing that most customers follow consistent behaviour patterns and become light, medium, or heavy credit users.

Customers have eagerly embraced revolving credit products because having readily available credit allows them to make impulse purchases, take advantage of unexpected opportunities, and make planned purchases with relative ease. The vast majority of merchants accept credit cards and cheques, giving customers a great deal of flexibility in making purchases.

Most people want to feel they are in control of their lives and their finances. Revolving credit products give customers control over when, where, and the purposes for which they use credit. They may be used to meet short-term cash flow needs. Large credit lines allow customers to reduce the number of credit accounts they use and in some cases, to reduce the amount of interest and monthly payments on their debts. The flexibility of payment options is also attractive. Most revolving credit lines give the account holder the option of:

- Paying a minimum monthly payment;
- Paying more than the minimum with the excess to reduce the principal balance to reduce interest cost; or
- Paying full balances so that no interest will be charged.

As the balance is reduced, the customer is in effect, rebuilding available credit for future use. The available credit becomes accessible immediately and does not require additional action on the customer's part.

Finally, the overdraft current account statement and monthly billing statement provide a ready history of account activity – helpful information for managing financial affairs.

Some customers have great difficulty controlling their use of revolving credit accounts' use. Lack of financial discipline becomes a serious problem when there is access to too much credit. Typically, these customers have a large number of credit lines available, use most of the accounts, and are near or over the credit limits available to them.

Often, it is necessary to rescue overextended customers by consolidating their loans into a non-revolving loan. Failure to limit a careless customer's access to credit could mean more serious problems in the future.

2. Considerations in Loan Pricing

Loan pricing is affected by four major factors:

(i) The legal environment;

(ii) The competitive environment;

(iii) General economic conditions; and

(iv) The bank's internal environment (costs, profit objectives, strategies and financial condition).

2.1 Legal environment

The legal environment has a significant impact on the prices that lenders can charge. Broadly speaking, Bank Negara Malaysia dictated the maximum spread that could be charged for fund-based lending until recently. Now, each bank is allowed to announce their own BLR. The minimum rates for fixed deposits with tenors between 1 and 12 months for balances of RM1 million and below, will be prescribed at the current prevailing levels of 3% for a one-month deposit and 3.7% for a 12-month deposit. The minimum fixed deposit rates are being prescribed to ensure that depositors have a positive real rate of return. The Association of Banks in Malaysia's (ABM) rules dictate the mode of interest rate calculations and the commission and fee chargeable for fee-based lending activities.

Rate structures have much to do with the loan products' types banks offer and the credit availability and credit risk level that banks are willing to accept. Banks will offer only those loan products on which they can earn a fair return on their investment. For example, if profit margins are squeezed because of high deposit costs, and the bank is unable to preserve its profit margin, it will typically limit the credit extension to its best and most creditworthy customers.

2.2 Competitive environment

Competition for all types of credit has increased in recent years as banks have expanded their lending operations beyond their traditional target market areas. Lenders must closely stay in a position to attract the business level desired.

Information about competitors' rates and products is easily obtained by following newspaper advertisements. Advertisements not only give information about competition prices, but also a clear indication of the kinds of loan products the competition is trying to sell. Competitor information can also be obtained by simply "shopping" the competition. A designated shopper may call competitors and request information on loans and loan pricing. This allows the bank to assess not only the competition's offered rates, but also their service quality and sales effort.

Another approach to evaluating the competition's products and prices is to question dealer personnel. Keep in mind though, that while dealers are quick to inform the bank when competitors reduce rates but they are unlikely to let them know about rate increases. It is impossible to monitor all competitors. Smart bankers focus on competitors who are price leaders by virtue of their market share or their aggressiveness in marketing products. Major banks are the usual targets of monitoring efforts.

2.3 General economic conditions

General economic conditions also have a bearing on pricing decisions. Deposit market rates, credit demand level and overall economic conditions in the bank's market areas are reflected in the bank's pricing of its loan products. Fluctuations in deposit market rates are reflected quickly in the bank's cost of funds. Thus, the rise and fall of deposits cost and other bank liabilities have immediate implications on credit cost.

Rising market rates mean that the loan portfolio's funding costs go up. The bank may react by raising rates (this occurs automatically with variable rate loans) or may elect to hold rates at the current level. Raising rates on new loans helps preserve profit margins; holding rates at the current level narrows short-term profit margins but may result in a higher market share if competitors raise their rates. Declines in market rates generally result in price reductions, which tend to stimulate demand for credit and increase activity level in credit markets.

The relative demand for credit influences pricing decisions. Loan prices tend to rise or hold firm when demand is strong. They decline when demand softens. Economic conditions in the bank's market area influence demand and thus loan pricing. Weak economic conditions, due to high unemployment and low purchasing power, may result in some rate reductions as a response to low demand.

2.4 Bank's internal environment

The bank's internal environment – its costs, objectives, and strategies – affects its loan pricing patterns. As objectives and strategies are generally set at the product level, pricing tends to vary from product to product. If the bank has set aggressive growth plans for a product, it will tend to price it at the low end of the available rate range. If growth goals are modest, and if other goals, increased profitability for example, are more important for a given product line — rates will be set more toward the middle to upper end of the competitive price range.

Each bank's financial condition has some impact on its loan pricing. In an increasingly competitive, deregulated environment, financial institutions that can deliver loan products at the lowest cost have a significant advantage over competitors. This is not to say that just by looking at the bank's cost structure and adding the desired profit margin, one can simply set loan rates. Rather, the lowest cost providers will be able to price their loan products at the lower end of the prevailing rate scale and still achieve desired profit margins.

3. Pricing patterns

Loan pricing is no longer, simply, an issue of rates. All of the following are elements of contemporary loan pricing decisions.

- Annual percentage rate;
- Monthly payments;
- Credit insurance charges; and
- Fee structure – annual account fee, credit report fee, etc.

Each element represents an opportunity for the bank to increase its income and provide a basis for competing in the market place. Although loan products pricing vary significantly from market to market, some practices are common. For example, many lenders vary loan rates based on loan types and the collateral securing the loan. Rates may also vary for the given products based on the loan term, the customer's credit strength, and the loan size.

These examples illustrate the concept that:

- Risk increases as the term of the loan increases, therefore justifying a higher rate.
- Larger loans offer some efficiencies that could be reflected in lower rates.
- Good customers – those representing less credit risk – could be renewed with lower rates.

The four primary cost categories for loans, especially consumer credit, are:

(i) Acquisition cost (cost to make a loan);

(ii) Maintenance and liquidation cost (cost to collect payment);

(iii) Loan loss rate (three year average); and

(iv) Cost of funds.

While the first three elements are self-explanatory, the final factor – cost of funds – is the most important. This factor represents the price that the bank must pay for the money it loans to customers. Banks have little money (capital) of their own to lend. They must attract deposits and borrow money to generate the funds needed for their lending activities. Increased competition in the financial services industry has had a significant impact on the cost of funds.

Sources can command widely varying rates for funds based on the availability and demand for those funds. These unpredictable fluctuations can result in loans becoming unprofitable or their profit margins being eroded. Credit managers do not have control over the cost of funds, but have some control over other expenses.

The cost of funds fluctuates over time, which affects not only pricing, but also the bank's product strategy, credit policies and in some cases, growth objectives.

4. Methods of Loan Pricing

Lending rates may be grouped into three categories, namely:

(i) Rates that describe a method of calculating the interest on loans – simple interest;

(ii) Rates that describe the behaviour of the interest rate over the loan term – fixed rate and variable rate (BLR and KLIBOR); and

(iii) Other rate definitions – annual percentage rate (APR).

4.1 Simple interest

Simple interest is a method of computing and quoting interest rates based on applying an interest rate to the daily loan balance outstanding during a specified period of time. The rate is generally expressed as an annual rate; however, it can also be shown as a daily periodic rate. For example, if the simple interest rate is 12 percent, the daily periodic rate is 0.032876 percent, that is the annual rate divided by 365 days.

4.2 Fixed rate

Fixed rate loans carry one interest rate throughout the life of the loan with one exception. When a fixed rate loan becomes delinquent, its entire balance is declared due and payable. There are provisions in security documentation that call for a different interest rate to be charged on loans.

Consumer loans frequently carry fixed interest rates and in most of these loans, the fixed rate is part of the level payments. In other words, the customer will have the same monthly payment as long as the account is repaid in a satisfactory manner. Minor adjustment may be required in the final monthly payment to reflect early or late payments received on simple interest loans. Fixed rates are used because consumers are dealt with more frequently on the basis of stable incomes and budgets. Lenders feel that consumers should be able to rely on fixed payment amounts in their budgets and it is easier to process fixed rate loans.

However, fixed rate loan portfolios clearly expose lenders to a high level of interest rate risk, thus leading to banks adopting variable rate loans or hedging the fixed rate loan portfolio with fixed rate funding, for example, selling loans to Cagamas.

4.3 Variable rates

Variable rates, also called floating rates, are those rates that are pegged either to the base-lending rate, Kuala Lumpur Inter-Bank Offer Rate (KLIBOR) or multi-tiered rates. Variable rates move up or down with those pegged rates while the spreads with occasional changes remains largely unchanged. When variable rates are used, they protect both the borrower and the lender against dramatic fluctuations in interest rates levels. When the risk of wide swings in interest rates is high, then variable rates are used more frequently.

As the base lending rate changes, either up or down, so does the rate on variable loans. Increases may be passed on to the customer in higher monthly payments, or they may result in an increase in the number of payments required to pay off the loan. Decreases may result in lower or fewer monthly payments, or a smaller final payment.

Variable rate loans allow the lender to pass on changes in the cost of funds to customer. The variable rate feature minimises the interest rate risk, but may increase credit and collateral risk.

Most consumer credit portfolios contain a blend of fixed and variable rate loans. Fixed rates tend to be concentrated in high gross yield products, such as credit card and in vehicle and hire-purchase loans. Variable rates are increasingly used on property-based lendings and business loans.

These blended portfolios appear to offer a sound middle ground in the effort to optimise profits.

One strategy for marketing variable rate non-revolving loans is to offer them side by side with fixed rates, with the variable rate loan priced somewhat below that of the comparable fixed rate loan. This gives the customer an incentive to take the variable rate, with its lower monthly payment, rather than choosing the fixed rate loan. The gap between the fixed and variable rate tends to grow as rates rise and narrow as they fall.

5. Concept of Cost of Funds

This represents the price a bank must pay to have funds available for loan, including factors such as the interest amount to be paid on deposits and on funds borrowed from investors. This figure is an important consideration in setting loan interest rates.

The factors that are taken into account in computing cost of funds are as follows:

- Interest paid on deposits;
- Reserve cost;
- Administration cost; and
- Non-interest bearing deposits.

The base lending rate (BLR) is computed by applying all these factors.

6. BLR Computation

Under the new framework, each banking institution will now announce its own BLR based on its cost structure and business strategies. Banking institutions will also, no longer be subject to the maximum spread of 2.5% above BLR. This is aimed at promoting more efficient pricing of the spectrum of financial products being offered.

An overnight policy rate (OPR), based on the current 2.7%, inter-bank rate, plus or minus 0.25%, will be used as the main basis of BLR computation. Further the OPR will be the indicator of the monetary policy stance. The OPR will have a dual role – as a signalling device to indicate the monetary policy stance and as a target rate for Bank Negara Malaysia's day-to-day liquidity operations. This means any change in the monetary policy stance would be signalled by a change in the OPR. It will serve as the primary reference rate in determining other markets rates.

6.1 Reserve cost

This is the cost of maintaining the Statutory Reserve Ratio at Bank Negara Malaysia. Currently it stands at 4% of eligible liabilities.

6.2 Administration cost

Each lender has to calculate his administration cost. Lenders, who are inefficient, may end up with higher lending rates. Conversely, efficient lenders who can maintain a low administration cost will enjoy higher profitability.

6.3 Non-interest bearing deposits

This refers to demand deposits commercial banks receive in the form of current accounts, where generally no or low interest is paid.

Interest on loans, other than inter-bank loans shall be at the individual banks' discretion under the rules set by the Association of Banks in Malaysia (ABM).

All interest rates on loans and advances shall be tied to the respective banks' base lending rate except for the following:

(i) All loans and advances, the rates of which are prescribed by Bank Negara Malaysia; and

(ii) All loans and advances, the rates of which are prescribed by law.

In the case of housing loans (including purchase of shop-houses), for which interest rates are not prescribed by Bank Negara Malaysia, interest rates should be revised periodically in accordance with changes in the base lending rate.

7. Basis of Interest Computation

7.1 Daily rest

Interest is calculated based on the daily outstanding in the loan account and it is compounded or rested into the principal balance at the last day of each month. For example, overdraft.

7.2 Monthly rest

Interest is calculated based on the preceding month's closing balance and is compounded or rested into the principal at the last day of each month. For example, term loan.

7.3 Yearly rest

Interest is calculated based on the outstanding at the beginning of each anniversary of the date of full draw down and is compounded or rested into the principal at the last day of each month. This mode of interest computation is no longer used in the light of the BNM guideline and market competition.

7.4 Flat rate

Interest is calculated based on the original loan amount and is added on to the principal at the outset, as in the case of a hire-purchase facility.

Following the varied methods of interest calculations given, it ought to be clear that ten percent interest charged on the daily rest will not be the same as ten percent on the flat rate. So how can comparisons be drawn to know what the equivalent is under the different methods? To do this, one must be get the actual interest rate by calculating the annual percentage rate (APR).

7.5 Annual Percentage Rate (APR)

This is the total cost of borrowing expressed as a percentage. The APR is intended to allow for fair comparison of the credit cost and to provide a common language for describing costs to borrowers. It is equivalent to the same basis that housing loan rate is quoted on a monthly rest basis (such as 6% p.a. monthly rest).

The formula for calculating the APR as found in the Seventh Schedule of the Hire Purchase Act 1967 is as follows:

$$\frac{2NF(300C + NF)}{2N^2F + 300C\,(N + 1)}$$

where

N = Number of instalments
C = Number of instalments that under the contract will be paid in one year or, where the contract is to be completed in less than one year, the number of instalments that would be paid in a year if instalments continue to be paid at the same intervals

F = the amount determined in accordance with the formula

$$\frac{100C \times T}{N \times A}$$

where

C = as stated above
T = Total amount of predetermined term charges
N = Number of instalments
A = Amount financed

8. Other Charges (Fees and Commissions)

The need to develop non-interest income has led banks to begin charging for services provided in the form of fees and commissions.

8.1 Fees

Commitment fees on the unused portion of loans are usually charged in accordance with ABM rules. This is because the bank must set aside funds to support the unused credit line.

For unused overdraft facilities, a commitment fee of 1% p.a. will be levied on the unutilised portion, with the following exceptions:

(i) Overdraft facilities with rates of interest prescribed by Bank Negara Malaysia, such as those granted under the Credit Guarantee Scheme, including the Special Loan Scheme, and loans to small scale enterprises and the bumiputra community for business purposes; and

(ii) Personal overdraft facilities with a limit of up to RM250,000 each.

No commitment fee shall be charged for term loans (excluding syndicated loans) where there is a predetermined draw down schedule fixed in terms of time. Where the term loan does not have a predetermined draw down schedule, or where the draw down schedule is not adhered to, a commitment fee of 1% per annum shall be charged. This fee applies to both term loans governed by prescribed ceiling rates or term loans of up to RM250,000.

The annual credit card fees allows banks to recoup some of the cost of servicing and renewing the account, especially those of occasional users and convenience users. Banks also charge a merchant discount fee for processing credit card sales slips. This fee or discount covers the

account's handling cost and generates a profit for the bank. Other fees banks charged include a processing fee for housing loans. These fees are designed to offset an account holder's specific actions that result in an expense to the bank.

However, due to competitive pressure, fee waiver, either wholly or partially, is becoming increasingly common.

A prepayment penalty fee is levied if a loan is partially or entirely repaid before its scheduled maturity.

For syndicated loans, various fees are charged for packaging and managing the facility. These flat fees – a percentage of the loan – can either be collected in advance or over the life of the loan.

8.2 Commissions

Commissions shall be charged for services rendered as per the ABM rules. The amount charged varies as it depends on the type of service rendered. For example, 0.1% commission is levied on Letters of Credit amounts for each month (or part month) of validity of the credit with a minimum of RM50 per credit.

9. Summary and Conclusion

The lender's pricing policy and practices, and cost structure of its operations affect loan profitability. The cost of funds is the single largest expense and also the one over which loan managers have least control.

Although pricing has a bearing on the lender's loan growth, it is also a feature that competitors can match or beat in a very short time, thus making it difficult to have pricing advantage for a long time. Consequently, a healthy account relationship would the key to making a difference in sustaining business.

Practice Questions

1. List the characteristics of non-revolving credit.

2. List the characteristics of revolving credit.

3. Briefly explain the four factors that affect loan pricing.

4. Explain the characteristics of a fixed rate loan.

5. Explain the characteristics of a variable rate loan.

6. Explain the factors commercial banks and finance companies take into account when computing cost of funds.

7. Distinguish between the daily, monthly and yearly rest basis of computing.

8. Explain the basis for charging commitment-feeing interest.