



# INTERNAL TRANSFER PRICING; A MEANS OF RATIONAL RESOURCE ALLOCATION IN BANKS

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## 1. Introduction

“Transfer Pricing” commonly refers to an international phenomena; the practice of pricing goods and services offered between related parties in different countries with due consideration to various strategic aspects including optimization of tax liabilities. This however, is outside the scope of this article. This article deals with the practices adopted by Commercial Banks in Sri Lanka in pricing of funds and services as provided between different business or administrative units within the Banks. Is there a need for recognizing the fact that the funds are transferred from some units to the others and in that case that they should be priced? If so, how should the pricing be? In a similar manner, is there a need to recognize that there are services generated by some units and utilised by others and if so should such services be priced internally? If so, how should the pricing be done? As an extension to the process, should there be recognition of the utilisation of the most scarce resource of a bank, i.e. capital, and if so should there be a target price set based on capital utilisation? If so how should such pricing or setting of targets be done? What are the industry practices? What are the best practices? And what could be further developments towards ideal practices? This paper attempts to cover these aspects.

## 2. Need for Internal Transfer Pricing

### 2.1 Need for Transfer Pricing of Funds

Banks today are quite complex organisations. They have evolved from simple two product (Deposits and Advances) organisations located in a single place of business to multi branch multi product organisations

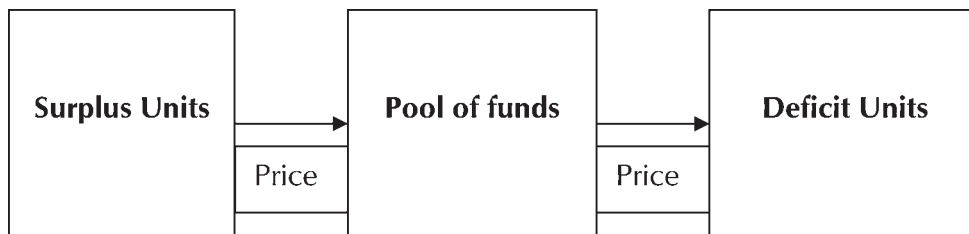
The geographical dispersion makes them deliver different products in different locations. Further, the diversity of economic activities and patterns of fund movements across the country make certain branches concentrate on deposit mobilisation and others on lending. There is no



such thing as a balanced balance sheet at branch level or at strategic business unit level. Either the unit would be more into lending or more into deposit mobilisation. Hence is the need for the funds of the Bank to be shared by different business units. Rather they need be transferred at a price! The branches with more deposits than advances effectively lend to the branches with more advances than deposits. They support each other by one party providing the funds at a price and the other party giving a return on the funds.

Specialisation of the banks on certain product lines such as Personal Banking, Leasing, Housing Finance, Corporate Banking etc., too create business units that concentrate mainly on one side of the balance sheet either advances or deposits. This again creates the need for fund transfers at a price.

The following is a simple illustration of the internal mobility of funds in a bank:



**Figure 1: The flow of funds within a Bank**

## **2.2 Need for Transfer Pricing of Services**

As much as funds are subject to mobility within an organisation, services generated within the organisation too are mobile. A branch requires the support of several other business units and administrative and support service divisions to perform their functions. So does a business unit. The Banks have become either too large or too complex or both. The management of a Bank itself makes up another service function that involves substantial costs. Services such as Information Technology, Human Resources Development, Marketing, Accounting and Finance, Training, General Administration, Auditing, Legal, Risk Management and Compliance etc., are all centralised services that cater to the rest of the organisation. Similarly, there are several specialised products and services divisions such as Trade Finance, Treasury, Housing Finance, Leasing etc that provide services to enable branches deliver structured products. These organisational arrangements clearly illustrate that it is necessary that some units produce services that are used by others. If one business unit or branch is to use the services of another, should such services be provided free of charge? Answer may be yes if both units are combined together to evaluate their performance. However, if the performance evaluation is done on a unit-by-unit basis, then the profitability of the respective units must be established. If the profit is to be established, then all relevant costs and income should be taken into account. Hence is the need to pay for the internal services.



Going by the concept of relevant or incremental costs, one might argue that costs such as Head Office management cost or the cost of the HR department are not necessarily incremental based on the incremental branches and hence the need to ignore apportioned or allocated costs in evaluation of performance of business units. Such arguments may be valid if it is to consider an isolated decision such as setting up of a branch or closing down a branch. However, if it is to be believed that the numerous service functions and the Head Office exists due to the fact that there is a corresponding network of business units, then there is relevance and justification in sharing the costs or providing the services, at a price. There is further justification of pricing services as the price mechanism can bring in market oriented discipline and resource allocation. If the services are overpriced or if the costs are excessive then there would be resistance within the organisation demanding justification of the costs of the service centres. On the other hand, there would be pressure on the business units to make not just a contribution but true profit that really contributes at organisational level. These aspects, put together, justify the internal transfer pricing of services as well.

Following is a conceptual framework of the need for transfer pricing of services:

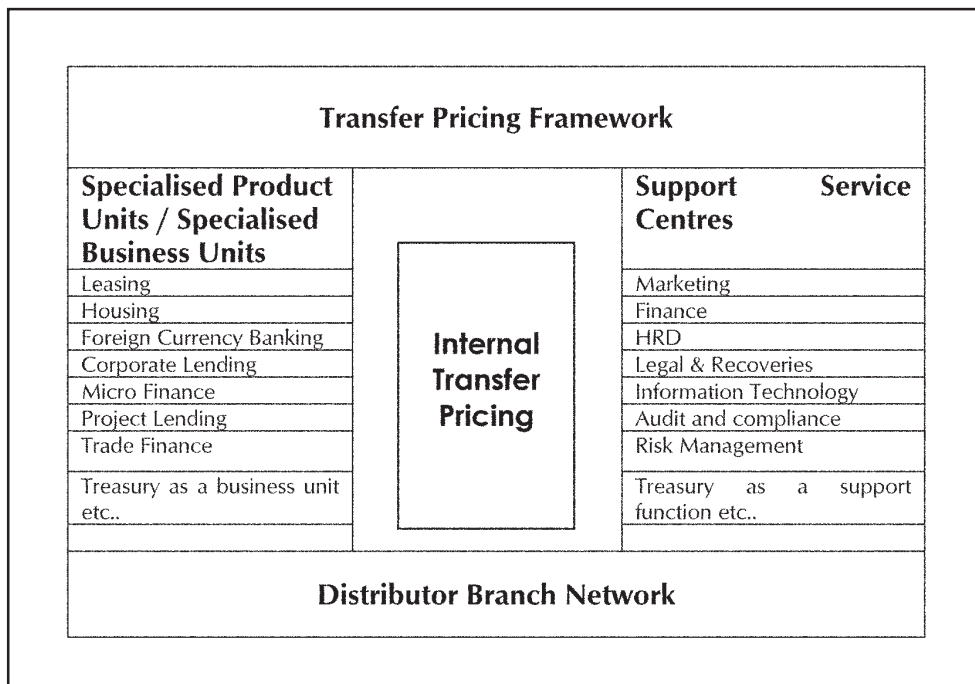


Figure 2: Transfer Pricing of Services; a Conceptual Framework



### **2.3 Need for Transfer Pricing of Capital**

Like most business organisations, banks require capital for growth. This reality is particularly embedded into the Regulatory Capital Adequacy Requirements in the banking system. The minimum amount of capital required to be maintained by a Bank is specified as a percentage of the Risk Weighted Assets (RWA) where the minimum at present is 10% of the Risk Weighted Assets. Risk Weighted Assets are the assets of the Bank, most of which is advances, risk weighted as per the perceived level of risk. The weightings are specified in the regulations issued for capital adequacy purposes. Accordingly, higher the risk taken by having a higher amount of RWA, higher the capital requirement. Branches and business units do not maintain the same level of Risk Weighted Assets. Hence the utilisation of capital is not equal. Therefore it is not correct to compare the profits of the branches without comparing the utilisation of the most demanded and scarce resource i.e. capital. Hence the need to carry out notional allocation of capital and the need to set target profits based on capital utilisation.

### **3. Internal Mirror Accounting for Fund Movements**

For those who are less conversant with the accounting aspects of fund movements within banks, it is worthwhile having a quick review of the process.

When a branch accepts a cash deposit it will do so by crediting a deposit account and debiting the cash account. When a large amount of deposits is accepted in this manner, there will be surplus cash that would be sent to the Head Office. The Head Office in turn will debit their cash account while crediting the branch. Therefore in the books of the Head Office there is a "payable" to the branch, which is a borrowing from the branches. In the books of the branch the cash transfer will be effected by crediting cash account and debiting the Head Office. This is a "due" from the Head Office. The essence is that if a branch accepts deposits beyond the level of their lending, then the surplus would be passed down to the Head Office to be utilised by the rest of the units.

A branch, on the other hand, will lend by debiting a loan account and crediting a customer deposit account. Suppose the other cash deposits at the branches have not been large and there is not adequate cash in the branch, then the branch will have to get down cash from the Head Office. Head Office will release such cash by crediting the cash account and debiting the branch account. The Head Office thereby creates a due from the branch which is a lending to the branch. The branch in turn responds by crediting the Head Office account thereby creating a borrowing from the Head Office and debiting the cash in hand. When the customers withdraw cash there will be debiting of deposit accounts reducing the deposit base and crediting of cash account to reflect the release of cash. Effectively, when larger amounts of advances are granted beyond the available deposits, such branches will borrow funds from the Head Office to bridge the gap.



The same adjustment for deposits over advances or advances over deposits will happen through fund transfers by cheques via internal or inter-bank clearing processes or via any other means of payment. While some banks route all the transactions in between branches through the Head Office, some others record in a single account in each branch, all the transactions with the rest of the branches and units and the balance in such account will be a net borrowing from or net lending to the others.

These dues to or from others create a clear need for Internal Fund Transfer Pricing.

#### **4. Generally Applied Fund Transfer Pricing Methods**

The review of industry practices and the analysis of possible methods that would address transfer pricing issues make it possible to identify and generalise the different transfer pricing methods. The author takes the liberty to classify them into five different methods with variations within each method, and name them as given.

##### **4.1 Pay on the Net Method**

This method will use the Head Office (or in some cases the rest of the bank) mirror account balance as the base for determining the amount of lending or borrowing done by the branches and business units. If in the books of Head Office, a particular branch balance is a debit balance reflecting an asset, then the branch has borrowed money from Head Office and Head Office charges interest on that borrowing. Similarly if, in the Books of Head Office, there is a credit balance, meaning a liability, then the branch has lent to Head Office and Head Office will pay interest to the branch. It should be noted that an asset balance in Head Office is a liability in the branch and vice versa. The calculation of interest could be done at Head Office Interest rate as decided from time to time, which in turn could be based on the market rates.

This approach ensures that all the funding by Head Office to a branch or by a branch to Head Office are captured. Therefore funding of fixed assets and other asset and liability balances etc are also captured.

However, effectively, this method is like running the excess or deficit of the branch through short term savings accounts or overdrafts. A branch that has excess balances has lent to the Head Office at the prevailing market rates that keep changing applied on that varying balance. Similarly a branch that has shortage of funds has borrowed from the Head Office at the prevailing market rates that keep changing, applied on the varying balance.

Hence the branches are severely exposed to interest rate risk arising from the mismatch between rates committed on the assets and liabilities and rates received on the net surplus or deficit. They may have windfall gains or losses and their performance can get adversely affected



due to market volatility that is beyond their control and in the same manner they may unduly benefit from such market movements. Yet there can still be exposure due to the business model depending on the linking of cost of funds to rates charged on advances.

Few sub methods can be identified depending on the method of determining the interest rate applicable.

#### **4.1.1 Pay on the Net Method with Single Rate**

In this case the interest rate applicable on borrowings by the branches and lending by the branches will be the same.

#### **4.1.2 Pay on the Net Method with Dual Rate**

In this method, Head Office keeps a markup or spread between the borrowing rate and the lending rate. This mark up may be used to cover some other cost element or to provide a disincentive on the borrowings by branches.

#### **4.1.3 Pay on the Net Method with Rates on Slabs**

In this approach, the interest rate applicable can vary depending on the amount of borrowing or lending. For example, the bank can decide that up to the level of funding as of the previous year end, the rate will be a certain percentage whereas beyond that it would be higher or lower. This, to an extent, can be used to control growth of advances or deposits as the case may be depending on the strategic objectives.

#### **4.2 Actual Cost Plus Margin Method**

In this method, the Actual interest cost of deposits as a percentage of the average deposits is calculated on a monthly basis separately for each and every branch. A certain margin, say 2% is applied on that percentage and the Head Office will pay for all the deposits at the respective cost plus rates of all the branches. The same or an increased percentage can be charged on the advances and other drawings of the branches. As an alternative the Head Office may pay only for the surplus deposits over advances to those deposit taking branches and charge on the net drawings by the branches that have more advances than deposits with the same basis of rate calculation.

This method will take away the interest rate risk from the deposit taking branches but will leave it with the branches that have more advances than deposits. Hence windfall gains and losses are still possible. In addition, there will not be any disincentive for taking high cost deposits or any incentive for having low cost deposits as the branches are reimbursed the cost plus a margin whatever it may be.



### **4.3 Internal Fund Market Method**

This method is to create an internal funding market where individual branches and business units can decide to place their funds or borrow funds for specific periods. This method can be used to manage the interest rate gap exposures. For example, if a branch has long term fixed rate leases with short term deposits, then there is a gap between the period of re-pricing of the assets (leases) and the period of re-pricing of liabilities (deposits). In this case, the gap can be closed by internally borrowing a specific amount up to the point of maturity of the leases to match the lease period, so as to close the gap and have a predictable stream of future interest income and cost. The short term deposit can be matched with a short term internal placement so as to close the gap again. The rates of the internal fund market transactions would be negotiated between one another.

While normally the branches would be expected to use this method for closing the gaps, they can use the method to create gaps too. Further, different branch managers may have different levels of understanding on the interest rate scenarios and may be outsmarted by others. The Treasury can monitor the positions but intervention will drive away the market orientation. On the other hand, Treasury can be made a counter party to all deals so that the rates etc will be more realistic.

In this method, the branches may transfer the interest rate risk to the others but unless the gaps are matched at the bank level there will be somebody carrying the risk. Therefore, unless a central unit such as the Treasury monitors and closes the overall gaps it would be a half solved problem.

### **4.4 Pooling of Funds at Variable Rate Method**

In this approach Head Office or Treasury will pay for all the deposits at a rate that prevails and that will vary based on future interest movements. Similarly Head Office or Treasury will charge for all the advances at a variable rate. The funds are effectively pooled.

Advances and deposits go as two different product lines and this method will to an extent avoid the advantage that may be enjoyed by business units or branches with the ability to match within the units. This issue will prevail depending on the level of attractiveness of the transfer pricing rate to the branches that take deposits vs the branches that give more advances than deposits. The bargaining process will prevail anyway.

The main weakness still is that the interest rate risk is yet with the branches and business units. The income received or the expenses incurred under internal transfer pricing will keep changing while the respective deposits and advances may have rates fixed for certain unmatched terms.



Another key weakness is that the method may fail to capture other assets and liabilities funded by the branches or Head Office as concentration is on the deposits and advances only. Therefore, there can be undue gains or losses to the branches or business units.

There are variations of this method as follows:

#### **4.4.1 Pooling of Funds at Single Variable Rate Method**

In this case the rate paid on deposits and the rate charged on advances will be the same. While it may sound fair, the method is unable to use the rate as an incentive or disincentive to promote or discourage one of the two lines of business viz. deposits or advances depending on the market conditions.

#### **4.4.2 Pooling of Funds at Dual Variable Rate Method**

The dual rate with a positive or even a negative margin may be used to divert business activities into one of the two product lines as stated above.

### **4.5 Advanced Pooling of Funds Matched at Origination Method**

In this method too, the deposits and advances are effectively pooled by paying for the deposits and charging for the advances. However the key difference is in the method of determination of the rate. The advances and deposits are captured at the time of disbursement or time of acceptance respectively. Then the maturity of the product will be taken as the key determinant of the applicable rate. In the case of products where the interest rate can be changed prior to maturity, (i.e. floating or variable rate products), then the earliest possible date of re-pricing the interest rate will be taken as the maturity date for the purpose of selecting the applicable transfer pricing rate. The Treasury and ALCO of the bank will, at a regular interval such as every month, determine the term structure of interest rates as prevalent in the market and/or as reflected in the rates applied on the lending or deposit products. Accordingly an internal yield curve is created specifying the different re-pricing (or maturity) terms and the applicable interest rates. The terms can be a series of maturity buckets such as:

1. Overnight
2. One day to one week
3. Over one week to one month
4. Over one month to three months
5. Over three months to six months
6. Over six months to one year
7. Over one year to two years etc. etc.



It is stressed that for the purpose of assigning the maturity, the re-pricing date of the advance or deposit is taken instead of the actual maturity date. For example, an annual floating rate housing loan with a term of twenty years will be taken under one year re-pricing rate and not under twenty year category. Similarly, permanent overdrafts with annual reviews but with the right for the bank to change the rate at any time will be priced as overnight re-pricing category. Same will apply to savings accounts.

When a deposit or an advance is taken, the system picks up the details and matches the internal rate applicable to the deposit or advance based on the re-pricing period. The charge on the advance or the payment on the deposit will be at this rate fixed for the period. For example, when a three month deposit is taken, the three month internal rate will be picked up for paying for the deposit for the three months. Similarly a one year loan will be matched with the one year internal rate for charging interest for the one year period. When the loan balance goes down the interest will be calculated only on the outstanding balance but at the original rate. In this manner the entire interest rate risk is taken away from the branches and business units. As the internal yield curve is revised frequently, always the prevailing rate will be applied and fixed for the entire re-pricing period. Therefore the rate received or paid will not, most likely, be out of the prevailing rate scenario.

This method too concentrates mainly on advances and deposits and there should be methods to capture other fund movements that go for financing of other assets or arise out of other liabilities.

This method can only be applied if there is a computerized internal fund transfer pricing system. Data need to be captured at account level on a continuing basis. Hence the volume of calculations and record keeping is very much beyond manual capabilities. However, given the increased cost efficiency of present day computerized processing capabilities, the benefits of investments would outweigh costs.

This method also allows the calculation of account profitability in a meaningful manner. The cost of funds applicable to an advance is fixed at the time of granting and fixed for the re-pricing period. Hence the profitability is a real one and not an estimate.

The biggest advantage is that branches and business units will not be subject to interest rate risk. Their returns are pre-determined. They will not be subject to windfall gains and losses. Hence the performance evaluation of the business units will be meaningful.

As the internal pricing fixes internal costs and returns on advances and deposits, the interest rate risk gets concentrated at the funding centre which could be Treasury or Head Office or a separate unit. The responsibility for managing the bank-wide interest rate risk lies with the central unit. The ALCO and Treasury would take this responsibility. Along with this there will be better



monitoring and need for managing interest rate risk. When the gains or losses arising from interest rate mismatches go hidden in hundreds of branches it would definitely go unnoticed whereas when it is concentrated in one book it will be clearly seen. Therefore, the bank will be compelled to apply more prudent risk management approaches rather than ignoring the risks.

Another benefit is that interest rate risk management goes to the experts from line managers who have less expertise in such area.

This method will still be open to the bargaining process and possible debate as to how to share the spread between the cost of funds and the yield on advances. Whatever the range of rates agreed will be to the dissatisfaction of one group against the other. There can be two sub approaches of the method:

#### **4.5.1 Advanced Pooling of Funds Matched at Origination – Single Yield Curve**

In this approach the range of rates applied for paying for deposits will be the same as the rates used for charging on advances for the respective periods. No spread is kept by the Treasury, Head Office or Funding Centre. Pushing the yield curve up or down could divert the spreads from deposit taking business to lending business and vice versa.

#### **4.5.2 Advanced Pooling of Funds Matched at Origination – Dual Yield Curve**

In this method two parallel yield curves would be used. One, the lower set of rates, will be used to pay for the deposits and the other, the higher set of rates, will be used to charge on advances. An internal spread will be maintained by the central unit. Apart from pushing the internal yield curve up or down for providing an incentive for one of the two lines of businesses, this method can create an artificial internal intermediation cost, the spread, either to cover any other central costs or to provide incentives to concentrate more on one of the two main lines of businesses, viz. deposits and advances.

### **5. Between the Cost and the Yield; The Sharing of Spread**

Banks have two main lines of fund based activities viz. accepting deposits and extending advances. Taking these two lines of business separately, one might analyse the cost elements that need to be covered in the spread between the rate paid on the deposits and the rate charged on the advances of a similar maturity period.

The following figure illustrates this in summary form.



### The Cost Elements to be Covered in the Interest Spread of Deposits and Advances at Branch / Business Unit Level

<b>Rate charged on advances</b>
Provision for credit loss
Loss of interest in suspense
Transaction costs (less fee income)
Overheads and value added taxes
Holding cost of related other assets net of liabilities
<b>Contribution on lending</b>
<b>Internal Transfer Price rate of Funds</b>
<b>Contribution on deposit taking</b>
Holding cost of related other assets net of liabilities
Overheads and value added taxes
Transaction costs (less charges recovered)
Yield difference in liquid assets
Cost of Reserves
<b>Rate paid on deposits</b>

**Figure 3: An illustration of the various cost elements that need to be covered between the rates applied on advances and the rates on the deposits with the transfer price playing a distributor role. The contributions on lending and deposit taking are available to cover central overheads and corporate taxes before determining the profits of the bank.**

It is seen that both the lending units as well as deposit taking units or in other words both the areas of business that are done by branches, require certain minimum spreads before they arrive at the transfer price rate.

From the point of view of lending business, first of all there should be sufficient premium to cover the credit losses. The credit losses arise in two forms i.e. provision for bad debts and interest held in suspense on non earning advances. The extent of risk premium should depend on the level of risk and need to be applied on a case by case basis for each of the advances. The lending units too should recover the transaction costs associated with the lending operation. The transaction cost could be higher in retail lending as against corporate lending due to the fact that the average loan size would be very small in the former as compared with the latter. The unit must recover a share of overheads that are relevant to the lending operations. In addition the funding cost of various assets less operational liabilities that reduce the funding burden must be recovered. Finally a contribution on the lending activity commensurate with the return required on the capital needs



created by the transaction is required. The Internal transfer Price rate should be such that all the above cost elements should be covered if the unit is to be happy.

Similarly, the business of accepting deposits will have a range of such costs to be recovered. First of all there is the cost of maintaining the Statutory Reserves with the Central Bank of Sri Lanka, as a percentage of the deposits which presently stands at 10%. Hence effectively the cost of a deposit is immediately grossed up by a factor of 10/90. Then there is a need to maintain statutory liquid assets against the liabilities including deposit liabilities. If liquid assets earn less than the cost of deposits then there will be an additional burden. Such difference would be the net cost. Generally, of course, the Treasury of a Bank takes care of the liquidity maintenance without having to pass a burden to the branches as the yield on liquid assets is more or less adequate to cover the average cost of deposits. Then the requirement to cover the transaction costs exists. Here again, the smaller retail deposits will have higher transaction costs while the larger wholesale deposits will have lower transaction costs per unit of funding. A further spread is required to cover overheads and also the cost of funds involving the other net assets. Finally a contribution is demanded by the deposit taking unit as well. Should this contribution be linked to a capital requirement arising from this business line is an issue. There is no capital requirement based on accepting deposits, as the requirement is rather based on the creation of risky assets. However the essence of capital adequacy is to protect the depositors by providing solvency. Therefore it is important that the bank-wide capital requirement is shouldered by both the lines of business. More will be discussed on this under capital allocation. The deposit taking units would finally satisfy all the above requirements using the rate at which a return is paid to them under the Internal Transfer Pricing.

It is very clear that the interests of the two lines of business will lead to a bargaining process. This is particularly so given the fact that all the units will not have equal values of deposits and advances making them aligned to being either deposit takers or lenders. Hence they would bargain for the areas that fit them well and demand a better rate under Internal Transfer Pricing.

The deposit taking units will demand a higher Rate while the lending units will demand a lower rate.

Study of industry practices as detailed below showed a large range of rates as applied by different banks. That by itself shows the bargaining power balances in the respective banks apart from of course the strategic decisions to concentrate on one product line against the other. The Internal Transfer Pricing rates varied between 11.5% p.a. and 19% p.a. indicating the degree of subjectivity in this exercise of deciding the internal transfer price.



## **6. Industry Practices – Selected Cases**

### **6.1. A State Owned Domestic Commercial Bank**

The Bank has been concentrating on the rolling out the core banking system for the past 3 years and all the branches have now been linked and fully computerized.

Now the bank is concentrating on introducing a new system that deals with:

1. Branch Profitability
2. Product Profitability
3. Customer Profitability

#### **6.1.1 Pricing of Funds**

At present the bank follows a two tiered internal interest rate system i.e.

1. A rate at which liabilities are purchased from the branches
2. A rate at which the assets are charged to the branches.

These two rates have a spread of 1%. The rate is linked to the reverse repo rate of the Central Bank of Sri Lanka which is 12% p.a. at present, with a plus and minus 50 basis points mark up for charging on assets and paying on liabilities.

All the deposit liabilities are paid for in this manner to the branches. Similarly, interest earning assets and cash balances are charged at the charging rate.

There is no charge for development lending and the Treasury bears the cost. Similarly, the Treasury bears the cost of Statutory Reserve Deposits held with the Central Bank. The Central Office has a small loss in the process and the Treasury has a slight surplus.

As the reverse repo of the Central Bank has become less significant to represent the market rates where there is a big gap between the short term Treasury Bill rate and the reverse repo rate and also between the short term deposit rates and the reverse repo rate the branches with surplus deposits tend to lose. The Treasury reimburses the full cost of high rate fixed deposits where special rates have been quoted.

#### **6.1.2 Pricing of Services**

The bank earlier charged for training hours which has since been discontinued. Cash handling cost is passed down to the branches. A small share of exchange profit is passed to the branches on account of customer transactions carried out by them. There are some branches that carry out international transactions and commission income such as LC commission are recorded in the branch.



### 6.1.3 New System

The bank is in the process of implementing a new system for identifying profitability and performing transfer pricing at branch level, product level and account level. Further, the pricing will be based on the tenor of the product. According to the new system all the assets and liabilities will be subject to internal transfer pricing, account by account depending on the

1. Term,
2. Product type and
3. Branch.

The Bank is also considering capital allocation to branches and measurement of Return on Equity, ROE. The bank is, in addition to the above, in the process of fully implementing IAS 39 for fair value accounting.

### 6.2. A State Owned Domestic Commercial Bank

The Bank has over 300 branches and a similar number of extension offices creating a huge network of branches.

It has a few strategic business units such as Corporate Banking, Treasury, the Overseas Customer Unit and the Primary Dealer Unit.

The Bank follows a “pooling of funds” concept where deposits of all the branches are pooled centrally through an internal transfer pricing. Similarly, all advances are charged by the Treasury as if the cost is borne by Treasury. However, no spread is kept by the Treasury between the rates paid on deposits and the rates charged on advances.

For the purpose of applying the rates, the accounts are broken into several maturity buckets such as overnight, one week, up-to one month, etc. Different rates are paid on the deposits and also charged on advances depending on the respective terms to maturity. At present these rates range between 14% p.a. to 18.5% p.a. depending on maturity. When branches and/or business units are directed to take deposits or advances at uneconomical rates, then the Head Office will provide a markup to cover the deficit.

The rates are revised monthly and applied for the deposits and advances based on original maturity. However, the rates applied are current rates based on current market conditions even for old deposits as the system does not track the applicable transfer pricing rates at the time of accepting the deposits or granting the advances. Therefore, the branches carry the interest rate risk.

The Deposits are taken net of Statutory Reserves so that the deposit taking branches would receive the transfer pricing on the net amount only.



The Bank leaves most of the Head Office costs in the Head Office itself without transfer pricing. As a result the Head Office has a large loss while the benefit would be reflected in the branches.

The Bank does not have a process of capital allocation or charging for the usage of capital.

### **6.3 A Private Sector Domestic Commercial Bank**

The Bank has in excess of 170 branches and extension offices. The bank also has a few specialised business units such as Treasury & International and Credit Card Centre.

Corporate and Personal Banking Facilities are booked in the branches while there are Head Office Departments that process and approve facilities.

The Fund Transfer Pricing is done through the Treasury. Rates are decided by the Treasury Committee and the ALCO. A flat rate is applied for all the tenors which at present is at 19% p.a.

The Bank follows a concept of pooling the funds where a return is paid for all the deposits while a charge is applied on all the advances. Same rate is applied for deposits and advances. All interest bearing assets and liabilities and current accounts are taken into account while assets such as fixed assets that are booked in the branches, even though funded out of borrowings from the Head Office, are not charged for the funding cost.

The calculation of interest is based on daily balances of deposits and advances and is paid monthly.

If fixed deposits are given special rates, an additional interest of 1% is paid. The Statutory Reserves are deducted from the deposit amounts and interest is paid on the net amount.

Services are not transfer priced. All the support service functions under the Head Office run as cost centres and as a result, the Head Office has a large loss. This benefit would be reflected in the branch profits.

The bank does not allocate capital and does not charge for capital utilisation. However, ROAA is being looked at, at the branch level, of course with the limitation that the branch profits are not after paying for Head Office services.

The Bank is just moving into a new core banking system and with this the Bank will be sourcing a new Transfer Pricing System in the future.



## 6.4 A Private Sector Domestic Commercial Bank

The Bank has in excess of 100 branches and extension offices. Bank also has several strategic business units such as Corporate Banking, Leasing, Housing, Treasury and International, Development Banking etc.

### 6.4.1 Internal fund Transfer Pricing

For internal fund transfer pricing, the bank uses a net borrower/net lender wise categorization of branches or Strategic Business Units, SBU s. Those who have more deposits than advances would be net lenders to the Head Office (i.e. to the rest of the Bank) while those who have more advances than deposits are net borrowers from the Head Office (i.e. from the rest of the Bank). The base for fund transfer pricing is the net borrowing or lending from/to the Head Office as reflected in the Internal Mirror Account between the branch or the unit and the Head Office (i.e. the rest of the Bank). The borrowing branches are charged Head Office interest and the lending branches are paid Head Office interest based on the Head Office Account balance calculated daily and credited monthly. This is effectively a method similar to financing out of an overdraft account for the borrowing branches and putting all the excess funds in a savings account by the lending branches.

Further, interest is charged on the amount of Statutory Reserves that need to be maintained in respect of all the deposits, while the Treasury maintains the Reserves. There is a spread of 1.75% between the rate paid to the lending branches and the rate charged on the borrowing branches. The rates at present are 15% p.a. and 16.75% p.a. . In addition, a higher rate of 18% p.a. is paid on new deposits accepted after July 2007 and a higher rate of 18.0% p.a. is charged on new advances over the level at the end of 2007. There are several schemes of paying additional interest to the branches for special deposits, etc.

Whatever the spread enjoyed by the Treasury through the Internal Fund Transfer pricing is distributed back to the branches in proportion to their lending to Head Office.

The Head Office interest rate is reviewed periodically. Earlier this was linked to the Reverse Repo Rate of the Central Bank but since the Reverse Repo Rate has become more or less non representative of the market interest rates, the Head Office interest rate is now determined with reference to the changes in the market interest rates and also through the bargaining process of the different units.

The Bank is also considering the implementation of a "Cost Plus" method for paying to the branches. In this method, the branches will be given a margin on their actual cost of deposits and that will be passed down to the borrowing branches with a margin. The bank is actively considering sourcing of a new transfer pricing system, and a policy decision has been taken in this regard.



### **6.4.2 Service Transfer Pricing**

The bank had some time back introduced a “Profit Centre” concept where all functional units were to become autonomous profit centres accountable for their performance. Accordingly, several of the Head Office departments such as Central Cash, Training, Internal Audit, etc. were converted to profit centres. However, there are yet many Head Office departments such as IT of which the cost is borne by Head Office. As a result, the Head Office runs at a large loss.

### **6.4.3 Capital Allocation**

The Bank does not allocate capital or charge a rate of return based on utilisation. However, the bank is considering measurement of ROAA, Return on Average Assets.

## **6.5 A Private Sector Domestic Commercial Bank**

### **6.5.1 Pricing of Funds**

Till end of last year (end of 2007), the Bank had maintained a single rate for all Internal Fund Transfer Pricing in local currency. This rate had been regularly reviewed based on market conditions.

The rate had hitherto been with a mark up of about 5% over the weighted average cost of the deposits where the rate was between 13% p.a. to 14% p.a. when average cost of deposits was around 8.5% p.a. However, the rate would be less than the marginal cost of deposits where the surplus branches would take the marginal deposits at a rate higher than that at which they would receive Head Office interest.

The rate changes did affect the budgetary targets to an extent where the spreads enjoyed by the branches changed. The branches carried the interest rate risk.

The funds were pooled across the surplus branches and distributed amongst the deficit branches at the same rate.

However, the bank has sourced a new software system that has been implemented in 2008 where the system is capable of matching the pricing based on the products and also on the term of the products. The system captures data relating to all deposit and advances products at account level and also recognizes the re-pricing terms, i.e. as to whether the applicable rate is fixed for the tenor or floating and, if floating, the frequency of re-pricing and the last date of re-pricing.

The funding Centre (Treasury) pays for all the deposit products and charges for all the advances products. The rate to be paid or charged is determined based on the applicable rate at the time of accepting the deposit or granting the advance, updated monthly. The applicable rate is based on the term to maturity of the deposit or advance. For this purpose, a yield curve is constructed and applied monthly, based on the applicable rates of deposits and advances and the



market rates as well. The internal transfer pricing yield curve is in between the deposit yield curve and the advances yield curve so that both the surplus branches as well as deficit branches will have a markup as against the average cost/yield.

In fact, the payment for deposits and charging for advances will happen on a gross basis without netting off deposits and advances. In this manner, the deposit products of all the branches are paid for by the Treasury at the applicable rates based on the tenor of the deposits and the advances products are all charged by the Treasury at the applicable rates based on the term of repayment.

The system has the capacity to price different products with the same tenor differently but this feature has not been enabled due to the complexity.

The funding centre has no margin for itself. For a specific term, the rate paid on deposits and the rate charged on advances would be the same.

The bank has gone back several years to construct the yield curves applicable to past periods so as to price the deposit and lending products granted earlier but yet outstanding.

The system has many advantages including the fact that the interest rate risk is taken away from the branches and now left at the funding centre, the Treasury.

Complexity could be the main disadvantage, but the significant benefits can offset this disadvantage.

### **6.5.2 Pricing of Services**

The Bank also prices Head Office services using different tools and almost 80% of overhead costs of Head Office have been transferred and charged to business units, to ascertain the profitability.

Linkage to ROAA is through the budgetary guidelines in a different manner.

### **6.6 A Domestic Commercial Bank**

The Bank has less than 50 branches and these branches are customer service centres concentrating on deposit mobilisation and transaction processing. Lending decisions are concentrated in the Head Office business units with all approvals being referred by the branches except for cash backed facilities and small personal loan facilities. A couple of staff members are assigned to the branches with direct functional reporting to Head Office Credit Administration to process the credit applications. However, lending is booked in the ledgers of respective branches where the initiation is made.

The Bank as a whole has several strategic business units such as Retail, SME, Commercial Banking, Project Financing and Treasury.



Retail Banking and SME Divisions handle personal lending and small business lending respectively and these are booked at the respective branches.

### **6.6.1 Pricing of Funds**

The Bank has developed a comprehensive Internal Transfer Pricing system. The computer software for this purpose has been internally developed over a period and is capable of determining profitability at:

1. each branch
2. each business unit
3. each client
4. each product
5. each portfolio of loans handled by a team

Further drilling down and aggregating of the profitability is also possible using the systems.

The transfer pricing system goes on the basis of pricing each of the lending or deposit transactions. Each time a transaction such as granting a loan is executed, the transfer price applicable to that period is picked up by the system and that price is associated with the loan or deposit till it matures. The transfer price is the internal interest rate paid on a deposit by the Head Office or the internal interest rate charged on a loan by the Head Office.

The rates are based on the tenor with separate rates for each commonly used tenor such as overnight, three months, six months, one year etc.

Current and Savings accounts are priced under overnight rate bucket and same applies to overdrafts. However, the short term rates are kept for monthly review so as to avoid excessive volatility of applicable rates. The transfer prices are reviewed on a monthly basis by the ALCO and input to the system.

The deposit transfer prices are based on the rates on fixed deposits offered by the bank and also the market interest rates with about 1% mark up over the rate quoted to customers.

The advances are transfer priced based on market rates for the specific tenors and the business units add their margins to arrive at the specific lending rates to customers. The costs of Statutory Reserves that are to be maintained with the Central Bank are not yet captured in the system specifically, but developments are being made.

If a loan is given using a subsidised rate based on a credit line refinance, then an adjustment is made to transfer the funding cost benefit to the lending unit.

Under the present method, the interest rate risk is entirely taken away from the business units. The interest rate risk is pooled in the Head Office/Treasury.



## **6. (6) (2) Pricing of Services**

The cost of service departments and Head Office are totally absorbed by the business units. Trade Finance acts as a service department and the costs are apportioned based on an Activity Based Costing approach also considering the volume of services shared by different business units. These apportionments are reviewed on a quarterly basis. Similarly, costs of marketing and advertising are also apportioned. Costs of other services too are allocated on some rational basis. For example, HR costs are allocated based on head count, legal costs are based on relevant level of activity, IT costs based on IT Systems, transaction volumes terminals etc. .

There are no costs left in the Head Office, as all costs would be apportioned or allocated to the business units. The business units will have three different types of overheads viz. direct overheads, indirect overheads and allocated overheads. Direct overheads are incurred at the business unit, indirect overheads are those incurred at other units but relate to the services generated at the business units and allocated overheads are those incurred centrally and allocated amongst the business units on some rational basis.

### **6.6.3 Transfer Pricing of Capital**

The Bank is in the process of developing the systems for capital allocation based on the risk weighted assets consumed by different business units. Along with this ROE, Return on Equity, targets would be set with different ROE requirements for different units where the basis of specifying the ROE targets is being studied.

## **6.7 A Foreign Bank Operating in Sri Lanka**

The Bank has over 10 local branches and few key areas of business viz. Corporate Banking, Consumer Banking and Treasury including Trading.

In addition to the above, there is a separate book called "ALCO" which is the equivalent of a funding centre or Head Office for the purpose of pricing of funds.

### **6.7.1 Pricing of Funds**

The Bank believes in internal transfer pricing of all products that depend on market prices. Accordingly, funds that have the price by way of interest rates and foreign exchange transactions are subjected to internal transfer pricing and these two areas are under the purview of the Treasury and the Asset and Liability Management Committee. In addition, all Head Office services and costs are transfer priced to the business units. At an advanced stage, even capital utilisation is subjected to a notional charge for determining an economic profit.

One of the key objectives of internal transfer pricing is to avoid sub-optimization where the Bank is taken as a whole and not as several independent business units while of course for the purpose of management, the different business units have substantial autonomy.



The Bank prices the assets and liabilities separately. All liability products comprising mainly of deposits are paid for at a rate that is based on the market. The price paid is called the Value of Funds (VOF). The Transfer prices of products of different tenors are based on the term structure of interest rates. The Bank at present follows SLIBOR, Sri Lanka Inter Bank Offered Rate, (less a small margin) as the benchmark rate and accordingly, overnight funds will be transferred based on overnight SLIBOR and three months funds will be transferred based on three months SLIBOR and so on.

Asset based products of which the main item is advances, are also priced in a similar manner. As such, assets are pooled through an internal book mirror entry into the Central books. These too are priced based on SLIBOR and the SLIBOR for the relevant period applies.

The central pool in turn places the funds with Treasury or receives funds from Treasury to the extent that funds received from business units on liability products and funds given to business units on asset products are not matched. The Treasury in turn charges for the funds borrowed by the central pool and pays for the funds received, at the respective rates. Treasury will either square the gaps in the maturity of re-pricing of assets and liabilities or may opt to keep open positions at their discretion within the risk management norms. All gains and losses of managing interest rate risk are kept by Treasury as a separate profit centre.

The Bank does not price the assets and liabilities differentiating product by product, while, of course, information is captured at account level for large transactions. The rationale of not differentiating the price by product category is that such price adjustment based on product should be the responsibility and the privilege of the business units. Accordingly, the benefit of low cost savings accounts and current account funds and also the extra cost of high rate fixed deposits etc. are all borne by the business units. Similarly, the need for pricing high risk advances at a higher price is the responsibility of the business unit and not of the transfer pricing mechanism.

Data capturing for transfer pricing purpose is done on a daily basis. Large transactions are required to be notified to Treasury for the purpose of hedging/matching. The smaller transactions are pooled together and transfer priced "block" by "block" based on the maturity buckets. The computer system does the data capture and pricing based on the rates input to the system daily.

At times, business units can agree with each other to carryout specific deals (eg. high cost deposits) between two units at negotiated transfer price. Eg. A lending unit may take a high cost deposit at a higher price from a deposit taking unit.

### **6.7.2 Service Transfer Pricing**

All central services costs are transfer priced to the business units. There is no such thing as "Head Office Costs" that are left in the Head Office and left as a loss. All services have to be paid for by the business units and the costs are allocated. The basis of allocation of cost depends on the cost drivers. For example, a software system used by a particular business unit will be charged



to that business unit whereas the cost of a shared system will be charged based on such drivers as number of transactions, number of accounts, number of users etc.. Management cost may be allocated based on estimated percentage time utilised by different business areas.

### **6.7.3 Transfer Pricing of Capital**

The Bank allocates the capital base to different business units based on the proportion of risk weighted assets, consumed by the business units. Since the capital is beyond the minimum required ratio, where there is surplus capital, even the surplus capital is allocated based on the proportion of risk weighted assets. The minimum required return is applied at different rates of cost of equity based on the risk level of each business unit. The required profit after tax is calculated by applying the percentage cost of equity over the allocated capital. This figure is compared with the actual profit after tax to determine if the business unit is making economic profits or not.



## 7. Review of Industry Practices

The industry practices can be summarised as given in the following table:

Reference Name	Bank Type (all are Commercial Banks)	Comments on Internal Fund Transfer Pricing Methods	Comments on Internal Service Pricing Methods
Bank 1	State owned domestic bank	Pools funds with a dual rate. In the process of moving towards advanced pooling of funds matched at origination	Head Office costs mostly left in the Head Office with Head Office having large losses
Bank 2	State owned domestic bank	Poling of funds at variable multiple rates	Head Office costs mostly left in the Head Office with Head Office having large losses
Bank 3	Private sector domestic bank	Pooling of funds with a single rate	Head Office costs mostly left in the Head Office with Head Office having large losses
Bank 4	Private sector domestic bank	Pay on the Net Method with various adjustments  Policy decision taken to move towards a comprehensive transfer pricing system.	Some Head Office departments separated as profit centres with internal transfer pricing. Most Head Office costs are left in Head Office with large Head Office losses
Bank 5	Private sector domestic bank	Just moved into a new system with advanced pooling of funds with rates matched at the origination	80% of the central Head Office Costs are transferred to branches/business units
Bank 6	Domestic bank	Advanced pooling of funds with rates matched at the origination	100% of Head Office services are transfer priced/allocated.
Bank 7	Foreign bank operated in Sri Lanka with branches	Advanced pooling of funds with rates matched at the origination Notional capital charges applied to the business units in proportion to the risk weighted assets/capital utilised to arrive at the economic profit	100% of Head Office services are transfer priced/allocated

**Table 1: Summary of Industry Practices in Transfer Pricing**



The above analysis suggests that the methods applied are highly organisation specific. The large domestic private banks except for one are following the less sophisticated methods. Either this is due to lack of appreciation of a need for a comprehensive transfer pricing system, lack of willingness to justify such investment, the overruling internal political bargaining processes or any other factors. Of the two state banks, one is moving towards a comprehensive system with advanced pooling. Overall, out of the seven banks studied two have been running comprehensive transfer pricing systems. Of the balance, one has just implemented a system and another is in the process of implementing. Three are left with less sophisticated systems; some with plans to source systems in the near future.

With the advanced and less advanced approaches, there seemed to be a wide range of internal transfer pricing rates applied between 11.5% and 19%. Both the extreme rates are those applied by banks using pooling methods at variable rates. Of the banks using advanced methods one linked up the internal transfer pricing rate to SLIBOR, Sri Lanka Inter Bank Offered Rate, less a margin and the other to the own deposit rates plus a margin as the benchmarks.

Practices of internal transfer pricing of services too varied widely with two banks transferring almost all services at a price and few not transferring, virtually, any of the Head Office costs.

## **8. Issues of Internal Fund Transfer Pricing Methods**

The following are some of the issues, and contentions that are commonly encountered in internal fund transfer pricing. These are stated by way of issues and observations.

### **1. Issue/Contention**

Business units are not homogeneous. Hence the policy of sharing the spreads may favour one group against the other.

#### **Observations**

This is a possibility. It is a scientific analysis and a major number crunching exercise that need to be done in determining the exact point of sharing where the internal transfer price rate lies in between the rate on deposits and the rate on advances. Perfection is near impossible but high level of reasoning is possible.

Despite the scientific methods, finally the internal political bargaining process too has a vital role to play in this regard. This is particularly true in the case of banks with large branch networks. The transfer pricing rates should nevertheless represent market realities.

### **2. Issue/Contention**

Interest rate risk is left at branches and business units and hence windfall gains and losses may occur.



#### Observations

This is true in almost all the methods other than the advanced pooling with matching at the origination. The solution is to implement a comprehensive transfer pricing method.

#### 3. Issue/Contention

The time and efforts spent on Transfer Pricing may not be justified as it is an internal matter altogether.

#### Observations

This is not true. A bad transfer pricing arrangement can hide the true performance of business units/branches behind windfall gains and losses. The budgetary process can become defunct due to the frequent changes of the so called Head Office Interest rate and the resultant windfall gains and losses. Identifying and rewarding good performers and training and developing poor performers will all be affected due to poor systems of identifying performance. There could be serious motivational implications where good performance gets hidden under the interest rate risk implications.

Further, as done by some banks, transfer pricing systems can be used to strengthen the profitability identification up to customer account level, product level, business sector level etc. thereby allowing the banks to carry out strategic asset allocation.

#### 4. Issue/Contention

Using transfer pricing and as a result, shifting focus into different business lines will lead to arbitrary changes.

#### Observations

Here again it is a question of reliability of the transfer pricing system and the level of comprehensiveness. If strategic decisions are made based on less comprehensive transfer pricing systems it would be worse. On the other hand, a good system can guide and help in rational changes and allocation of resources. The need for transfer pricing was already discussed at the beginning of this paper.

#### 5. Issue/Contention

The margin between deposit rates and the internal transfer price rates or the margin between the lending rates and the internal transfer pricing rates is not enough.

#### Observations

If the margin is not enough for one of the two product lines then it is a matter of adjusting the internal transfer price rates to meet the deficit where the other product line will be affected. However, if both have an issue then the total margins have to be carefully examined. Does the bank charge the correct rates on advances? Does the bank pay the market rates for deposits? If both responses are affirmative then the total margin is a given factor. There is nothing much to be done in sharing the margin.



Instead, it would be worthwhile examining if there are productivity issues including excessive overheads, capital structure issues including poor capitalization or excessive debt capital, product mix issues, over reliance on fund based activities with less contribution from fee based income, failed marketing strategies, lack of focus etc.

6. Issue/Contention

Same Internal Transfer Price rate is applied for all types of lending i.e. low risk and high risk regardless of the risk level.

Observations

The credit risk can either be tackled at the business unit level or at the organisational level. If the credit risk is taken by the business units, which is the case in most instances, then the business unit is entitled to the risk premium. Therefore the same cost rate should be applied to advances of all levels of risks leaving the varying margins to the business units. The provision for bad debts etc must be borne by the business units that enjoy the said risk premia.

7. Issue/Contention

Retail and wholesale businesses both are subject to the same transfer price.

Observations

The differentiation is both in the rates applied and the extent of transaction costs. While retail business involves higher margins there are also higher transaction costs. Similarly, the lower margins of the corporate business should be offset by lower transaction costs. Hence the internal transfer pricing rate need not be altered for making the adjustments.

8. Issue/Contention

The priority sector loans and advances need to be supported through lower transfer price rates.

Observations

Transfer price system should not be used for delivering subsidies. If there are commercial benefits of subsidies given, then such business units will find such benefits accrue to them anyway and no subsidies are required. If there are no immediate commercial benefits and if still the central office wishes to incur such subsidy, particularly on lending products by way of reduced interest rates etc., then the subsidy may be credited by the central office directly without involving the transfer price rate. It is necessary to clearly highlight the cost of subsidy rather than hiding it behind a reduced rate.

9. Issue/Contention

Transfer pricing rate should be totally market based regardless of the internal rate structure.



#### Observations

It may be possible to link up to a rate such as SLIBOR, Treasury Bill rate, repo rate, reverse repo rate, etc. However, it is necessary to appreciate the fact that such rate alone is not applicable unless a margin (plus or minus), is introduced. For example, if the Treasury Bill rate is used, then there will be a presumption that the cost of deposits is always below the rate on Government Securities which is not true. On the other hand the parallel movement of Treasury Bill rates or any such other market rates with the deposit rates may not be sustained all the time as the relationships break depending on the liquidity conditions of the market. Hence it is necessary to look at the actual deposit rate structure in addition to the market rates.

### **9. Service Transfer Pricing; the Practices and Issues**

The need for service transfer pricing was discussed earlier in this paper. Having identified the need, yet it is difficult to have a consensus on the exact pricing arrangement due to several organisational issues that may arise.

Following are some of such issues that arise along with observations:

#### 1. Issue/Contention

Head Office costs are beyond the control of the branches and the business units. Therefore the branches or business units should not be called upon to pay for the same.

#### Observations

It is a generally accepted principle that performance is better evaluated based on controllable factors. Hence this argument. However, there is a necessity to allocate the costs in a reasonable manner and also based on the benefits derived. Although the costs would not be controllable, there are benefits enjoyed by the business units and hence a payment is necessary. Further, apart from performance evaluation, proper profitability calculations are required for strategic purposes as well. In this regard it is important that the cost elements be separately identified along with the services provided. For example the cost of the Finance department may be allocated based on each ledger maintained with an adjustment for the size or complexity of the business unit. Similarly the HR cost may be charged based on the head count, the IT cost may be based on the number of users, number of terminals, number of accounts, number of transactions etc with a combination of all such relevant factors.

#### 2. Issue/contention

The allocated costs of the central services are too high compared to alternative market prices.

#### Observations

This could be true if there is no strategic fit in the organisational administrative units.



The units may be run inefficiently and the other business units may be called upon to bear the cost. One of the purposes of transfer pricing the costs itself is to make matters transparent so that there would be exposure of such inefficiencies which can then be controlled through peer pressure and other changes. Ideally, the cost of internally produced services should be equal to or below the market price of such services. If not so, it may be worthwhile looking at outsourcing such services. However, there could be practical difficulties of separating some functions from within the organisation, due to accountability issues and related strategic importance. Further, it may be difficult to segregate some such services, as those readily available standardized services that can be easily outsourced. As an alternative approach, it is possible to have cost comparisons with peer banks, to see if the bank's service costs are comparable.

3. Issue/Contention

Complex activity based costing methods are luxuries that do not serve much purpose. Just divide the costs amongst the branches on some simple approach.

Observations

Oversimplification leads to anomalies and incorrect conclusions. For example the cost of the IT department may be divided equally amongst the branches and business units. This will not provide the correct information and will not reflect the true cost sharing. The correct allocation of costs will also lead to the correct determination of profits. This is important when evaluating the Return on Average Assets as well as the economic profit after charging for capital usage.

4. Issue/Contention

Cost allocation is an internal affair. It cannot bring in external revenue and hence non productive.

Observations

While it is an internal affair, it leads to proper identification of the performance of different business units. It would be easy to record profits in one unit while the costs are recorded elsewhere. If such overstated profits are recognized as correct then there will be incorrect acceptance of such business lines thereby leading to sub optimal resource allocation. The managers may be rewarded or penalised incorrectly. Proper cost identification is a prerequisite for proper accounting for profits.

5. Issue/Contention

Head Office costs are not incremental costs and hence should not be allocated to the branches

Observations

Business units, where it is firmly believed that all services are necessary. The support



services exist because they are required by the rest of the units. Hence it is reasonable to pay for the support services. The internal pricing mechanism will apply pressure on support services to be efficient as their services are paid for by the others who keep a close eye on them. If it is possible to outsource a service cheaper than being internally produced, such possibility will get highlighted.

## 10. Capital Allocation and Diversion of Resources

Probably the ultimate goal of all accounting and costing methods is to ensure that the capital is in good use. Who uses the capital funds and what returns are generated for them? Could it have been better? When finding answers to these questions at business unit level or branch level it is important to have proper costing and accounting.

Why should an organisation be so concerned about capital utilisation? It is because capital is presumably the most scarce resource of a business organisation and, in particular, of a bank.

Unlike in most other organisations, banks use up capital in meeting the regulatory minimum requirements to support the asset base. In particular, it is to support the Risk Weighted Assets, where the capital requirement is given as a percentage of the Risk Weighted Assets, the present rate being 10%.

In determining the capital requirement, the immediate direct link is the Risk Weighted Asset (RWA) base. Therefore it is justified if the capital utilisation of individual units is determined by allocating the total capital in the proportion of the RWA of the individual units to the total RWA base of the Bank. This method is being used in some banks. Once the capital utilisation is determined it is easy to set the target returns etc.

However, the above approach of determination of capital utilisation presumes that all business units are originators of RWAs. Not necessarily! Even if they are so it is not to the same extent. Suppose a business unit is set up purely to mobilize deposits. Such a unit will mobilize deposits and lend the funds internally without lending to customers. Only few assets such as fixed assets and net other assets will add to RWAs and such an amount would be negligible. Hence the capital utilisation based on RWA alone will be very negligible and therefore the target return too will be negligible. Such low targets set, will effectively demand very low contribution from the business of deposit mobilisation. This defeats the purpose of budgetary process and target setting. Hence there is a need for capturing this business line as well in the target setting and for this purpose there is a need to recognise the capital utilisation. Further, the essence of capital adequacy is to safeguard the interest of the depositors and leaving out this business line in capital allocation is not rational.

It is suggested that the business of mobilisation of deposits also be captured by taking a combined base of RWA and Deposits. Suppose the total deposits is more than the RWA, which is normally the case, then we can arrive at the equivalent in deposits by taking the proportion of



RWA to Deposits and multiplying the value of total deposits of individual units by this proportion. In this manner there will be two bases of equal size viz. the actual RWA and the RWA equivalent of the deposits so calculated. Then for each business unit, the two values could be added together and divided by two so as to get an adjusted RWA base, unit wise. This adjusted RWA base when added up will equal to the actual RWA base. In this manner, each business unit, regardless of whether it is concentrating on deposits or advances will have a representative RWA base. The capital utilisation can then be calculated by taking the proportion of capital at each unit, based on the adjusted RWA. In this manner all business units will get a fair target. Also, the burden of generating profits will be equally shared by the lending units as well as deposit mobilising units, of course in proportion to the business volumes.

If a bank is in a position to justify higher returns in one line of products as against another, it would be natural for the bank to shift capital resources to such line and pursue growth. Such vital decisions are based on the performance of different product/business units as measured using the costing and accounting systems that include transfer pricing of internal services and internal funds. Hence is the importance of sophisticated systems and methods for the determination of transfer pricing that affect the performance.

The capital allocation and charging process may take place as follows:

1. Bank would allocate capital to the business units based on the amount of adjusted risk weighted assets in each of the business units.
2. The percentage required return on capital as pre-determined for each business unit is applied to the respective units to arrive at the minimum profit required.
3. The actual profit is then compared with the required or target profit.
4. If the actual profit is less than the required, then the unit is not using the capital efficiently. Such business will not add value but eat into the capital resources. Hence, in the long run, either performance must improve or the business line must be discontinued.
5. If the business unit/line is to generate surplus returns compared to the target required returns, then such business line adds value and more resources may be diverted to grow the business line.
6. Since the final analysis leads to such crucial decisions, it is important that the determination of profits, which includes the effects of internal transfer pricing, be carried out with a high level of rationality.

## **11. An Ideal Policy Framework for Internal Transfer Pricing and Resource Allocation**

Having studied the different practices and also conceptually applicable methods, it is possible to identify a policy framework for internal transfer pricing. These policies would probably provide a means of better resource allocation.



The policy framework could be outlined as follows:

1. Internal Fund Transfer pricing should not lead to arbitrary gains or losses. The returns should be predictable.
2. For the above reason the interest rate risk should be taken away from the business units and branches. It should be in a central pool either in the Treasury or in Head Office and should be managed by the Treasury and ALCO.
3. To meet the objective stated in "2." above the most preferred method would be the advanced pooling with rate matching at origination.
4. As part of the above method, the pricing of the products with different tenors would be at different rates as applicable to the term. There should not be a "same size fits all" approach as in the single or dual rate methods.
5. The internal rate on a product once fixed shall not be changed until maturity of that specific transaction. New rates are applied on new transactions. The rate structure is revised regularly, at least monthly.
6. There should be sufficient debate on the basis of sharing the spread between the rate on advances and the rate on deposits. There should be a reasonable basis for selecting a particular transfer pricing rate in between the two rates.
7. It should be recognized that the internal transfer pricing rate that determines the sharing of the spreads can be heavily influenced by the internal political bargaining process. There should be a sufficiently scientific approach to minimize the ill effects.
8. Transfer pricing of services should be an integral part of the transfer pricing system. Service transfer pricing should be, as far as possible, with allocations based on the cost drivers and an activity based costing approach.
9. There should not be costs that no one is willing to pay within an organisation. All costs must be paid for and hence all costs must be transfer priced.
10. The cost allocations and transfer pricing must be fair, reasonable and transparent. There should be fora to challenge the methods as well as the actual costs without penalizing those who resent.
11. The services provided and the transfer prices should be comparable with the market prices. Internal transfer prices, at least in the long run, should not be higher than the comparable market prices.
12. There should be constant communication, education and clarification on the transfer pricing methods applied. The more knowledgeable managers are, more rational will be the outcomes.
13. The transfer pricing methods should also enable the determination of profits at account level, product line level, portfolio level, branch or unit level etc.
14. The transfer pricing system should also link up to the rational capital allocation through the calculation of economic profit and economic value added on the capital.
15. Depending on the attractiveness of the surplus returns of different business lines, the banks may divert capital resources towards growth of those sectors, while taking away the allocations from poorly performing sectors.



## 12. Conclusion

The study covered the current practices based on the practices adopted by seven representative commercial banks in Sri Lanka out of 23 commercial banks while in terms of market share of assets or deposits, the sample would cover in excess of 70% of the market.

The study revealed varying degrees of sophistication applied at different banks in their approach towards internal transfer pricing. However a clear trend of moving towards more sophisticated and rational internal transfer pricing systems and methods was observed.

While under less competitive and challenging environments we may ignore matters such as efficiency, productivity etc it is no longer possible under very challenging and turbulent environments. Hence the banks have to be equipped with appropriate method for measuring their performance and also allocating resources rationally. Good transfer pricing methods help in this process.

The author identifies a range of different internal transfer pricing methods along with their relative merits. The issues and contentions surrounding the transfer pricing practices are also discussed. It is noted that most of the issues get resolved with a better and sophisticated transfer pricing system that uses computer support for extensive data processing involved. Further, the methods should be rational fair, open, transparent and market oriented. Interest rate risk need to be taken away from the business units and branches and managed centrally. A policy framework is provided as guidance in this regard.

Overall, a good transfer pricing arrangement in an organisation will help in better understanding of performance and strategic resource allocation.

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