Fundamental Economic Functions of Banking and the Role of Substitutes

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Core Banking Functions

Banking has always been a changing industry. Lord Denning, once observed; "Like many other beings, a banker is easier to recognise than to define". (D G Hanson, Page 1). D G Hanson in his popular book on Service Banking writes, "We are tempted to say that banking is what one cares to make it". Whatever way one defines a bank, a banker or the business of banking, it appears that, despite a large spectrum of financial services that banks have embarked on to offer, certain fundamental economic functions of Banking remain yet to be fully substituted. To understand this proposition it may be necessary to look at Banking from both a traditional functional view, i.e. a functional analysis and from a logical business and economic view, i.e. an economic analysis. The purpose of this article is to make an attempt to carryout such economic analysis and to evaluate if some of the "Substitute" financial services do perform such economic functions.

A Functional Analysis

A functional analysis of banking business will look at the apparent activities that a bank performs. The activities are numerous and more keep adding to the list. The Banking Act No 30 of 1988 defines the business of banking as ""banking business" means the business of receiving funds from the public through the acceptance of money, deposits payable upon demand by cheque, draft, order or otherwise, and the use of such funds either in whole or in part for advances, investments or any other operation either authorized by law or by customary banking practices;"

This definition mainly deals with the aspect of banking where the function invariably looks at the maintenance of demand deposits commonly known as current accounts. Current Accounts are maintained only by Licensed Commercial Banks. Does this mean that only Commercial Banks carry on the business of Banking? Probably not so. There are other institutions and instruments that perform most of the economic functions of Banking. It is important, therefore, for us to analyse the economic functions more than the activities of Banking. The concentration of this article will therefore be on Economic Functions.

Nevertheless, it is useful to look at the activities that banks do carryout with a view to analysing the Economic Functions.

The Banking Amendment Act No: 33 of 1995 by its section 31 that introduces section 76A to the Act, to provide for Specialised Banking, restricts the carrying on of the business of accepting deposits of money and investing and lending such money to be only by a company which has an

equity capital in an amount not less than Rs 50 Million and under the authority of a licence issued by the Monetary Board.

Further, the new schedule IV introduced by the Amendment Act specifies a list of activities that may be carried on by a Specialised Licensed Bank. Section (a) of this list permits acceptance of time and savings deposits and related activities but excludes carrying on of "business of banking", as defined in the Banking Act No: 30 of 1988. The obvious restriction is the maintenance of Current Accounts for customers.

In addition, the Banking Act No: 30 of 1988 gives a comprehensive list of activities permitted to be carried out by Licensed Commercial Banks under Schedule II of the Act. This list runs into 22 sub sections and is somewhat detailed. Most of the activities listed are business functions of Banking while the others such as "(0) the acquisition, construction, maintenance alteration of any buildings or …" refer to those activities that support the core business.

The Finance Companies Act No: 78 of 1988 defines the Finance Business under section 46 as follows:-

""Finance business" means the business of acceptance of money by way of deposit, the payment of interest thereon and -

(a) the lending of money on interest; or

(b) investment of money in any manner whatsoever; or

(c) the lending of money on interest and the investment of money in any manner whatsoever;"

Further, Direction No. 6 of 1991, as amended subsequently, by its section 2 restricts the acceptance of savings or very short term fixed deposits. It says "2. A finance company shall not accept any deposit repayable on demand or repayable after a period less than three months … and more than sixty months …"

A transition is seen as far as the fund based activities are concerned where:

1) Finance companies can accept deposits and lend but the deposits are restricted to term deposits.

2) Specialised Banks can accept deposits and lend and the deposits can be both term deposits and savings deposits, but not demand deposits.

3) Commercial Banks are permitted to accept deposits and provide advances and they can maintain demand deposits (current accounts), apart from the term and savings deposits.

The other functions listed in the respective schedules and Directions are numerous. The analysis and comparison would probably be better done in a separate article.

Economic Analysis of Banking Functions

As stated above, the concentration of this article is in analysing the logical economic and business functions of Banking as performed by Commercial Banks with a view to evaluating the extent to which the substitute financial services, instruments and institutions could perform the functions. For this purpose we could look at a wide range of functions as listed below and the list, of course, may not be exhaustive though it is quite comprehensive.

Economic & Business Functions:

1. Credit Insurance through Pooling of Risk
2. Diversification of Credit Risk
3. Cushioning the Risk of Losses
4. Creating Implicit Equity in Businesses
5. Financial Intermediation
6. Maturity Transformation
7. Aggregation of Funds
8. Asset Stripping
9. Integrating Geographical Fund Flows
10. Minimising Transaction Costs
11. Central Accounting
12. Money Creation and Asset Growth
13. Facilitation of Payments
14. Minimizing Settlement Risk and Credit Risk of the Client's transactions
15. Safe Keeping of Funds
16. Trusted Custodian
17. Absorption of Interest Rate Shocks
18. Absorption of Short Run Adverse Economic Effects

19. Minimizing Liquidity Risk of Assets

20. Asset Broking

21. Selling Options on Financial Instruments

22. Mopping up and Infusion of Liquidity

23. Tax Collector

24. Credit Knowledge Storage

Let us review these functions and evaluate how banks perform such economic functions:

1. Credit Insurance through Pooling of Risk

Banks grant credit facilities to a large number of clients. As a result, failure of few businesses amongst a large number will not create a material impact on the depositors who provide funds to the banks. Had the depositors, instead of using the Banks, given the funds directly to the ultimate borrowers then the failure of some of the borrowers will lead to losses to be borne by the respective depositors who had advanced money. By pooling of risk banks distribute the credit losses arising from few advances out of many amongst all the clients. Borrowers bear the effect of risk by paying a higher interest rate (than if all advances were default free) and depositors bear the effect of risk by receiving a lower interest rate (than if all the advances were default free).

The difference between the 'would have' been rate and the actual rate is a cost to the borrowers or the depositors. This is similar to an insurance premium. Some borrowers and depositors question as to why they should bear the losses even in very small amounts by paying /receiving such insurance premium adjusted rate. The answer is in following the basic principles of insurance. Everybody pays an insurance premium. But only those who make losses are compensated. Here the depositors are automatically compensated by not attaching individual advances to specified deposits. The credit losses should have been borne by somebody. Instead, everybody shares it in negligible portions!

How about the borrowers? Why should they bear the credit risk of those defaulting ? First, it is difficult to assert that interest rates on advances are adjusted upwards instead of the adjustment being only on the deposit rates, downwards. It may be that both are adjusted. Then the justification for the borrowers is that they join a club in which one's losses are shared by everybody. One may never suffer a loss and hence will only share others' losses! What is the rationale then? Well, insurance is just like that. If one fears no risk then have no insurance. For borrowers who possess absolutely no or very low risk bypassing a pool i.e. a Bank, may save costs. Dis-intermediation may come as a lower cost option.

Banks generally apply interest rates varied based on the level of risk. Therefore a lower risk borrower tend to contribute less to the pool.

This analysis also makes a point clear. If Banks do not differentiate between the levels of risk of different borrowers, then the pooling will result in an anomaly. The borrower with high propensity to default will benefit from those who have low propensity. It should be noted that the propensity to default, i.e. credit risk, is not necessarily a function of the size of the advance.

If it is an insurance (implied and not contractual), do the borrowers have a right to expect that the credit losses arising out of their defaulted advances be absorbed by the Banks? Probably so, provided that basic principles of insurance are applied; the interest rate paid being risk based, the contract being one of utmost good faith and the insured (borrower) not making a profit but simply covering the genuine losses.

2. Diversification of Credit Risk

Pooling of risk and Diversification are two different approaches to managing risk. Banks pursue both and some others as well. In pooling of risk, the losses are shared to minimize the impact on a single party. In diversification, a Bank will make use of the negative correlation of returns of different industries or sectors of the economy to reduce risk without compromising on the returns. By doing so, the returns of the Bank get stabilised. Should Banks concentrate on few industries, which sometimes they do, then they are equally vulnerable to the vagaries of the industries concerned. Diversification eliminates the diversifiable risk element. Yet a question arises in attempting to compare diversification of a credit portfolio with that of an equity portfolio. In equity, the industries that do well will provide an extra return to offset the losses of the industries that do not perform well. However, as a creditor, could a Bank get a higher return at good times of an industry given that the Bank is entitled only to a fixed interest payment? Two clarifications might be appropriate. First, the ancillary business of a well to do client will bring in more revenue. Secondly even payment of contracted interest without default may be considered an attractive return given the relatively high spreads mainly arising from credit risk premiums.

3. Cushioning the losses arising from Credit Risk and other factors:

Banks support their risks with capital. At present, Banks in Sri Lanka are required to maintain minimum capital levels to cushion the credit losses. The requirements are based on the relative realiseability of assets, which is mainly a function of credit risk given the significantly large assets in the form of loans and advances. Capital of a bank can cushion the effect of credit losses in two ways. First, given that a major portion of capital is non-interest bearing equity capital, it will ensure stability of profits without passing the entire volatility of operational profits caused by various factors including credit losses.

Secondly it provides solvency to depositors where capital ranks behind the depositors giving the depositors priority in claiming the assets realised in the event of a liquidation. Consider a financial institution that has no or low capital. Invariably it will reflect large volatility of returns and also would offer very little or no comfort in ensuring full settlement of dues to depositors/creditors.

This exercise is over and above the comfort of equity capital of the individual borrowers. Reasonable Debt: Equity ratios of the borrowers themselves minimise the risk of default and ensure high realiseability of the loans. A corporate debt instrument issued by a low-geared company will provide this comfort. But a Bank provides an additional comfort by offering its own capital as a further cushion.

Apart from the credit risk, the capital stands to cushion losses arising from interest rate risk and operational risk among other less significant forms of risk.

4. Creating Implicit Capital in Businesses:

It is interesting to see how banks create implicit capital, specially in small and medium businesses. Think of a business that has virtually no capital. It appears to be viable as a business but the owner has no equity to put into the business. Bank is worried of the realiseability of the advances if the business fails. Explicit equity capital would have been ideal. In the absence of it, the Bank will call for collateral from the owners of the business coming from outside the business. Although such collateral would not add stability to returns, (as there is no cash contribution) these will certainly provide solvency and hence the recoverability of advances in the event of default. Such collateral act as implicit capital in the businesses making a significant contribution specially when the capital markets have not performed so well.

5. Financial Intermediation

Financial Intermediation is the most commonly talked about function of Banks. Banks do accept deposits from those who have surplus funds i.e. funds that need not be spent immediately, and make such funds available to those who are short of funds. In other words, Banks act in between the surplus units and the deficit units. In doing so the Banks assume the responsibility for returning the funds to the surplus units and take the risk of recoverability or otherwise from the deficit units. Some of the other functions such as maturity transformation, aggregation of funds and minimizing transaction cost are direct benefits of intermediation.

6. Maturity Transformation

An economy comprises of lenders and savers whose borrowing and investment time horizons do not necessarily match. Generally, the savers have a short-term maturity preference with reluctance to commit their funds for too long. The borrowers, or the deficit units of the economy as they are called, on the other hand, wish to borrow for longer periods. Project loans, Housing loans and even permanent working capital finance require commitment of funds for long periods. At the same time, Banks do undertake to honour the deposits of short -term nature as and when they mature. This is made possible due to two reasons:

1). The maturing deposits come back to the Banks. So it is only a matter of time. Banks manage these gaps by proper liquidity management.

2). The law of large numbers help the Banks. Of a large number of deposits, only few will mature at a time. The Bank can manage the few by maintaining a fraction of the assets in liquid form.

7. Aggregation of Funds

In most economies, the savings are concentrated amongst individuals and some of the businesses. Most businesses keep expanding and require funding and end up being borrowers. The savings are highly fragmented and as such available in small quantities. In any Bank the number of deposit and savings accounts will far exceed the number of loan and advances accounts. Banks step in to the process of aggregating such small savings to sufficiently large pools that they are disposable at required quantities to the borrowers. If not for this process, availability of funds to borrowers for medium to large scale business requirements will be adversely affected.

8. Asset Stripping

Asset stripping is a generic term to refer to situations of breaking up of an asset into smaller quantities with a view to realising more value from the disposal of the collection of components.

Banks do obtain credit lines and large savings that are disbursed as smaller loans and advances. In the process, a bank adds value to itself and to the others. The distinction from the general function of ‘asset stripping’ in this scenario is that the larger financial asset yet remains intact while it is now disaggregated to make better use.

9. Integrating Geographical Fund Flows

The Role of Banks in facilitating movement of funds across different geographical areas is noteworthy. In Sri Lankan context, most of the funding required in the Western Province is collected within. However, a further portion is accumulated in the other Provinces by way of deposits not necessarily lent in those provinces. Some argue that it is not ethical to collect

surplus funds in certain regions to be utilised in other regions. This argument is based more on equitable grounds than pure economic rationale. If the regions are not equally balanced in the level of funding demanded as against funds accumulated then such geographical movements will only facilitate optimum use of funds. It is up to the political and development process to take care of such imbalances. Sometimes, a deliberate imbalance to take care of less developed geographical regions may be necessary. Banks would inevitably be silent facilitators in the intended direction.

10. Minimizing Transaction Costs

As stated before and discussed later in this document, the processes of financial intermediation, aggregation of funds, maturity transformation, central accounting and geographical fund flows, among other things, reduce the cost of transaction to both depositors and borrowers. For example, if not for aggregation of funds, a borrower requiring a large loan will have to make a public debt issue to tap several surplus units, i.e. investors to buy their debt instruments, rather than using the depositors' money aggregated by the Banks. High issue costs and brokerage prevalent in debt market far outweigh the costs of carrying out transactions in the banking system. Further, the geographical fund flows happen through the banking system without a significant cost in carrying out such transactions as compared with a situation of such surplus funds outside being attracted by the borrowers in the city directly.

Large numbers of transactions between the surplus units i.e. depositors, and the Banks and then between the Banks and borrowers happen at a much less overall cost than if Banks did not come in between to provide intermediation. One would argue that intermediation costs, going by whatever comparisons are too high. The point is that the cost of direct transactions of getting funds from surplus units to deficit units would have been much higher. In this comparison, one ought to look at either the total intermediation cost with the total cost of direct debt raising or only the transaction processing cost under intermediation with that under direct debt instrument.

In considering total intermediation cost, it is necessary to look at the elements such as credit losses, cost of statutory reserves etc which may not be apparent in direct debt instruments. For example, the costs of defaulted debt instruments are borne by those people who hold them and such cost is not necessary reflected as a gap between what one gets on investments and what a borrower pays on borrowings. For example, in a very crude estimate, if, say, 5% of all the direct debt instruments outstanding are defaulted, the total capital loss would be 5% and hence 5% should be added to the cost to the investors. Therefore, if a portfolio of debt instruments has an average interest rate of 15%, then the actual return after credit losses will be 10%. With such an adjustment and adjustment for issue costs etc the comparisons with total intermediation costs become more appropriate. Yet, still the smaller borrowers will not be able to use such direct borrowings bypassing the intermediation making comparisons unrealistic.

The subject of intermediation cost which includes transaction cost is wide enough to be dealt with in a separate article. The author has proposed two models to facilitate understanding of

the intermediation cost in his article “Analysis and Modelling of Yield, Spread and Related Factors in Commercial Banking” published in the book “Banking in Transition, Issues and Challenges” at the 14th Anniversary Convention, 2002, by the Association of Professional Bankers of Sri Lanka.

11. Central Accounting

An important development that banks have acquired is the maintenance of financial assets and liabilities in the form of account balances, as they ought to be. A person depositing cash gets a credit into an account; the currency getting converted into an account balance. Maintaining such accounts by Banks facilitate several other functions including payments and money creation.

The networks of accounts maintained by Banks enable almost all surplus funds in an economy to come into a highly liquid mobile form. Amongst Bank branches through the Head Offices, from Bank to Bank through the Central Bank, and from Bank to Bank across countries through correspondent banks, money keeps flowing from Account to Account. The account balance based money has no doubt created a revolutionary change in the way money gets its mobility.

12. Money Creation and Asset Growth

One of the most significant Economic functions of a Bank is to create money. Banks create money by lending using book entries. A new loan granted creates a new deposit, where the bank debits a loan account and credits a deposit account. Such deposit is considered to be money and will have equal value and mobility as much as the existing deposits and the deposits created simply by depositing cash.

The money creation helps facilitating the storage of value created in the economy through economic growth. The storage being money in the form of bank deposits make it available in fairly liquid form with high mobility. While the Banks help the economy by creating money, the excessive creation of money, as all of us know, leads to loss of value of money in the form of rising prices. The monetary policy comes to play its role and the banking system in turn help implementing the monetary policy by falling in line with such target monetary growth, collectively as a system.

13. Facilitation of Payments

Banks use their networks, the banking system and the Central Accounting facilities for effecting payments. A cheque, for example, enables transfer of funds from an account of one person to another either in the same bank or another. It may also facilitate payment by encashment. In addition, electronic methods of settlement using networks such as SWIFT, (Society for Worldwide Interbank Financial Telecommunication), SLIPS (Sri Lanka Interbank Payment System) and the proposed RTGS (Real Time Gross Settlement System) enable fund transfers. It is almost impossible to imagine a proper payments system without the involvement of the Banks. It is true that various non-banking methods such as travellers' cheques, credit cards and various fund transfer systems have been developed and innovated as if such systems were standalone. Further, the use of Internet based technologies for effecting payments is prevalent. However, the common feature is that where there is payment and transfer of money there are the Banks coming as partners to be trusted. Hence, the banks get involved in either effecting or settlement of payment in most of the innovative solutions that have existed and would come to existence.

14. Minimizing Settlement and Credit Risk of Clients' Transactions

When two parties enter into a transaction such as sale of goods, imports, exports, sale of securities etc there are two main risks that are involved

1) Credit Risk (Default Risk)

2) Settlement Risk

The credit risk is that the payment may not be made as agreed when it is due. The settlement risk is that the payment that is purported to have been made may not be actually effected. On the other hand, if payment is made prior to clearance of the goods or collection of securities then the goods or securities may not in fact be received.

Banks intervene in minimizing credit and settlement risks in a number of ways.

In International Trade, Banks offer Documentary Credit facilities that reduces credit risk substantially for the counter parties. Similarly Bank to Bank submission of documents of title to release against payment or against acceptance of a Bill of Exchange reduces the credit and settlement risks.

A party who wishes to be sure of the payment being received from another will rely on a bank draft rather than a personal or business cheque. Honouring of obligations under bids for contracts, performance of the contracts once awarded and even purchase of goods under credit extended by the supplier are instances where the banks come in between to assume the related risk by guaranteeing the respective transactions and parties.

15. Safe Keeping of Funds

Let us ask somebody as to where he has kept his money. The most likely answer could be that it is in the bank. Bank deposits are considered to be money. People tend to believe that they

deposit money more for safekeeping (while of course earning interest in the meantime) than as a means of investment to earn a return. The absence of a distinction is so apparent that they tend not to look at the soundness of a particular bank as they deposit money. Evaluation of financial soundness is associated with investments or lending while trust is the key aspect of safe keeping of funds. The word "Bank" creates this mindset of trust as, until recently, Banks have not failed in honouring obligations during the last fifty years. Depositing money with Banks is considered more as safe keeping than as investing. As a result, people look at as to how much they would trust the Bank than the extent to which they would analyse the financial soundness. Therefore, some theories that suggest proportionate risk return relationships are substantially ignored by the depositors, to the surprise of regulators and some of the analysts. Some may argue that absence of information is the reason for such "absolute" trust. It is difficult to accept, as absence of information should itself be the reason for the depositors to shy away from such banks.

16. Trustee and the Trusted Custodian

Banks offer a range of trustee and custodial services. It could be a function as simple as safe custody of valuables or as detailed as facilitating an escrow arrangement or acting as trustees to an issue of debt securities.

A banker is entrusted with such duties not only because of a reputation to have performed such functions well but also because the party concerned relies on the financial strength of the banks that give them the ability to keep to their duties and ensure returning of assets given for safe custody. They also, no doubt, rely on the ability to meet a claim in case of a "breech of trust".

17. Absorption of Interest Rate Shocks

An economy carries an interest rate exposure if it has mismatched maturities of assets and liabilities. For this statement to be analysed it is necessary to consider the total supply of funds and total utilisation of funds within the economy. These are effected through financial instruments or account balances. For example, a loan taken by a client of a Bank is a financial asset of the Bank and a financial liability of the client. Similarly a bank deposit is a liability of the Bank and an asset of the depositor. We discussed earlier that Banks generally borrow short term funds available with the depositors and make such funds available to the borrowers for, by and large, longer periods. This function is called "maturity transformation". The depositors have short term assets and the borrowers have longer term liabilities. Banks also take short term funds by way of short term Repurchase Agreements and invest in longer term Government Treasury Bills or Bonds. Here again the providers of funds provide short term funds while the borrower takes it long. With the dominance of the Banking Industry, it can be reasonably considered that the overall economy has got more of short term funds available (Short term assets) while the requirements are for long term funds (Long term liabilities). This implies that there is a gap considering the total economy. The effect of the dominance of the banking system and the resultant gap is somewhat nullified by the existence of Insurance Companies and provident funds that have the opposite position i.e. long term funds available and short

term investments made. Nevertheless it can be reasonably considered that even after including the Provident Funds and Insurance Companies, the economy generally has short term funds available and relatively longer term funds required.

The resultant gap leads to two issues. One is the liquidity management. Here the Banks come in between the two parties and assure liquidity to the providers of funds despite the funds being lent for relatively longer periods.

Second is the interest rate risk management. The availability of funds on short term basis and utilisation on long term basis creates an interest rate mismatch and a negative gap on interest rates. What is the outcome of such interest rate gap? The economy would suffer losses in general due to a rapidly increasing interest rate scenario where the short term assets of the economy demand higher returns while the long term obligations have rates fixed for relatively longer periods. In another way, the additional interest demanded by the lenders in the economy cannot be met by borrowers because they have borrowed funds for long term to finance long term business ventures. The businesses do not start earning more money simply because the interest rates have gone up! As a result, the participants within the economy lose substantial amounts of money.

Banks however come to the rescue by assuming the interest rate risk for themselves by creating corresponding financial assets and liabilities with the mismatches. Any losses arising from an increase in interest rates are first absorbed by the Banks and then may be passed on to the others. Of course, taking this exposure provides a good return by way of an increase in value of longer term financial instruments assets as against the short term borrowings, of the Banks, in a declining interest rate scenario.

18. Absorption of Short Run Adverse Economic Effects

Banks carry large business risks because they are a prime source of finance of businesses. In Sri Lanka in particular the businesses tend to be more debt financed than equity. Only 238 companies have raised equity currently listed in the stock market and the total market capitalisation of the equity market as at 31.12.2002 was Rs162.6 Bn. A significant portion of the market capitalisation represents the value of shares held prior to the Initial Public Offerings of the respective companies and the price appreciation. An entrepreneur does not count on stock market as a place of raising initial capital. A firm ought to have a track record of trading before the share is listed.

An entrepreneur tends to manage with his own capital and top up the deficit by borrowing rather than by raising outside equity. In the absence of a developed corporate debt securities market, raising of debt has to be from the loan market mainly represented by banks. The Commercial Banks had total outstanding domestic credit other than to the Government amounting to Rs 487.9 Bn as at 31.12.2002, much bigger than the market capitalisation of the stock market of Rs162.6 Bn and market capitalisation of listed corporate debt market of Rs 10.3 Bn. The amount of funding by non-listed equity is difficult to quantify. What this implies is that a significant share of funding of all businesses is done by banks. If we are to quantify, the banks have funded businesses and individuals to an extent of Rs 487.4 Bn as at 31.12.2002. Further,

the Commercial Banks had lent to the Government to an extent of Rs 122.06 Bn. The Licensed Specialised Banks had Rs 195.86 Bn of domestic credit of which Rs 101.75 was to the Government. Finance Companies had granted domestic credit of Rs 35.2 Bn of which Rs 4.2 Bn was to the Government.

What happens if there is a downfall of the economy? Theoretically the business losses should be absorbed by the equity and creditors must be serviced even if there are losses.

However, in practice, this does not happen. First there may not be adequate equity in the businesses (forget the negative equity that we find in the balance sheets quite often). Second, the businesses would not be able to continue unless the creditors give some relaxation even if there is equity satisfying the traditional norms. It will be in the best interest of the Bank as well as the entrepreneur to make the business continue. Banks would not like to bet on the ability of the equity to provide solvency in liquidation. The value in a business is more as a going concern. With a view to keeping the business alive, Banks tend to compromise on their interest income and sometimes the loan capital. They provide grace periods for settling interest and capital and elongate the repayments. These actions will increase the credit risk in a strict sense but allows bypassing a bad period without having to materialise a failure. While the risks increase, the return goes down due to the interest waivers entertained, a contradiction of the traditional risk return profile. All in all, the Banks absorb part of the economic downturn or the business failures arising from whatever reason.

19. Minimizing Liquidity Risk of Assets

A depositor holds his funds in the form of a bank deposit. He has other options such as Government debt, corporate debt, equity, unit trusts and various other non-financial assets. The extent of liquidity provided by most of the other assets is less than the liquidity of bank deposits. As a result, in the process of conversion of the assets to cash there will be a loss of value.

For example, trading of shares will involve a loss ranging from 2.3% to 2.8% on normal transactions on both ways i.e. buying and selling, due to brokerage and depository charges.

A Bank deposit, however, is not subject to such penalty for conversion into cash. The branch networks of Banks make it even more convenient to access the Bank and encash the deposits. There is no loss of value unless the deposit is uplifted prematurely. Premature upliftment is the exceptional way of getting liquidity on bank deposits whereas the rule would be keeping funds in shorter term deposits or deposits payable on demand (savings) in line with the liquidity needs. However, in a market instrument, the rule is to exit paying such high brokerage.

20. Asset Broking

Banks are being approached to get involved in the process of disintermediation, by subscribing to or selling the debt securities of various forms. Large corporates issue commercial paper or promissory notes which are quite often purchased by banks and sold to the investors either

simultaneously or after holding for some time. A Bank could thereby facilitate bypassing of the Bank by a potential depositor where the bank acts as a 'go-between' between the investor and the borrowing company. Banks in Sri Lanka have facilitated several securitisation issues recently by subscribing to such issues in private placements. Banks consider them to be alternative lending opportunities to park their liquid funds.

When the securities subscribed to by a Bank are sold to investors by such Bank its role as a market maker, or sometimes as a broker ends. This is if the security is sold without addition of the Bank's name as a guarantor to the security. If the Bank guarantees the paper, then the investor takes a position similar to that of a depositor. The Bank's role also reflects more of an intermediary, as the Bank does not pass the credit risk.

The analysis shows how the Banks can get involved in the process of disintermediation, which would normally be viewed as a threat to the Banks.

As a market maker or a broker (not in the strict sense) the Bank's spread between buying and selling will only cover a return for facilitation of the deal, provision of liquidity and if held for sometime before sale, a return for taking interest rate risk. A Bank would also disaggregate the borrowing by selling the security to several parties having bought it en-block. In such case there will also be a spread representing the effort of retailing. If the Bank adds its guarantee to the security before sale then there will be a credit risk premium incorporated which will result in a lower yield to the investor. In this case, the Bank assumes its traditional role and provides the service of intermediation though the transaction would have intended to be for disintermediation.

21. Selling Options on Financial Assets and Liabilities.

Banks accept deposits and lend money both as payable/repayable on demand and on Term basis. The term deposits or fixed deposits as they are called, mature after a given period like three months, six months, one year or more. There are deposits running up to five years generally offered by Banks. In a strict sense, such deposits can be repaid only at maturity. Similarly, Banks lend money as term loans (among other methods). These are generally repayable in monthly instalments. Housing loans in this manner may be repayable over periods up to 25 Years.

The practice however is that the Banks do not strictly apply the maturity periods for both deposits and loans. The depositors do uplift the deposits prematurely. The right to get the deposits paid by the Bank before maturity is similar to selling the deposit back to the Bank at any such time. The 'right' to sell the deposit back is similar to a 'put option' on a corporate debt instrument. The depositor gets this implicit right. It is only a practice in the industry and may not be demanded by a customer as a legal right. Nevertheless it is an implicit undertaking and hence there is an "implied" put option.

What is the premium for this put option?

Strangely, there is nothing on a one to one basis. There is no explicit premium deducted from deposit rate, at the time of accepting the deposit. Banks tend to be happy by paying a reduced interest as against the agreed rate at the time of premature upliftment. This is synonymous with a put option of which the premium is payable only if and when exercised! There is no doubt, it is an attractive option! It appears impossible to be there in a perfect market and price mechanism. There cannot be options without premiums being paid. Is the premium of the put options on deposits hidden in the interest rate spreads?

The availability of the put option can be used to the advantage only of the depositor. (That is why it is a put option!) It is generally used in most genuine circumstances where funds are required for some purpose and the premature withdrawal is a sheer need. It can also be used in a rapidly rising interest rate scenario where an existing low interest deposit can be prematurely uplifted by the depositor with a view to reinvesting at a higher rate. If it is a rapidly declining interest rate scenario, however, the deposit will continue to carry the higher rate as the depositor is unlikely to withdraw with a view to reinvesting at a lower rate!

Banks also offer a similar option to the borrowers, even if the loans are for long durations. This is the option to prepay the loans. It is a "put option" on the loan available to the borrower. Those who borrow long term by way of project loans and housing loans are the main beneficiaries of these options. Here again the prepayment is allowed even if the borrower does so to take advantage of a declining interest rate scenario. The borrower may settle the high interest loan by borrowing cheaper. Of course, with some reluctance, Banks in Sri Lanka apply prepayment penalties more as an exception than a rule. These penalties are also not based on sound financial models but flat rates applied without due consideration to the value of the put option. Again it is applied only if the option is exercised!

The existence of put options on deposits and advances without proper pricing cause constraints in the Asset and Liability Management of the Banks! Serious outcomes had not been observed as banks hitherto have been operating more on the short end, i.e. taking short term deposits and giving short term loans. However, since of late, banks have now aggressively embarked on housing loans, project loans, leasing and long term deposits. This has created the particular implications and the need to introduce the tools to ensure good Asset and Liability Management.

22. Mopping up and Infusion of Liquidity

Commercial Banks come under the monetary policy of the Central Bank of Sri Lanka. The Central Bank implements its monetary policy using few but powerful instruments.

Amongst them, the Statutory Reserve Requirement (SRR) influences the ability of Commercial Banks to create multiple deposits and credit; the Bank Rate is expected to be a monetary policy instrument though the significance has been substantially overtaken by the Repo and Reverse Repo Rates. Credit Ceilings, where Central Bank may impose limits to the level of expansion of credit too act as a monetary policy instrument, though it is not used frequently due to its "non market friendly" character.

The Central Banks today attempt to rely more on Open Market Operations where the actions are market based transactions. The freedom to act or respond is given to the participants while the Central Bank could influence the action by acting on a particular side, demand or supply side, of the transaction or by influencing the prices i.e. interest rates or exchange rates. There are many a debate as to how exactly the Central Bank would conduct monetary policy and what targets should they aim at. We wish to avoid going into the details of the contents of such debate but rather see the role of Commercial Banks in the liquidity management aspect of monetary policy.

In implementing its monetary policy, the Central Bank actions may be broken down to unstated objectives at two levels:

a. The maintenance of the desired level of Money Supply and Interest Rates.

b. The management of market liquidity in line with the first objective.

The "market liquidity" as the players in the financial market commonly refer to is the amount of high powered money that the market is in short of or in excess of. If there is a shortage in the market, then the "market players" will go to the Central Bank to get the shortage released. If there is an excess on the other hand, such excess may be returned to the Central Bank. How does this happen?

The three visible gateways for flow of liquidity into or out of the market are the operations of the Central Bank with (1) the Government (2) the Commercial Banks and (3) The Primary Dealers. All three parties maintain accounts with the Central Bank. Talking of Commercial Banks, in particular, they help in mopping up or infusion of liquidity in a number of ways:

(1) The Repo window allows mopping up of excess liquidity. Under the new "Open Market Operations" (OMO) an auction system has been introduced to absorb the excess liquidity on a daily basis at market determined interest rates, of course, substantially influenced by the Repo and Reverse Repo interest rate corridor. Primary Dealers and Commercial Banks participate in this. The excess funds are "lent" to the Central Bank against the Government Securities held by the Central Bank. These are actually Repurchase transactions where the securities are purchased by Commercial Banks and Primary Dealers from Central Bank with the agreement to sell back on an overnight basis. The excess liquidity in the market get accumulated with the Primary Dealers and Commercial Banks and then move to the Central Bank in this manner. The Central Bank therefore does not have to tap too many parties in the process of mopping up liquidity.

(2) The Reverse Repo window acts exactly in the opposite direction. When there is a shortage of liquidity in the market Primary Dealers and Commercial Banks go to the Reverse Repo window of the Central Bank to obtain funds under Reverse Repurchase agreements. In this case the Primary Dealers and Commercial Banks sell the securities to the Central Bank (and receive money) with the agreement to buy the securities back. So the liquidity requirements are met on an overnight basis.

(3) Commercial Banks are also involved in the process of mopping up or infusion of liquidity by engaging in foreign currency operations. When Commercial Banks sell foreign currency to the

Central Bank, local currency liquidity is infused and when Commercial Banks buy foreign currency from the Central Bank the local currency liquidity is reduced, as money flows from the Commercial Banks to the Central Bank. The market liquidity is also affected by the sale or purchase of Foreign Exchange by the Government to or from the Central Bank.

(4) Another aspect is the seasonal currency withdrawals or deposits. This is more a factor that influences the market shortage or excess. There are two particular seasons, April and December during which the demand for currency held by public increases. The outcome is an increase in demand for high powered money known as "April Effect" and "December Effect" respectively. While Commercial Banks meet the demand for currency, the Central Bank will use open market operations or other means to infuse or mop up liquidity that the market is short of or in excess of.

(5) As stated earlier, the Statutory Reserve Requirement is primarily to influence the ability of Commercial Banks to create multiple deposits and credit. However, a change in SRR not only influences this ability but also releases or absorbs a certain amount of liquidity by relaxing the compulsory idle account balances or by increasing the required idle account balances maintained by Commercial Banks with the Central Bank.

(6) There are other means such as refinance loans of the Central Bank that influence liquidity through Commercial Banks but not significant at the moment.

23. Tax Collector

A function that Commercial Banks have undertaken, willingly or unwillingly, is the role of the tax collector of the government. This is not as a banker to the Department of Inland Revenue but as an implied agent that shares a "piece of transactions".

Prior to the abolition of Stamp Duty by the Government in the budget of April 2002, a large number of transactions that are generally routed through the banks including letters of credit, payment of cheques, withdrawal of cash and security documents and agreements were subjected to Stamp Duty at fixed amounts or, as in most cases, as percentages of the transactions.

Banks were also significant collectors of National Security Levy and Turnover Tax applicable to financial transactions before these taxes were done away after gradual phasing out, in April 2002.

Banks have been identified as providers of 'exempt financial services' resulting in absorption of most of the input VAT (Value Added Tax) paid on acquisition of goods and services. On top of this, Banks pay VAT under a new definition of value addition which considers profits and staff expenses as value addition.

Banks do collect withholding taxes on interest called "Tax on Interest" as per the criteria laid down by the Revenue Authorities.

The most recent reversion to “an old source of tax” was the introduction of Debit Tax in April 2002 budget more as a temporary measure which appears to be attractive and hence permanent.

Banks collect such taxes and bear the administrative costs of such process of tax collections without a direct compensation for this service.

24. Credit Knowledge Storage

In the process of intermediation of the Banks, every business of some significant size and every individual with some significant amount of savings or borrowing capacity interacts with a Bank and therefore with a banker. Bankers in this process acquire very important knowledge about the creditworthiness and financial affairs of such businesses and individuals. Apart from this, the Banks also tend to be updated on the industry specific knowledge that help make credit decisions. All in all, Banks act as a storage of credit knowledge. The storage has also been formalised to some extent by the establishment of the Credit Information Bureau. However, the first hand knowledge of the banker about the businesses and people is a valuable tool in supporting sound credit decisions, that in turn helps making more rational allocation of resources.

Some of the other Options With Potential Substitution

The business of banking keeps continuing and expanding. There appear to have had no shrinkage of the market size. The total advances and deposits in the banking system over the last five years provide ample evidence to this statement.

Table 1

Total Deposits and Domestic Credit of Commercial Banks

As at end of Year	Total Deposits Rs Bn	Total Domestic Credit excluding Credit to the Government Rs Bn
1997	287.9	277.8
1998	325.9	304.9
1999	369.8	338.9
2000	420.8	402.6
2001	483.6	437.6
2002	547.2	487.4

Note : The Deposits and Credit include those of the Foreign Currency Banking Units as well.
Source: Central Bank of Sri Lanka Annual Report 2002.

Yet there is a question as to whether banking is a dying industry. Is the demise of Banking imminent? Will other Financial Institutions and Instruments replace banks? What are they? Can

they be good substitutes? How have there performance been in the recent past? These are some of the issues that need to be addressed.

The Loan Market / Securities Market Approaches

The financial market and, in particular, the capital market is said to provide funds from the deficit units to surplus units in two market segments. W A Wijewardena in his paper titled "Capital Market in Sri Lanka - Problems & Prospects", 1993, states:

"… In the case of first category of institutions, the link between the saver and the final user of funds is built up by the lending institution assuming a liability to the saver and acquiring a claim on the user. In the latter category, the market produces a convenient market floor with a host of supportive institutions for savers and users to meet each other and complete their transactions".

"The capital market can therefore be broadly broken into two sub-markets as follows:

1. Loan market or the non-securities market where the moneys are made available to users in the form of loans through financial intermediaries without creating a tradable security in the process.

2. Securities Market where moneys are acquired by users by selling a debt acknowledgement called a "security" to savers which may be tradable or non tradable in the market by the saver before its maturity".

He further states that, as a general observation, developed markets tend to have a good balance between the two segments whereas the capital markets in developing countries tend to have lop sided development with a well developed loan market and a less developed securities market.

The loan market comprises of several intermediary institutions such as Commercial Banks, Specialised Banks, Finance Companies, Leasing Companies etc. The Securities market on the other hand should have exchanges, brokers, dealers, market makers and, most importantly, investors and issuers of debt and equity securities.

When it comes to substitution of banking functions, we may look at both the institutions and developments within the loan market and from the debt securities market.

The Possible Substitutes, Innovations and Evolutions

Some of the substitutes, innovations and evolutions that may threaten the banks can be identified as follows: -

i. Securitisation

ii. Corporate Debt Securities including Commercial Paper

iii. Rating Agencies and Credit Rating

iv. Real Estate Investment Trusts

v. Unit Trusts

vi. Portfolio Fund Managers

vii. Life Insurance

viii. Provident and Trust Funds

ix. Merchant and Investment Banks

x. Cooperative Savings Societies and Rural Banks

xi. Leasing Companies

xii. Finance Companies

xiii. Primary Dealers

xiv. Specialised Banks

xv. Credit Cards

xvi. Mobile Phones/Phone Accounts

xvii. Internet Banking

Let us briefly look at the key features of each of these instruments and institutions to understand the level of threat they could impose upon Banks: -

i. Securitisation

Securitisation is the process of converting assets into tradable securities. The assets so converted are mostly receivables due to be received at future points of time. The most likely candidates for securitisation are financial institutions themselves who own large values of financial assets that can easily be converted into tradable securities. Banks are also on the top of the list.

Several finance and leasing companies engaged in securitisation exercises in the recent past. There were different extents to which the rights over the receivables were detached from the original owners and transferred to separate pools so as to clearly identify the entitlements of the investors in the securitised paper. As a result of poor separability, most issuers have failed

or opted not to derecognise the financial assets from their balance sheets. The Enron saga and the additional care that Auditors take since then have definitely made derecognition of the assets from the issuer's Balance Sheet a matter doubted between the need to raise funds and the need to "hide" bad assets.

The accounting provisions appear to require consolidation of the financial statements of a Special Purpose Vehicle (SPV) with the issuer's financial statements if there is continuing control over the SPV either directly or through an "autopilot mechanism" where a detailed trust deed will make provisions for each and every action of the SPV.

Securitisation of assets and thereby raising funds directly without going through intermediaries will definitely pose a threat to banks. At the moment, however, it is mostly the financial institutions that securitise their crystallised financial assets. Most of the issues have been substantially subscribed to by the Commercial Banks. Mostly they have been related to lease or hire purchase receivables.

A well-developed securitisation market is far away from its current status. At a minimum, two conditions should be satisfied if this market is to be considered to be independent and standing on its own:

1) The assets securitised should go beyond existing financial assets that appear in the balance sheet. For example, securitising of property rent receivable in the future as it falls due, by a property development company will go to a higher level of the concept of securitisation.

2) The securitisation must be commonly done by non financial institutions. The above example satisfies this condition too.

There are numerous situations that can be cited as possible opportunities for securitisation . Utility Companies do have the most predictable cash flows that can be securitised. An electricity supplier can securitise the receivables, phone company can securitise future phone bills and a water supplier can securitise the revenue from future meter readings and so on and so forth!

A software supplier could securitise the revenue receivable under software maintenance contracts! A 'Rent a Car' company may securitise the car rentals!

Several legal, taxation and accounting issues need to be resolved before a well organised securitisation market is developed. The neighbouring India has progressed fast in this direction and has been able to issue necessary guidelines and directions.

While securitisation would perform some of the key banking functions associated with intermediation yet it is not a plausible substitute for most of the functions of Banking.

Institutionalising Securitisation where companies are specialised in acting as Special Purpose Vehicles, one issue after the other, segregated by issue, might result in faster progress in developing this market.

ii. Corporate Debt Securities Including Commercial Paper

Companies with high credit rating will find it more attractive to bypass the intermediaries. Issue of debt securities for short, medium and long term can resolve their funding requirements in lieu of going to the loan market, mainly to the banks.

Short term commercial paper are somewhat popular in the local market. The Central Bank has given some recognition to this market by issuing guidelines to Commercial Banks. This also indicates the involvement of the banks in this apparent disintermediation process. Banks mainly handle initial placing of the instruments and market making. In addition to outright sales and purchases of commercial paper, there are repurchase agreements offered against the same for the convenience of meeting the required duration and required value within the total.

Banks also guarantee Commercial Paper issues thereby making them another form of intermediation.

While the short term debt instruments have a certain amount of liquidity, the medium and long term debt instruments in the form of secured or unsecured debentures with or without credit rating have very little liquidity in the market whether they are listed or otherwise. Listed debentures lack liquidity as most investors tend to hold to maturities and those few who sell do so at prohibitive discounts due to lack of demand and popularity in the secondary market. The present fixed brokerage of 0.20% on each party (buyer & seller) makes the cost of trading a debt security 0.40% of the value for each trade. A holder of a security that has a yield of 10% p.a. will find that all the interest for the year will be absorbed, in the brokerage cost, if the security is traded for more than 25 times during a year (10% / 0.40%). The brokerage should be lower and negotiable for larger transactions to create sufficient volumes of trade and hence liquidity of the instruments. A fixed income securities trader who borrows short and invests in Debt instruments will find it impossible to meet the brokerage within the thin spreads as a result of which such trading is not developing.

Corporate debt fails to provide benefits such as pooling of risk and diversification unless the investor maintains a portfolio of securities instead of one or two. A developed debt market will no doubt be complementary to the banking system more than being a substitute.

Five companies raised listed Corporate Debt totalling to Rs 2.978 Bn in 2002 of which Rs 2 Bn was debt issued by one Commercial Bank. Total market capitalisation of listed debt as at 31.12.02 was Rs 10.299 Bn as reported in the Annual Report of Colombo Stock Exchange.

As reported in the Annual Report of Central Bank, there were Rs 24 Bn worth of Commercial Paper issued during the year 2002 inclusive of reissues. 98% of the issues were supported by the Commercial Banks. Commercial Paper outstanding as at 31.12.02 was Rs 5.6 Bn.

iii. Rating Agencies and Credit Rating

The Rating Agencies deserve special mention as they perform a vital role in popularising corporate debt. It is in the interest of the rating agency to do so! Rating provides an opportunity for the investor to make an assessment of the level of risk involved. This function substitutes to some extent the internal credit evaluation processes of Commercial Banks. The simplified rating will make an investment decision quicker and the pricing more rational.

As a Corporate Debt Securities market develops, the credit knowledge tend to have another storage apart from Banks, i.e. with the rating agencies.

iv. Real Estate Investment Trusts

Real Estate Investment Trusts (REITS) are funds set up to attract investments in real estates. The investors buy a unit of the trust which represents a pool of investments in real estates, either as a portfolio or as selected properties. The advantage is allowing passive investors to enter the lucrative real estate market with least involvement on a day to day basis. This process may be compared and contrasted with a situation of a Bank lending to a real estate company, to see the extent of difference in approach. The investor bypasses the Banks. However there is a constraint in pooling of risk as sectoral (or industry) risk is concentrated.

REITS are an upcoming addition to the Sri Lankan market with some firms taking the initiative.

v. Unit Trusts

Sri Lanka saw the establishment of several unit trusts by newly set up unit trust management companies in the late eighties and early nineties.

At the moment there are five unit trust management companies and 13 different Unit Trusts. The funds under management as at 31st December 2002 was Rs. 4.4 Bn, as per the Annual Report of the Central Bank, 2002. There were 459 Mn units issued with an average net asset value per unit of Rs 9.62. There were 25,291 unit holders, indicating an average investment of Rs 174,590 per unit holder. This average investment suggests a mix of small and large savers in the funds.

Unit trusts are particularly placed in a position to raise savings of smaller savers providing a well diversified investment for each unit purchased. This enables pooling of risk, aggregation of funds and even maturity transformation.

However, unit trusts do not have the feature of cushioning the risk of credit losses as there is no equity to support unlike in the case of Banks where there are capital adequacy requirements based on the risk carried in the assets.

A drawback the unit trusts face is the absence of a developed corporate debt market. As a result, they are compelled to look for low risk Government Securities that provide a relatively lower return and the high risk and unpredictable equity securities.

vi. Portfolio Fund Managers

Portfolio fund managers provide the services of arranging investments of assets of high networth individuals and businesses. Invariably, their performance will be proven if they could provide investments that provide better returns without an undue increase of risk. They have to offer investments going beyond bank deposits quite commonly available to everybody. In this process, they would look for non traditional non banking instruments to manage and provide better returns. Instruments such as Commercial Paper, Corporate Debt, Leveraged Gilt funds and Equity Securities may be promoted by the fund manager. It will also be in the interest of the fund managers to develop the level of activity and enthusiasm in these markets so that sufficient liquidity will be available.

vii Life Insurance

Life Insurance is another source of Savings and investment. In Sri Lanka, the Life funds stood at Rs 35.5 Bn as at 31/12/02. There were eleven insurance companies in business.

Insurance companies have the particular character of attracting long term savings. The funds are mainly invested in Government Securities, Bank Deposits, Corporate Debt and listed shares. The insurance companies generally target a sector different to that aimed at by the Banks. Bancassurance schemes have enabled a concerted effort by insurance companies and Banks in raising funds.

While the insurance companies pool the life related risks as the core business, their process of raising funds and making investments result in pooling and diversification of the systematic and unsystematic risks of investments to some extent. They, however, do not get opportunities to benefit from large numbers of different investments thereby making it difficult to pool the risk of the investments.

viii. Provident and Trust Funds

Provident and Trust Funds, the contractual savings entities (apart from Insurance Companies) that operate in Sri Lanka appear to be silent giants in the process of aggregating savings. Employees' Provident Fund (EPF) is the single largest entity in the country (Next to the Government and the Central Bank) with total member balances of Rs 293.9 Bn as at 31/12/2002 an increase of Rs 37.7 Bn or 14.7% from the value of Rs 247.5 Bn as at 31/12/2001. This was almost equal to the total Balance Sheet size of the Central Bank where total assets/liabilities were Rs 304 Bn as at 31/12/2002. (The two figures as at 31/12/2001 were Rs 256.2 Bn and Rs 247.5 Bn respectively where the size of EPF exceeded that of the Central Bank).

Employees' Trust Fund (ETF) too had significant savings although relatively lower at Rs 39.9 Bn as at 31/12/2002.

The Public Services Provident Fund (PSPF) had Rs 8.5 Bn of assets as at end 2002. The other approved Private Provident Funds numbering about 200 had assets totalling to Rs 79.7 Bn.

The total funds of all the Provident Funds and the Trust Fund as at 31/12/2002 can be estimated to be at Rs 422 Bn.

The existence of such large savings with the funds suggest how much has been lost for the Commercial banks had the savings been so attracted. The funds are growing with exponential patterns.

A key issue, if at all, in time to come will be the availability of investment opportunities if Government borrowings do not grow at a rate that exceeds the Growth of Savings in these funds. Most of the fund assets are investments in Government securities and Rupee Loans issued by the Government. EPF had 97.5% of all its funds invested in Government Securities and Rupee Loans whereas ETF had 80% of its assets in Government Securities.

Table 2

The Growth of Provident and Trust Funds

Year	Total Member Balances of EPF Rs Million	Total Member Balances of ETF Rs Million	TotalRs Million	Annualised GrowthRate%
1993	62,425	8,461	70,886	-
1994	75,731	10,950	86,681	22.28
1995	81,500	13,228	94,728	9.28
1996	108,553	15,785	124,338	31.26
1997	144,092	18,698	162,790	30.93
1998	167,470	21,940	189,410	16.35
1999	193,846	25,243	219,089	15.66
2000	222,933	29,221	252,154	15.69
2001	256,293	33,867	290,160	15.07
2002	293,980	38,985	332,965	14.75

Source: Compiled using data from the Annual Report of the Central Bank of Sri Lanka 2002.

ix. Merchant and Investment Banks

Merchant Banks in Sri Lanka have emerged to be "Semi Leasing Companies" with businesses more focused on fund based activities rather than fee based activities, not ruling out significant involvement in fee based activities. Leasing has been a key fund based activity, which is a way

of providing financial intermediation. The raising of funds for this purpose is from borrowings directly from public or from Banks. Along with intermediation, these institutions provide the related economic functions and benefits. In 2002, of the total income of Merchant Banks, 63% was interest income with another significant portion coming from other fund based activities. Severe regulatory restrictions limit the expandability of the businesses. There were twelve firms classified as "Merchant Banks" having total assets of Rs 13.5 Bn as at 31/12/2002.

Investment Banks on the other hand tend to focus more on structuring instruments for raising of funds, a function also performed by Merchant Banks. Competition amongst the institutions will facilitate more and more instruments being offered to the market to improve liquidity.

x. Cooperative Savings Societies and Rural Banks

Cooperative Savings Societies have the unique character of being small and widely spread. They reach the smaller savers in a cost efficient manner to aggregate savings to build giant funds. The total deposits mobilised and loans granted by Cooperative Banks, Rural and Regional Banks are given below:

Table 3

Deposits and Advances of Cooperative Societies and Rural and Regional Development Banks

Rs Million

	Total Deposits		Total Loans	
	2001	2002	2001	2002
Cooperative Rural Banks	16,5764	18,687	5,663	3,326
Regional Development Banks	4,746	6,344	4,695	6,345
Thrift and CreditCooperative Societies(SANASA)	4,539	4,902	2,996	3,176
SANASA DevelopmentBank	1,361	1,490	615	646
Total	27,222	31,423	13,969	13,493

Source: Central Bank of Sri Lanka Annual Report 2002, page 254 Table 10.15.
Note: There are smaller segments not included above.

It can be seen that the size of this savings force is significant given the relatively small savings mobilised.

The Cooperative and Rural Banks too engage in intermediation and extend several benefits such as pooling of risk, aggregation of savings and maturity transformation. They also help minimize transaction cost to the savers by the presence in widespread networks. Yet the loans granted by these Banks and societies have been a fraction of the deposits as seen in the figures of table 3.

xi. Leasing Companies

There are five finance leasing companies registered under the finance leasing Act No. 56 of 2000 (that came into effect in August 2001). All these companies had been in operation prior to passing of this new law. Leasing companies raise long term funds by way of borrowings, equity, issue of debt instruments and also by securitising lease receivable.

When the funding is arranged through Commercial Banks, the function of the leasing company appear to be one of "Disaggregation of Savings" or retailing the funds on behalf of the Banks. In such case there is good reason for co-existence and sharing of mutual benefits.

The total value of leases granted and outstanding as at 31/12/2002 was Rs 5.1 Bn a figure much less significant compared to the banking industry, which had total advances and leases of Rs 487.4 Bn.

xii. Finance Companies

Finance Companies though existed prior to 1988, came under the Finance Companies Act No: 78 of 1988 after its enactment. The business includes accepting term deposits and advancing such money by way of hire purchase contracts, leasing, term loans and also investment in property development projects. They provide valuable financial intermediation that result in related economic benefits. However, many other economic functions of Commercial banks cannot be performed by Finance Companies due to restricted activities permitted to be carried out.

As at 31/12/2002 the total deposits of Finance Companies stood at Rs 28.627 Bn as against Rs 487.4 Bn of Commercial Banks.

xiii. Primary Dealers

Primary Dealers of Government Securities are the distribution network of the Central Bank's Public Debt Department to sell Government Securities viz Treasury Bills and Treasury Bonds. Under a new scheme introduced in 1999, only companies exclusively engaged in the activity of dealing in Government Securities were authorized to apply for Primary Dealer Licenses. Accordingly, eight Primary Dealers were set up in early 2000. Subsequently with a change of the policy, two banks also were added to the list in late 2002, and one more company in 2003 making a total of eleven Primary Dealers.

The business is mainly buying and selling of Government Securities and entering into Repurchase Agreements (Repos) against Government Securities. Further, Primary Dealers maintain large inventories of Government Securities and quote two way prices for Government Securities in the inter dealer market and to the large institutions. Primary Dealers also retail the securities either as outright sales or Repos.

In accepting Repos and making outright sales, the Primary Dealers engage in sourcing funds for the Government. This activity cannot be identified as intermediation as risk assumed by the investor is the risk of ultimate borrower i.e. the Government and not of the Primary Dealer. Further, there is no pooling of risk because the securities are "risk free" and risk if any is that of one party, viz. Government.

The functions include aggregation of saving by collecting savings of a large number of clients to be lent to the Government.

Further, this market is engaged in "maturity transformation " by taking short term Repos and investing in longer term bonds. The Repo market therefore has enabled issue of longer term instruments up to 15 years and more commonly around five to six years without having to mobilise matching funds. High market liquidity of the Bonds has also encouraged investors with short term funds acquiring longer term bonds with a view to discounting in the Secondary Market, when necessary, to convert to cash.

Apart from a continuous flow of buying in the primary auctions and selling in the market, the Primary Dealers also have grown to be significant in terms of the size of Repos outstanding and investments in Government Securities. The eight Exclusive Primary Dealers had Rs 21.543 Bn of Repos outstanding as at end of year 2001 which increased to Rs 31.677 Bn by end 2002. Similarly there was a corresponding increase in the Government Securities portfolios amounting to Rs 23.069 Bn in 2001 increased to Rs 34.216 Bn by end December 2002. (Source: Published Accounts of the eight exclusive Primary Dealer Companies).

While Primary Dealers tend to tap the savings to finance the Government, apparently in competition with Banks, most of the other banking functions are not within the purview of Primary Dealers.

xiv. Specialised Banks

With the enactment of the Banking Amendment Act No: 33 of 1995, provisions were made to recognise Savings and Development Banks under the category of Specialised Banks. The DFCC Bank and National Development Bank which were known to be Development Finance Institutions (DFIs) are now licensed as Specialised Banks. Similarly the State Mortgage and Investment Bank (SMIB) and National Savings Bank come under this category.

The DFIs hitherto enjoyed long term credit lines that enabled project lending at reasonable interest rates. The Banks are now compelled to raise deposits locally to meet these funding requirements, as the credit lines are curtailed. The continuous demand for a single Banking Act and allowing legal provisions for Commercial Banks and Specialised Banks being merged amply demonstrate that the key players in the industry are dissatisfied with their present

classification. The 2002 Annual Report of NDB in the Chief Executive's Review states that "Credit lines from multilateral agencies, which supported the project lending business in Sri Lanka in the past, have now largely disappeared, as a matter of global policy, making the single product Development Finance Institution unsustainable for the future". Further, it states "… NDB is therefore working towards merging its business with the Commercial Banking business of NDB Bank Ltd, subject to regulatory and shareholder approval …".

In a similar voice, the Chief Executive's Report of DFCC Bank states that: "Development Banks today face the prospect of diminishing long term lines of credit from multilateral institutions, and these are being made increasingly accessible to Commercial Banks as well. A sustainable solution to make more long term funds available would therefore, be for Government to loosen its hold on captive sources of domestic long term savings, while permitting development Banks to broad-base their income stream by offering their customers a wider range of lower risk products".

In essence, there is a clear preference for combining the project lending activities with Commercial Banking as, quite understandably, the Specialised Banks are unable perform most of the economic functions discussed earlier due to the restrictions on maintaining current accounts for customers, creating money and carrying out foreign exchange activities.

Therefore, the question of Commercial Banking paving the way to other institutions is being asked on the reverse. Some segments appear to prefer the Commercial Banking framework.

The growth of selected key Specialised Banks can be reviewed in terms of the size of the total assets outstanding as at the end of selected years:

Table 4

Total Assets of Selected Specialised Banks

Rs Billion

Bank	1990 (a)	2000 (b)	% p.a.Annualised Growth for 10 Yrs (c)	2002 (d)	% p.a.Annualised Growth over 2 yrs (c)
DFCC	3.026	24.966	23.5%	29.001	7.8%
NDB	5.5172	41.545	22.4%	40.366	(1.4%)
NSB	5.145	115.102	16.4%	148.036	13.4%
SMIB	2.690	8.094	11.6%	9.715	9.5%

Source: Central Bank of Sri Lanka Annual Report (Columns (a),(b) & (d) only)

The biggest Specialised Bank, National Savings Bank, has been the fastest growing Specialised Bank during the two years 2000 to 2002 with an annualised growth rate of 13.4% p.a. where the assets grew from Rs 115.102 Bn to Rs 148.036 Bn by Rs 32.934 Bn.

This Growth suggest that a specialised Bank could still achieve market dominance by tapping domestic savings with a large branch network. NSB also had introduced several savings and loan products as quoted in the Annual Report of the Central Bank 2002, (page 258).

The Bank appears to have changed its traditional standardised products to new "branded" products with brand names such as "Friends" "Rata Ithuru", "Sthree" and "Express Service Housing Loan".

Specialised Banks are a particularly important segment of the financial system given their reach and size. Although the deposits held by public with specialised Banks are not included in the traditional measures of Money Supply, i.e. M2 (Board Money Supply) or M2b (Consolidated Broad Money Supply), the deposits of public, both savings and time deposits, held with Specialised Banks are no doubt considered to be money by the economic constituents. There is virtually no difference in terms of liquidity of such deposits even if they are time deposits with premature withdrawals being permitted. The significance has been recognised by inclusion of deposits of Specialised Banks in the M4 Broad Money Supply as given in Table 115 of the Annual Report of Central Bank 2002.

Another aspect is the ability to create money. At the moment these Banks do satisfy essential pre-requisites for being able to create money viz. granting loans by passing book entries, maintaining deposits payable on demand (in this case, savings accounts), and maintaining only fractional reserves (Cash Reserves as applicable). The question is the acceptance of the deposits as money for which there are probably two factors that form arguments against.

1) Absence of current accounts may reduce the mobility of savings account balances as well.

2) Not maintaining current accounts with Central Bank may be considered a factor that reduces the ability to raise liquidity.

Both the factors are not so strong in a proposition of not considering their deposits as "Money". The level of causation of these deposits in creating demand for goods and services would be the relevant factor in determination. This article does not go to further analysis of this aspect. However, it is worth summarising the different monetary statistics to understand the significance of the Specialised Banks.

Table 5

The Monetary Aggregates
1998 – 2002

Rs Billion

Year	M2 Broad Money Supply	M2b Consolidated Broad Money Supply	Adjustments for Deposits of LSBs and Finance Companies with Commercial Banks, Currency held by Finance Companies and LSBs and etc.	Time and Savings Deposits of LSBs	Time Deposits of Finance Companies	M4 Broad Money Supply
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1998	316.1	377.1	(6.0)	92.8	16.1	480.0
1999	358.1	428.3	(4.9)	104.0	19.1	546.5
2000	404.7	483.4	(4.7)	116.5	20.8	616.0
2001	450.7	549.1	(6.5)	132.7	24.4	699.7
2002	510.4	622.5	(4.1)	150.6	28.6	797.6

Source: The Central Bank of Sri Lanka, Annual Report 2002, Tables 111,113 and 115 for Columns (b), (c), (e), (f) and (g).

Notes:

1) The M2 Broad Money Supply comprises only of domestic rupee assets.

2) The M2b Consolidated Broad Money Supply consists of foreign currency deposits in DBU and FCBU as well.

3) The M4 Broad Money Supply includes the Deposits of Specialised Banks and Finance Companies as reported in Table 115 of the Annual Report of Central Bank.

4) The "Deposits with Commercial Banks held by Public" and "Currency held by Public" amounts change as the definition of "Public" changes depending on whether the Licensed Specialised Banks (LSBs) and Finance Companies are included under the definition of "Public" or not. Hence is the adjustment in Column (d).

xv. Credit Cards

Credit Cards have been brought in for discussion as they appear to challenge one of the basic functions of traditional banking i.e. facilitating payments. However, the outcome has been that Banks have embraced the product rather than competing using the traditional instruments such as cheques and drafts. Most of the Banks issue credit cards and acquire payments to facilitate settlement to merchants. Banks in Sri Lanka have issued 321,145 credit cards as at end 2002 as against 255,584 as at the end of previous year, a 25.7% increase. (Source: Annual Report of the Central Bank).

Total outstanding as at end 2002 was Rs 6.390 Bio as against Rs 5.129 Bio as at end 2001, a 24.6% increase.

xvi Mobile Phones / Phone Accounts

The potential for phone accounts, in particular using the mobile phones, in making payments is quite enormous.

One would make all his supermarket and shopping payments sending authenticated messages using the mobile phone! Pay all the utility bills to the debit of the phone account and make a single settlement of the phone bill using the banks; Yet in time to come one may receive part of his salary direct to the phone account bypassing the bank and the phone company could enjoy a float. What about payments before receipt of funds? Well the phone company has the best records of payment habits and deciding a credit limit could be virtually automated. With a large clientele in hand and limited threat of new entry due to very high infrastructure costs, phone companies could pose substantial threat of competing in some of the key banking functions.

xvii. Internet Banking

Internet has become a common means of payment and trading where the payments are mostly using credit cards. Banks also facilitate the access of the Bank accounts for inquiry, payment and fund transfer via internet. This reduces the need for customers to visit the Banks for some of these transactions and also provides the potential for the Banks to be reduced to "mere call centres" shying away from the large lobbies of brick and mortar banks. While internet enabled huge potential for change of banking methods, the fundamental economic functions appear to remain unchanged.

The Role of Substitutes and Potential for substitution.

In the analysis of substitutes, we noted that most of the institutions, instruments and innovations are not perfect substitutes in total. However, they tend to take care of certain aspects at a time. For example, most institutes discussed tend to provide financial intermediation. Payment systems like credit cards have joined hands with Banks to make them part and parcel of the processes.

Instruments in the securities market specially in the form of debt securities are intended to impose a threat on Banks but, so far have not been significant enough as a market to provide meaningful competition.

Some argue that loan market where the intermediaries play the role of channelling funds from the deficit units to surplus units, is primitive and hence should be replaced by the (debt) securities market where the intermediary is bypassed and the investor takes risks and rewards of the debt issuer directly. The brokers, dealers and market makers will substitute the role of

Banks in such a scenario. Fund managers too may provide an active role. Unit Trusts and investment trusts can facilitate pooling and diversification of risk.

Despite concerted efforts and an outcry for a dominant (debt) securities market to replace the loan market the loan market still dominates. An analysis of financial assets and obligations of the financial market provides ample evidence to this.

We can have a look at Table 7 provided as an annex to this paper which is extracted from the Annual Report of the Central Bank 2002 with suitable additions and modifications as described in the footnotes.

The Data can be summarised to give the share of different segments as follows:

Table 6

Total Assets of Banking and other Financial Institutions and Markets - Summary

Financial Institution	Amount Rupees Million			As a percent of Gross Domestic Product			Percentage of Relative Size, %		
	1990	2002	2002 (a)	1990	2000	2002(a)	1990	2000	2002
1. Banking Sector	245,103	1,022,148	1,263,822	76.2	81.4	80.0	61.3	58.0	54.8
2. Licensed Specialised Banks	36,378	202,552	241,816	11.3	16.1	15.3	9.1	11.5	10.5
3. Other Deposit Taking Institutions	14,031	56,467	73,205	4.4	4.5	4.6	3.5	3.2	3.2
4. Other Housing Finance Institutions	8,077	14,711	17,077	2.5	1.2	1.1	2.04	0.81	0.7
5. Contractual Saving Institutions	57,227	329,999	460,343	17.8	26.3	29.2	14.3	18.7	20.0
6. Specialised Financial Institutions	2,149	37,548	35,877	0.7	3.0	2.3	0.5	2.1	3.1
7. Commercial Paper Issued	-	3,963	5,600	-	0.3	0.4	-	0.2	0.2
8. Market Capitalisation of Listed Corporate Debt	-	5,803	10,299	-	0.5	0.7	-	0.3	0.4
9. Market Capitalisation of Equity Market	36,900	88,800	162,600	11.5	7.1	10.3	9.2	5.0	7.1
10. Total	399,865	1,761,991	2,305,852	124.3	140.3	146.0	100.0	100.0	100.0

Source: Same as in Table 7

The Banking sector comprising of Central Bank and Commercial Banks including FCBUs held 54.8% of total assets in 2002 of which Central Bank's Share was 13.2% and Commercial Banks' with FCBUs was 41.6%. Commercial Banks' share was the same as it was in 1990 but has come down from a level of 45.7% in 2000. Central Bank's share has reduced from 19.4% to 13.2%.

The second largest sector was the contractual savings institutions having 20% share in 2002, of which a share of 18.2% was Provident Funds the balance 1.8% being insurance. This segment has a growing share with an increase from a share of 14.3% in 1990 to 20% in 2002.

Licensed Specialised Banks maintained a share of 10.5% of the total assets of the market as at end 2002.

Other Deposit taking institutions such as Finance Companies, Rural Banks, and Thrift & Credit Societies maintained a consistent percentage and had 3.2% of the total market size as at end 2002.

The two Housing Finance Institutions lost their share though they grew in size. They had 0.7% by end 2002.

In the category of Specialised Financial Institutions, a new addition was the exclusive primary dealer companies, (The Primary Dealer units of Commercial Banks being counted under Commercial Banks). They had a share of 1.5% and category in total 3.2%.

All the institutions mentioned above had a share of 92.3%.

The balances was shared by Commercial Paper outstanding having 0.2%, market capitalisation of listed Debt of o.4% and market Capitalisation of listed equity of 7.1%, totalling to 7.7%. This is the segment that may be considered as the securities market both debt and equity.

In conclusion we can observe that the loan market, still dominates while the contractual savings mainly dominated by provident funds are growing at a rapid rate. Of the loan market the Commercial Banks have a major share followed by the Specialised Banks.

One reason for such continuous and consistent dominance by Commercial Banks in particular within loan market is that most of the key economic activities of banking are yet to be performed by alternative instruments or institutions. Another factor is probably the early mover advantage which supported the dominance of the loan market in general including the Specialised Banks. The country has been based on a banking and loan market model as against a securities market. Mindset of the people, and their habits are in line with the existence of a dominant banking system. It may take a while for depositors to think of their investments in corporate debt as a substitute for money held in the Banks. It may take a while for the companies raising funds for new projects or for their working capital requirements to go to the debt securities market and raise such funds at the same speed, flexibility and convenience that they now enjoy in the Banking System.

It will definitely take a while before individuals could borrow from the securities market probably in an instrument where individual borrowings are “bunched” into composite debt instruments by creative fund managers.

Yet the changes of habits, changes of view and the enthusiasm of the people concerned are encouraging. But the change, the evolution into securities market, will no doubt happen only if it is a gradual transition. In that transition we will still find the Banks, evolved as ever, engaged in structuring, broking and trading securities in the teller counters!

End

10th July 2003

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Table 7

Total Assets of Banking and other Financial Institutiong and Market

Financial Institution	Rupees Million			As a percent of Gross Domestic Product			Ralative Size, %		
	1990	2002	2002(a)	1990	2000	2002 (a)	1990	2000	2002

1. Banking Sector	245,103	1,022148	1,263,822	76.2	81.4	80.0	61.3	58.0	**54.8**
1.1 Central Bank	77,400	217,191	304,152	24.1	17.3	19.3	19.4	12.3	13.2
1.2 Commercial Banks	132,364	617,681	788,026	41.1	54.0	49.9	33.1	38.5	34.2
1.3 FCBU (b)	35,339	127,276	171,644	11.0	10.1	10.9	8.84	7.2	7.4
2. Licensed Specialised Banks	36,378	202,552	241,816	11.3	16.1	15.3	9.1	11.5	**10.5**
2.1 DFCC Bank	3,026	24,966	29,001	0.9	2.0	1.8	0.77	1.4	1.3
2.2 NDB (C')	5,517	41,545	40,366	1.7	3.3	2.6	1.38	2.4	1.8
2.3 NSB (d)	25,145	115,102	148,036	7.8	9.2	9.4	6.3	6.5	6.4
2.4 SMIB (e)	2,690	8,094	9,715	0.8	0.6	0.6	0.7	0.5	0.4
2.5 RDBS (f)	-	7,763	11,322	-	0.6	0.7	-	0.4	0.5
2.6 Private Savings Development Banks	-	5,082	3,376	-	0.4	0.2	-	0.3	0.1
3. Other Deposit Taking Institutions	14,031	56,467	73,205	4.4	4.5	4.6	3.5	3.2	**3.2**
3.1Finance Companies	8,600	33,566	44,910	2.7	2.7	2.8	2.2	1.9	1.9
3.2 Rural Banks	3,379	18,325	23,465	1.1	1.5	1.5	0.8	1.0	1.0
3.3 RRDBs (g)	980	-	-	0.3	0.0	0.0	0.2	-	-
3.4 Thrift & CreditCo-operative Societies	1,072	4,576	4,830	0.3	0.4	0.3	0.3	0.3	0.2
4. Other HousingFinance Institutions	8,077	14,711	17,077	2.5	1.2	1.1	2.04	0.8	**0.7**
4.1 NHDA (h)	7,886	11,892	12,081	2.5	0.9	0.8	2.0	0.7	0.5
4.2 HDFC (i)	191	2,819	4,996	0.1	0.2	0.3	0.04	0.2	0.2
5. Contractual SavingInstitutions	57,227	329,999	460,343	17.8	26.3	29.2	14.3	18.7	**20.0**
5.1 Insurance Institutions	7,435	31,962	42,305	2.3	2.5	2.7	1.9	1.8	1.8
5.1.1 State Corporations	6,500	24,851	29,202	2.0	2.0	1.8	1.6	1.4	1.3
5.1.2 Proivate Insurance Companies	800	6,639	13,113	0.2	0.5	0.8	0.2	0.4	0.6
5.1.3 SLECIC (i)	135	472	538	0.0	0.0	0.0	0.03	0.03	0.02
5.2 Employees Provident Fund	40,800	224,852	296,912	12.7	17.9	18.8	10.2	12.8	12.9
5.3 Employees Trust Fund	4,858	29,813	40,895	1.5	2.4	2.6	1.2	1.7	1.8
5.4 Private Provident Funds	4,134	43,372	79,683	1.3	3.5	5.0	1.0	2.5	3.5
6. Specialised Financial Institutions	2,149	37,548	35,877	0.7	3.0	2.3	0.5	2.1	3.1
6.1 Leasing Companies	1,249	14,168	16,401	0.4	1.1	1.0	0.3	0.8	0.7
6.2 Merchant Banks	900	18,289	12,461	0.3	1.5	0.8	0.2	1.0	0.5
6.3 Venture Capital Companies	-	2,918	2,583	-	0.2	0.2	-	0.1	0.1
6.4 Unit Trusts	-	2,173	4,432	-	0.2	0.3	-	0.1	0.2
6.5 Exclusive Primary Dealer Companies	-	-	35,213	-	-	2.2	-	-	1.5
Sub Taltal	362,965	1,663,425	2,172,353	112.8	132.5	132.5	90.8	94.4	**92.3**
	-	3,963	5,600	-	0.3	0.4	-	0.2	**0.2**
	-	5,803	10,299	-	0.5	0.7	-	0.3	**0.4**
	36,900	88,800	162,600	11.5	7.1	10.3	9.2	5.0	**7.1**
	399,865	1,761,991	2,305,852	124.3	140.3	146.0	100.0	100.0	**100.**

7 Commercial Paper Issued 6 O/S 8. Market Capitalisation of Listed Corporate Debt 9. Market Capitalisation of Equity Market **Total**									

(a) Provisional

(b) FCBUs – Foreign Currency Banking Units (of Commercial Banks).

(c) NDB – National Development Bank of Sri Lanka

(d) NSB – National Savings Bank

(e) SMIB – State Mortgage and Investment Bank

(f) RDBs – Regional Development Banks

(g) RRDBs – Regional Rural Development Banks. All RRDBs operating in the country have been absorbed in to RDBs under the provisions of the Regional Development Bank Act, No. 6 of 1997.

(h) NHDA – National Housing Development Authority.

(i) HDFC – Housing Development Finance Corporation of Sri Lanka Ltd.

(j) SLECIC – Sri Lanka Export Credit Insurance Corporation.

Source: Monetary data and percentages, as a percentage of Gross Domestic Product, for rows 1 to 6.4 have been extracted from Table 25 of the Special Statistical Appendix of the Annual Report of Central Bank of Sri Lanka 2002. The Table has been modified to include rows 6.5 to 9 and the percentages of relative size. For this purpose data were

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PHOTO

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