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Transition Issues in Monetary Reform

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INTRODUCTION

This paper is an edited version of contributions made by Tarek El Diwany to a policy document prepared in 2005 for the Al-Bukhari Foundation in Malaysia. It sets out a pathway for transition from an interest-based fractional reserve monetary system to one that is interest-free and in which 100% reserves are mandatory for the commercial banking system. The adoption of commodity money is included as part of the transition process. Although Malaysia has been taken as the context for these proposals, the underlying principles of reform could be applied in many modern economies.

Section One summarises arguments in favour of monetary reform and outlines the key reform phases and objectives for consideration by policy makers. Section Two provides details on the two reform phases and includes an assessment of the impact on the main monetary indicators, while Section Three identifies the main policy levers that can be used to carry out the implementation. A forecast of the impact of the reforms upon the main financial markets and institutions is given in Section Four. Section Five provides an overview of the impact of reforms on the commercial banking system, Section Six does so from the Federal perspective, and Section Seven looks at the consequences for the central bank's balance sheet. September 2004 data has been used throughout.

EXECUTIVE SUMMARY

- The ceding to commercial banks of the right to create money has provided these institutions with a substantial economic advantage over the non-bank sector. This has resulted in a distortion in the allocation of society's resources towards the provision of banking and financial services, and simultaneously damaged economic welfare in areas as diverse as wealth creation, wealth distribution, price and output volatility, and environmental sustainability.
- Removing the right of commercial banks to create money will lessen distortions in resource allocation, improve the quality of economic performance, and allow large scale net gains in wealth creation within the non-bank and non-financial sectors of the economy.
- Interest is a cornerstone upon which modern money creation is based, and its influence upon economic activity is reinforced because of this interconnection. Breaking the link between interest and money creation will lessen the damaging impact of interest-based finance.
- A Phase One reform is proposed in which the right to create money would be removed entirely from the commercial banks and placed under the control of the Government. The Phase One reform will enable a reduction of at least RM18.8 billion in Federal Government debt to be achieved. A total reduction of up to RM64 billion in public sector debt may be achieved during this period, depending upon the implementation methods adopted by the authorities.
- A minimum annual saving of some RM0.7 billion to the Federal Government budget will result from the Phase One reform. This saving in debt service may increase to as much as RM3 billion annually depending on the methods adopted by the authorities to implement the Phase One reform.
- An optional Phase Two reform is proposed in which the creation of money by the state authorities will be abandoned in favour of a market-led commodity based monetary system. The new currency unit will be denominated by weight, not by nominal value. Coincident with the Phase Two reform, the use of interest-based finance will be prohibited.
- Most current international and domestic operations presently in use by Malaysian financial institutions will continue unaffected throughout and after the reform process.
- The implementation of the two main reform objectives should be gradual so as to minimise sudden shocks to the domestic economy, and should allow for responsive policy modifications through time.
- Existing policy levers should be utilised to implement the reform proposals, where possible, so as to reduce the cost, administrative and legislative burdens involved.

KEY IMPLEMENTATION PROCESSES

Phase One

- Establishment of an independent Monetary Oversight Committee to implement, oversee and audit monetary reform processes.
- Creation of a minimum of RM64 billion in new reserve money by the state, as a direct obligation on the Treasury or through the issuance of interest-free Government securities to Bank Negara Malaysia.
- Injection into circulation of the newly created reserve money by means of redemption and repurchase of public sector debt, tax reductions, welfare payments and Federal expenditure over a period of three years from commencement of Phase One of the reform.
- Stepped increases in required reserve ratios for commercial banks' sight deposits to 100% over a period of three years, in tandem with the injection into circulation of newly created reserve money, thus removing the power of money creation from the banking sector.
- Further issuance of state money to be undertaken under the supervision of the Monetary Oversight Committee in accordance with the performance of various defined price indices or other economic indicators.
- Prohibition of payment of any form of return by commercial banks to holders of sight deposits.
- Restriction of chequing facilities, electronic transfer and other on-demand withdrawal facilities to sight deposit accounts operated by commercial banks.
- Conversion of time deposits at banking institutions into investment accounts over a period of three years, such accounts to be operated on an off-balance sheet basis where withdrawal is dependent upon the liquidity of the underlying assets, subject to a minimum withdrawal notice period to be imposed by statutory instrument.

Phase Two

- Conversion of state issued fiat money into commodity money undertaken at market prices using a selected commodity or set of commodities as the new monetary medium.
- Establishment of commodity markets and bullion conversion facilities enabling commodity producers and purchasers to transact efficiently for the purpose of supplying and converting commodities for conversion into currency units.
- Abolition of interest-based financing techniques to be phased in over an agreed period.
- Promotion of equity based investment products, leasing and instalment purchase schemes within the private sector, through tax and other incentives.
- Provision of Government interest-free financing facilities for lower income groups.

1. REFORM OBJECTIVES

1.1. The Need for Monetary Reform

The modern model of commercial banking developed from the practices of European goldsmith bankers of seventeenth century England. These bankers took deposits of gold coins and in return issued receipts to depositors. The receipts in due course came to be used in payment for goods and services among merchants and others, and thereby came to be used not as receipts for money but rather as money itself. Eventually the bankers saw that they could alter their business model radically, by acting not as safe-keepers of gold but as lenders of money. When borrowers came to the bank to borrow money, what they would be given was not gold but newly printed paper receipts. The bankers had found a mechanism for creating money, and they did so in order to charge interest on the newly created amounts. One consequence of this banking model was that with each new unit of unbacked paper money issued by the bank, there would appear within society a debt corresponding to the loan that the banker had made.

Some commentators argued that if the banker had issued a receipt promising payment of a certain amount of gold, then he should have at least that amount in his vault in order to fulfil the promise if required. The banks however argued that traders would rarely seek to cash their receipts for gold at the banker's office and the majority of gold on deposit in their vaults would therefore remain untouched for extended periods. It would therefore be safe to make promises to pay a greater amount of gold than existed on deposit in the bank vault.

Today the process of money creation by the commercial banking system is widely known as "fractional reserve banking" or "multiple deposit expansion" and while its techniques have become more sophisticated, the key principle remains the same. Commercial banks create money from nothing and lend it to society at interest. Whereas in the past the state issued gold coins and banks issued paper receipts, today it is the state that issues paper notes and electronic balances through the medium of the central bank, whilst the commercial banks use chequing facilities and accounts in order to pursue their own money creating activities. In the monetary systems of the modern economies, the majority of money supply is created by the commercial banking system.

For the purpose of the following discussions, money produced by the state will be referred to as "state" money, and that produced by the commercial banking system as "bank money". In more contemporary language, the former is referred to as "reserve money", whilst the latter is normally the largest component of the common measures "M1", "M2" and "M4". Not all reserve money circulates freely, some being held in non-operational accounts at the central bank for example, hence the term "M0" is used to refer to the amount of reserve money in circulation outside the banking system, plus the amount held by the commercial banks in their operational accounts at the central bank, plus till cash.

1.2. Economic Consequences of Fractional Reserve Banking

1.2.1. Business Cycle

Largely as a consequence of the variation in the rate of money creation by the commercial banking system, a business cycle has developed that is unrelated to real factors such as climate variation or technological progress. When money creation by the commercial banking system increases sufficiently, the wider economy can experience boom conditions that are evidenced in due course by asset or consumer price inflation. At times when the rate of money creation decreases substantially, a contraction in business activity can result, accompanied in some cases by price deflation. The business cycle is not only an unnecessary feature of the modern economy, but one that can be highly damaging to economic development. Business and consumer confidence is undermined by economic volatility, long term planning and investment is discouraged and, once sacrificed to a recession, a firm's resources and business relationships may be irreparably damaged.

1.2.2. Endemic inflation

Given that commercial banks have the power to create new money at zero cost, it is a rational business strategy for them to maximise money creation within the existing regulatory regime. The greater the amount of money created, the greater their interest revenue and the greater their profit. The growth in money supply may not therefore be in accordance with the growth in the demand for money arising within the real economy because of growth in population or trade, for example. It is therefore the case that the volatile business cycle described above plays out against a backdrop of endemic inflation in every major economy over the longer term. Often, the inflation that is experienced is disguised in that asset prices are not included in headline inflation figures (for example, house prices are often excluded from retail price indices despite the fact that houses are the most expensive item that many individuals ever buy). A monetary system that suffers from endemic inflation is widely acknowledged to weaken confidence and distort decision making processes. Yet, where one or more public or private entities have the legal right to arbitrarily create new amounts of money to their own advantage, history testifies to the impossibility of achieving stability in the purchasing power of money over the longer term. It is therefore a common thread among reformers' arguments that the legal privilege to create money with a face value higher than its factor cost should at the very least be removed from private entities, and ideally from public ones too.

1.2.3. Banking patronage

The ability to create money, and subsequently lend it, grants to the banking establishment a substantial power of patronage over other members of society. At a simple level this power takes the form of choosing which entrepreneurs to finance. At a more sinister level, it takes the form of supporting political ideologies that accord with the ambitions of banking institutions. The major lending nations have enjoyed the benefits of this power of patronage over debtor nations for several decades. It should not go unremarked that they have in part been granted this power by virtue of those many debtor nations who have decided to adopt Western currencies to satisfy their trading and investment needs.

1.2.4. Financial leverage

The fractional reserve banking system is largely responsible for the ascendancy of interest-based financing techniques within the modern economy. At the practical level this is evidenced by the emergence of financial leverage as the dominant business model among modern corporations. In this model, entrepreneurs undertake projects where forecast returns exceed interest costs, maximising the amount borrowed in order to maximise profits. As a result, small scale economic activity is sacrificed to ever larger scale production techniques, and local control over community activities is lost to distant corporate headquarters. This process is often accorded the term "globalisation".

1.2.5. Environmental degradation

The pervasive use of interest in modern finance has in turn sponsored the use of highly questionable tools in financial decision making. For example, discounted cash-flow analysis has been shown in a number of studies to be very short term in its scope, reducing significant long term costs to an insignificant present value component in a financial appraisal. This factor works alongside more direct practical expressions of the pressure that can be exerted upon human activity by a need to service interest-bearing debt. For example, the world's major deforesting nations are also among its most indebted.

1.2.6. Wealth inequality

The use of collateral as a criteria when making lending decisions is a key feature of interest-based finance. It often encourages resource allocation that is speculative, and promotes wealth inequality because wealthier members of society usually have the most collateral to offer as a basis for bank borrowing. To the extent that monetary reform reduces the role of interest-based commercial banking in business finance, there will be a commensurate longer term reduction in domestic wealth inequality.

1.2.7. Conflicts in monetary policy

The setting of short-term interest rates is a most common tool of monetary management in the modern economy, operating on the assumption that the level of interest rates determines the degree of borrowing and hence money supply expansion in an economy. In other words, management of the money supply is most commonly undertaken by affecting borrowers' ability to borrow, not lenders' ability to lend. In seeking to reduce new borrowing, increases in interest rates have the undesirable consequence of harming the cash-flows of all existing borrowers and are therefore a "blunt" weapon of economic policy. Meanwhile reductions in interest rates often spark a speculative boom as investors and speculators engage in financial leverage upon assets such as property in the expectation of future capital gains. In some circumstances, the level of interest rates must be chosen so as to satisfy two opposing requirements at the same time. This can be the case, for example, when high interest rates are deemed appropriate to support a weak currency while recession indicates that lower interest rates are necessary. Such circumstances produce impossible dilemmas for monetary authorities operating in an interest-based monetary environment.

1.2.8. Increased systemic risk

The potential for systemic collapse within the commercial banking system arises from a variety of factors including liquidity shortage, volatility of interest rates and alterations in the purchasing power of the currency unit. A sudden change in any of these three components carries with it a major risk to confidence in such spheres as domestic investment, transaction turnover and bank liquidity. These risks manifest themselves in the form of hyperinflation, wild currency fluctuations, volatile interest rates, and the occasional bank run (Indonesia 1997, Argentina 2003). Systemic risks are typically higher in the less developed economies. Here, monetary policy may be lax or politically motivated, debt service ratios (debt repayment as a percentage of export revenue) may be high, regulatory regimes weak, institutional mismanagement more common and personal financial behaviour less predictable. Within the more advanced economies, whilst such risks exist, their appearance is usually more prominently and publicly heralded due to the transparency of the relevant monitoring systems allowing economic agents the opportunity to take pre-emptive action. Nevertheless, in both advanced and lesser developed economies, monetary reform remains one of the lowest cost opportunities for risk reduction.

1.2.9. Resource misallocation

By the removal of the subsidy to commercial banking that is granted by the privilege to engage in fractional reserve banking, resource allocation to the rest of the economy will improve greatly. We believe that the necessary provision of payments and transaction services will remain at levels sufficient to support public sector, commercial and household economic activity, but there will undoubtedly be a reduction in the number of banking institutions competing for such business. The redirection of resources from banking and finance to the health, education and construction sectors for example, cannot be achieved overnight of course. The development of a carefully thought out restructuring policy for such areas as bank mergers, retraining and educational grants will be required, with the objective of minimising transitional unemployment during the reform process.

1.2.10. Public and private sector indebtedness

As the bulk of modern money supply is created by means of interest bearing loans, money has effectively become the balance sheet counterpart to interest bearing debt at the macro-economic level. The indebtedness of private individuals, corporations and the public sector has its roots in this relationship between money and debt. Reductions in debt imply reductions in money supply, hence efforts to repay the debts of a nation can be the cause of severe recessions. Sustained long term increases in indebtedness are therefore a feature of developed and developing economies. In Malaysia, total private and public sector indebtedness to the banking system increased from 60% to 139% of GDP between 1970 and 1993. Debt service payments on government debt currently run at RM10,546 million (2003), more than

the entire Malaysian education budget. The monetary reform proposals outlined in this document would enable a gradual reduction in both private and public sector indebtedness, and would in the process reduce public sector interest charges substantially.

1.2.11. A note on the efficiency of the payment and clearing system

The reduced cost of banking services is often cited as an argument in favour of money creation, since the profits derived from it cross-subsidise the payment and clearing system. Putting aside the wider economic costs of the fractional reserve system, if the price of payment transmission services under the reformed system comes to reflect the true cost of service provision, then this would be the more efficient position to adopt from an orthodox economic perspective.

1.2.12. A note on qualitative consequences

The consequences of permanent indebtedness for society as a whole, particularly the household sector, are wide-ranging and substantial. Aggressive competition in the market economy is in part a by-product of the unnatural shortage of money that results under present monetary arrangements. Stress caused by heavy indebtedness affects the individual and the corporate executive with further pressures that need not be documented here. The large scale nature of modern business processes produces a physical environment in which the human scale is sacrificed to that obtained by economies of scale. Two very visible consequences include anonymous modern housing developments that predominate over older individualistic construction, and monopolistic supermarket outlets that smother smaller enterprises and market traders. While it is wrong to claim that such symptoms are entirely caused by the fractional reserve system, it is also true that they are greatly encouraged by it. They are some of the features of the system that our reforms target, features that are seldom discussed, difficult to quantify, but widely felt.

1.3. Main Stages of the Reform Process

The reform process contemplated in this document comprises two main phases, the first of both of which may be implemented.

In the first phase of reform ("Phase One"), the right of private profit-seeking institutions to create part of the monetary aggregates would be removed in a gradual process of restriction that could be implemented over a period of some three years. The precise policies adopted within this first transition period would be determined in accordance with the institutional, political and economic circumstances of the time. The target position at the end of the Phase One reform would be a monetary system in which a public sector authority would have vested in it the sole right to create money in the same form as the present monetary base ("reserve money"). Existing commercial banking institutions would continue to operate as providers of financial services and payment transmission services. In effecting this change, commercial banks would be required to maintain 100% reserves of reserve money against customers' sight deposits. Term deposits would attract no reserve requirements and the nature of a term deposit would be redefined over time such that redemption would be at the deposit-taking institution's option, subject to its liquidity position, upon a minimum notice period. The link between the creation of money and the creation of interest-bearing debt would thereby be broken.

In the second phase of reform ("Phase Two"), the public sector monetary authority would yield its role of money creation to an entirely market-based system in which a chosen commodity, or set of commodities, would be adopted as the domestic monetary medium. Any economic agent wishing to act as a producer of money would then have the right to do so, in effect by mining or otherwise accumulating the specified commodities in refined form, and presenting them to the relevant regulatory authority for assessment and exchange into monetary medium under strict and transparent quality standards. The specified commodities need not circulate as minted coinage only. Instead, warehouse deposits of commodity in bullion form could be established under Government authority, operating as a centralised custodian through which electronic transfers could take place between larger account holders.

The exchange value of the new money would be established by free market processes, not by Government decree, and because the supply of commodity money would depend in general terms upon production costs, a firm anchor would exist to tie the monetary system to the real economy. In such a system, the level of money supply could not easily be destabilised by politically motivated action. Precious metals have traditionally played the role of commodity money, though more modern proposals have been made for the creation of a commodity basket in which warehouse receipts fulfil the role of the monetary medium whilst simultaneously standing in evidence of a claim to physical commodities held at specified warehouses (B. Lietaer, *The Future of Money*, 2001).

The transitions between the structure of the present monetary system and that obtained following the Phase Two reforms will require delicate management, given the various commercial and political lobbies involved, and the need to protect the domestic economy from external and internal disturbances. Detailed specifications would need to be drawn up if a process of reform is decided upon, addressing in more detail the basic themes highlighted in this document, and mapping the relevant processes for each institution affected by the proposals. This would apply, for example, to central banking and commercial banking operations, financial market regulation, and markets for foreign exchange and other financial assets.

1.4. Key Themes of the Reform Process

1.4.1. Staged process with pilot implementation

The reform process should be implemented in carefully designed stages, some of which could be piloted so as to test the implementation framework and monitor early feedback in the form of quantitative and qualitative information. It will be necessary to develop a common project language, measurement tools and to set benchmarks against which performance can be measured. In a small number of cases, it may be necessary to establish suitable monitoring capabilities where none presently exist.

1.4.2. Low-risk strategy

The implementation strategy emphasises a low-risk approach to reform such that authorisation for each stage in the process would depend upon suitable feedback from prior stages. Sudden major changes to the framework of the monetary system are to be avoided wherever possible, with the utilisation of existing operating and regulatory infrastructure wherever possible.

1.4.3. Identification of “quick wins”

A small number of quick wins may be identified and will no doubt assist in gaining political support for the reform process. For example, a substantial tax reduction or series of major public projects could be funded from the savings to the Federal budget that are identified in this paper. Also, the imposition or lowering of maximum interest charges on certain kinds of financing facility will prove popular among a large section of the public. These types of quick win could be promoted and undertaken early in the reform process, if indeed the issue of reform is to be placed within the public domain at all.

1.4.4. Change management

It would be necessary to design the implementation framework with regard to political confidentiality and sensitivities in the financial markets. Attention should therefore be paid to issues in change management when planning the reforms. These plans would encompass the major issues of objective setting, resourcing, buy-in, scheduling and risk management.

2. THE TRANSITION PHASES

2.1. Phase One: Elimination of Bank Money Issuance

2.1.1. Formal restructuring of time and sight deposits

In order to restrict the issuance of new amounts of money supply to the state sector, it will first be necessary to formally define the nature of money within the banking system. The current variety of monetary aggregates reflects an uncertainty as to what precisely constitutes money in a modern setting. The increased variety of measurement statistics in many countries (M1, M2, M3 or M4 for example) reflects in part a cat and mouse game that has developed over recent decades between regulators and commercial banks, in which each attempt to control the growth of a particular monetary aggregate leads to the innovation of new account types that fall outside the existing definition of the targeted aggregate and are therefore not subject to the formal control of the authorities. By formally restructuring time and sight deposits within the commercial banks along the lines suggested below, the monetary structure can to some extent be simplified, allowing a less complex monetary policy to prevail following the transition to state money.

2.1.2. Withdrawal from sight deposits

To effect the Phase One reforms, a requirement would be imposed that unconditional withdrawal facilities through cheque, card and other transfer facilities should exist only for sight deposit accounts at commercial banks. 100% reserves of reserve money will be required against sight deposits and it will be prohibited for a banking institution to offer depositors a return or profit of any kind on these deposits. Such a law would echo the prohibition upon the payment of interest on sight deposits that existed for much of the twentieth century in the United States of America.

2.1.3. Withdrawal from investment accounts

Withdrawal from all other commercial bank accounts, to be defined in due course as "investment accounts", would be subject to the liquidity position of the financial institution in question. Such a restriction need not in fact be onerous upon the investment account holder, since the deposit-taking institution may in practice be able to meet requests for redemption of investment accounts by allocating the balance in question to another existing customer or to a new customer. A minimum notice period of perhaps one month would be imposed on withdrawals from investment accounts by means of statutory instrument. The principle under which investment accounts operate would be that funds placed with a banking institution cannot be available for withdrawal if they are simultaneously invested elsewhere.

2.1.4. Length of transition period

The new account system would be introduced during the Phase One transition, a period of perhaps three years. During this transition, time deposits might exist side by side with the new investment account system, although these two types of account would be regulated in different ways. New accounts opened during Phase One would be established as investment accounts, and holders of time deposit accounts would be required to transfer their balances into either sight deposit accounts or into investment accounts that matched their investment preferences by the end of Phase One. For example, investment accounts of different risk and return profiles could be established by commercial banking organisations, into which existing loan assets were pooled according to type and term, with basic historical and forecast performance data provided to aid the term deposit holder's investment decision.

2.1.5. Measurement of money supply under reformed system

Under the reformed monetary structure, domestic money supply would unambiguously be identified as the value of notes and coins in circulation outside the banking system, sight deposits within commercial banks, and other deposits of a minor nature (for example at the central bank). Formally speaking, M0, reserve money and M1 would each assume much more similar values than is presently the case.

2.1.6. Potential shift to sight deposits

It is to be expected that given the change in the nature of time deposits following the reform, there could be a fairly sizeable shift in preference for deposit type among depositors from time deposits to sight deposits, since only the latter type of account would allow immediate withdrawal through chequing or similar transfer services. (Acting against this trend will be the fact that sight deposits will not earn any kind of return for the depositor.) The policy mechanisms described in this report are fully able to cope with such a shift in deposit preferences. However, for the time being, our proposals assume that sight deposits will remain at their existing level during the reform period and that all term deposits will be converted into investment accounts.

2.1.7. Provision of new reserves

A substantial increase will be required in the reserve holdings of commercial banks as a result of the move to 100% reserves against sight deposits. This change would be achieved in steps during Phase One, in keeping with appropriate changes in reserve requirements. The Government, or more likely Bank Negara Malaysia as its agent, would first create the amounts of new reserve money that are required (see Section 3.1.2) and then inject them into circulation (see Section 3.1.3). Contemporaneous with the creation and injection of each new amount of reserve money, the statutory reserve ratio imposed upon the commercial banks would be increased in respect of sight deposits. The speed of implementation for each change in the reserve ratio and phasing-out of time deposits would be forecast using the central bank's existing modelling resources, in order to neutralise the impact of the expansion of the monetary base upon M1 and the other wider monetary aggregates as presently defined. In other words, commercial banks would not be able to use the newly issued amounts of reserve money to expand the volumes of their own money creation at any stage prior to the achievement of 100% reserves against sight deposits. In this way the potential for domestic inflation and currency weakness to result from an expansion of the monetary base would be removed. It would be necessary to set each phased increase in the minimum reserve ratio at a level that did not prejudice the operation of any one commercial bank. Regulators would need to avoid sponsoring a position in which one commercial bank, or one segment of the commercial banking sector, was forced to make substantial adjustments in its lending volumes whilst others went relatively unaffected. For example, any sudden calling in of overdraft facilities from borrowers by commercial banks in an effort to achieve newly increased minimum reserve ratios on sight deposits would need to be avoided. This could be done by adopting a stratified approach to determining reserve ratios, based upon the type of commercial bank involved and the size of each deposit against which the reserve was to be calculated.

2.1.8. Finance companies

Finance companies, being generally prohibited from offering sight deposit accounts, would be largely shielded from the changes described so far. It has been assumed here that the present requirement upon them to hold a statutory reserve will be phased out since the bulk of their deposit taking is on a time deposit basis, and such accounts will be replaced by investment accounts in due course.

2.1.9. Removal of automatic withdrawal rights on time deposits and investment accounts

The right to on-demand redemption of time deposit accounts would be removed gradually, possibly by statutory enforcement during Phase One. The minimum notice period for withdrawal from investment accounts would be a condition of such accounts from commencement, again by statute. Reserve ratios for existing time deposits could be imposed as a temporary disincentive to the deposit-taking sector to maintain such accounts in operation. Subject to commitments under international agreements, the calculation of capital adequacy ratios may also be modified so as to reflect preferential treatment for the new investment accounts. Such a change would seem warranted since the liquidity risk on investment accounts would, by definition, be negligible as far as the deposit-taking institution is concerned.

2.1.10. Inflationary consequences?

The target position on the commercial banking sector's balance sheet would be for reserve money to replace interest-bearing loans and securities, particularly public sector debt. There would be no inflationary impact to this change, since money supply would not alter in total, as presently defined, but rather in composition. In the case that interest-bearing securities held by the non-bank sector were purchased for the purpose of injecting new amounts of reserve money into circulation, private sector holders would subsequently have the option to hold sight deposits or cash, or acquire new financial assets in the form of investment account holdings or other assets. Here, the central bank would monitor changes in the distribution of holdings of sight deposits and financial assets by the various sectors as each injection of reserve money takes place, so as to ensure a smooth transition to 100% reserves whilst minimising instability in the wider monetary aggregates.

2.1.11. Publicly funded safety net

Faced with radical attempts to curtail their profitability, some privately controlled banking institutions may be tempted to call in loans whether or not their position was in danger of breaching the newly established minimum reserve requirement, in order to create the public perception that the reform process was damaging to economic performance. Government should be prepared to react quickly to any such developments, for example by making standard loan and overdraft facilities available to the private sector on a fast-track basis through favoured institutions, perhaps through commercial banks presently under its control. Such facilities could be advertised in advance of any potential need.

2.2. Phase Two: Elimination of State Issued Reserve Money

2.2.1. Transition to commodity money system

During Phase Two, a transition would be made from a system in which reserve money is issued by the state (in other words, a fiat money system) to a system in which it is constituted as one or more commodities. This stage of reform would therefore remove the right of the state authority to create money with an exchange value above its factor cost. The newly defined commodity money could circulate in specie (bullion minted into coinage) or in the form of receipts (physical or electronic) issued by an appropriate state institution with warehouse stocks held on a 100% reserve basis against the circulating volume of such receipts. The warehouse facility could be established as a trust for all holders of commodity reserve receipts. Commodity money could be spent at point of sale, or deposited into sight deposits or investment accounts at commercial banks, as before. 100% reserve ratios would be held by the commercial banks against sight deposits of commodity reserve money, also as before.

2.2.2. Steps in Phase Two

The Phase Two transition from state issued reserve money to commodity based reserve money can be achieved in three steps. In step one, the central bank would acquire sufficient amounts of the chosen commodity (or commodities) in exchange for existing financial assets (foreign exchange for example). Such acquisition would be gradual in order to achieve an optimum average price for open market purchases of the commodity (or commodities). In the second step, the acquired commodity reserves would be transferred to a newly established reserve account whose purpose would be to support the outstanding fiat reserve circulation on a one-for-one basis in terms of market value. Thus, for example, if the central bank's reserve money issuance prior to the establishment of the reserve account was RM80 billion, the reserve account would in due course hold RM80 billion of the chosen commodity. In step three of the transition, fiat reserve money in circulation or held in commercial bank accounts would be made fully convertible into the warehouse stocks by Government decree, and at a rate of exchange determined in accordance with the market value of the bullion prevailing at the time of the decree. Holders of state issued reserve money would from this point onwards be permitted to present their holdings (physically in the form of notes or coins, or by transfer from a commercial bank sight deposit account) to the appointed warehouse office and require redemption in bullion form. Existing pre-

reform base metal coinage would be retired from circulation and replaced by a new coinage minted from the chosen commodity in weights and purities that equate with the prescribed exchange rate between Ringgit and bullion. Thereafter, the exchange value of the new commodity money would be largely determined by the performance of the global market for the underlying commodity bullion.

2.2.3. Commodity selection

As a result of the commoditisation process, the unit of currency would assume the status of a defined weight of one or more commodities, in contrast to the previously existing abstract nominal value. The new commodity system could be restricted to a single commodity or expanded to include a variety of commodities. One or more of gold, silver, platinum, palladium, copper and other storable homogeneous commodities might be approved for adoption as the unit of currency within the domestic system. Such may occur under a number of different systems of implementation. For example, under a gold commodity reserve money system, fifty Ringgit might be exchangeable for one gramme of gold. Under a commodity basket reserve money system, fifty Ringgit might be exchangeable into half a gramme of gold and thirty grammes of silver. Or under a bimetallic system, a gold Ringgit and a silver Ringgit would circulate side by side, each convertible at fixed exchange rates into their respective bullions, and sellers would be free to choose in which of these two currencies they denominated their prices. The key elements throughout would be the definition of the Ringgit as a commodity weight, and the holding of 100% reserves (both of bullion at the warehouse against reserve money issued, and of reserve money held by commercial banks against customers' sight deposits).

2.2.4. Naming conventions

The naming convention adopted for the new commodity based currency might depend upon the nature of the commodity selected. Under the commodity basket approach, the naming convention would be flexible. Here, the term "Ringgit" could be retained though it would thenceforth be defined as a specified set of weights of constituent commodities. Under a bimetallic or multi-metallic system, each commodity would behave as a separate sub-currency. Here one might encounter the Gold Ringgit, the Silver Ringgit or the Platinum Ringgit.

2.2.5. Establishment of free-market mechanisms for supply of commodity money

The authorities would arrange for the conversion of bullion into currency units, and vice versa, by establishing a currency conversion office at one or more physical locations. A feasible location for one or more conversion offices would be in proximity to the warehouse facilities used for the storage of the underlying commodity (or commodities) in bullion form, or near to the industrial processing facility that would be used for processing commodities from bullion form into minted circulating coinage. The conversion facility would allow producers and wholesale traders of commodities to convert their bullion production into legal tender currency, and thereby create a market based process for the supply or withdrawal of commodity money to and from the monetary system. Producers of underlying commodities would supply them for conversion into currency units at times when the costs of commodity production were low (relative to the value of the commodities so produced). Hence, at times of money supply "tightness", the incentive would be for suppliers to increase the supply of the commodity to the conversion office, thereby relieving the monetary tightness. Conversely, by allowing holders of currency units the opportunity to convert them back into the underlying commodity form (for example, from coin or deposit into gold bullion) a link would also be established in the opposite direction, providing access to bullion should the currency unit be perceived as undervalued relative to the costs of commodity production. Therefore, a self-correcting market based mechanism for the production of money would come into operation, responding to the price signals generated in the capital goods and commodities markets rather than to interest rates and speculative flows.

2.2.6. Link between commodity money and bullion

Following the introduction of commodity based money, exchanges of countervalues

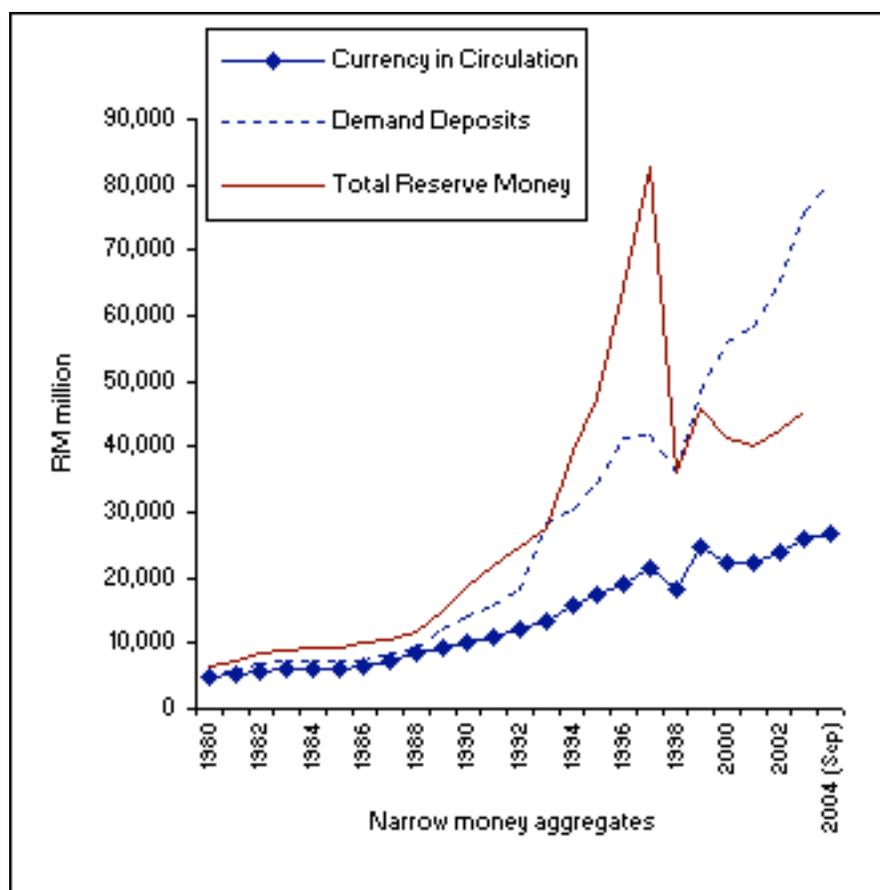
throughout the economy would be undertaken by agents with at least some reference to the wholesale price for the underlying bullion in terms of foreign currencies. Of course, there would be no domestic “Ringgit price” for the underlying bullion, since the Ringgit would be defined in terms of bullion by law. Hence the availability of two-way dealing prices in foreign currencies for underlying bullion would be an important element in improving the transparency and efficiency of the new system. The provision of such a facility domestically should be considered.

2.2.7. Public sector buffer stock

The potential for state authorities to establish a buffer stock of underlying commodities and foreign currency assets might also be considered as a means of smoothing any violent swings in the underlying commodity markets during the early years of implementation, and to provide a two-way domestic commodity market with liquidity and sufficient stock levels, as required.

2.3. Post-reform Monetary Aggregates

2.3.1. Longer-term trends in narrow measures of money supply

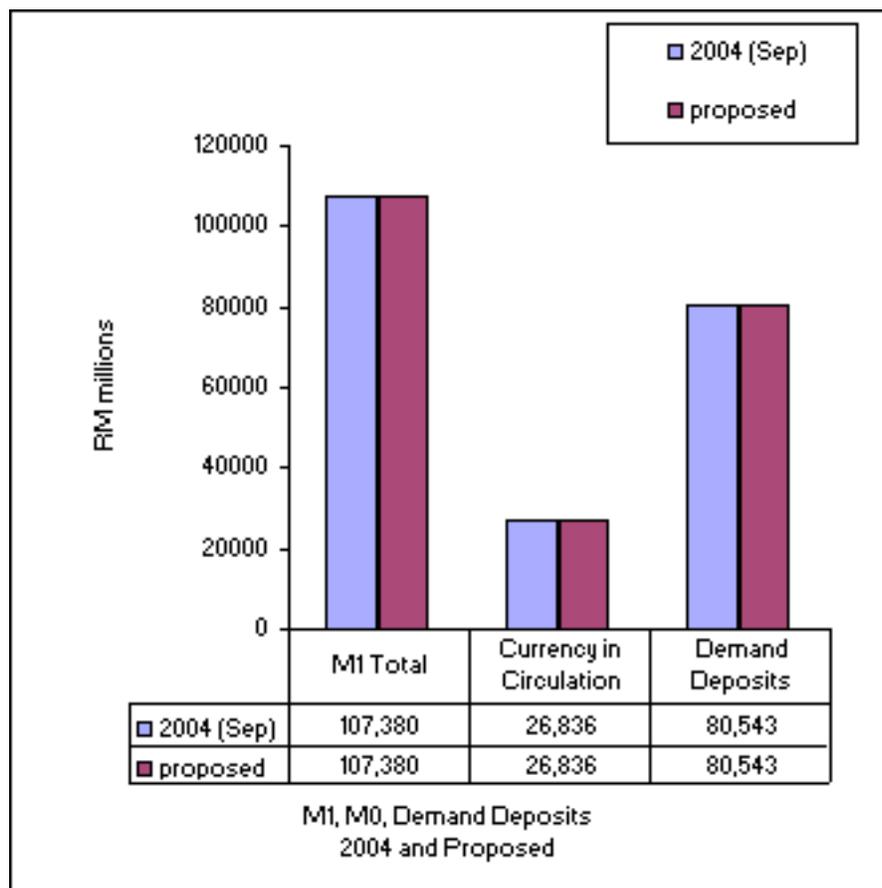


The upward progression over time of both reserve money and demand deposits is a feature of modern economies. (The severe fluctuation in reserve money shown here for Malaysia in the 1990's coincides with a period that saw a substantial reversal in GDP growth and heavy downward pressure on the Ringgit exchange rate.) In common with other modern economies, the upward trend in the various monetary aggregates is in due course re-established following such downturns. We suggest that this feature is in keeping with the demands of an interest-based financial system. The application of a positive interest rate to debt and money balances within the banking system requires

such a trend in the longer term. Attempts to achieve stability or contraction of debt and money balances generally sponsors stagnancy or contraction in economic performance. Policy makers have therefore tended to shun such attempts in most countries, most of the time. Expansion of the debt and money aggregates is, in effect, the only politically acceptable economic policy to adopt under the current monetary framework.

2.3.2. Proposed narrow money aggregates post-reform

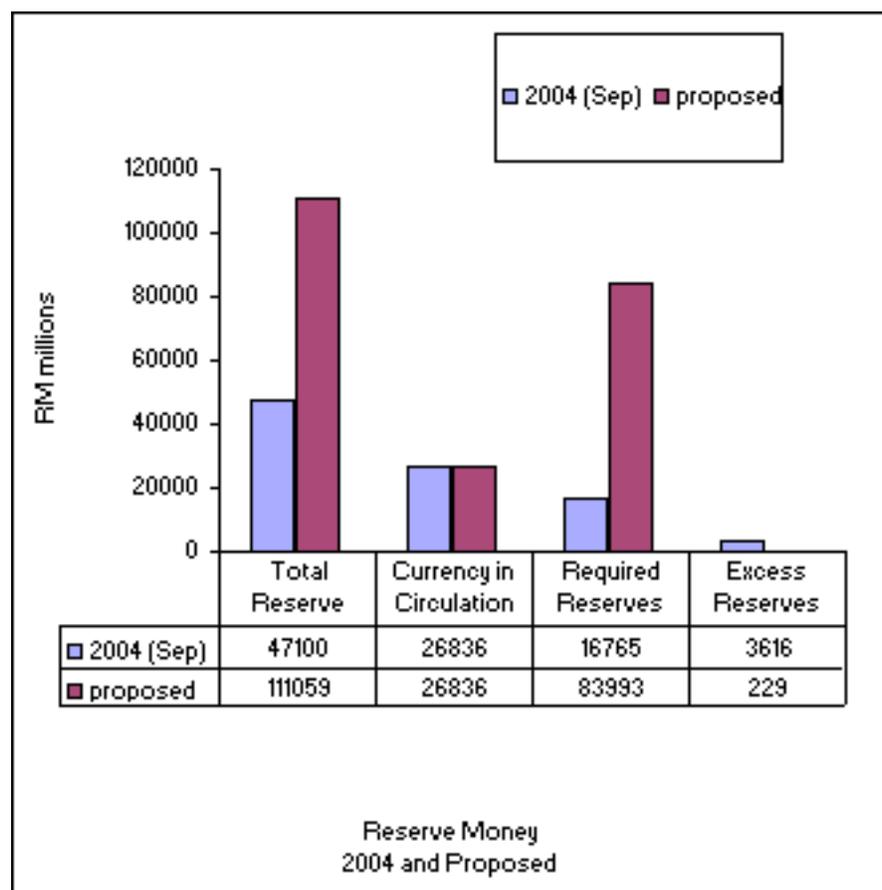
The current and proposed structure of narrow monetary aggregates is shown in the following chart. While there need be no change in conventional measures of M1, currency in circulation, or demand deposits as a result of the Phase One reforms, we should bear in mind our earlier view that holders of time deposits under the present banking arrangements may request to switch their holdings to sight deposits in order to have immediate access to liquidity. It is also possible, though much less likely, that switching will occur in the other direction (i.e. from sight deposits to time deposits).



2.3.3. Change in reserve money

The authorities will need to carefully monitor the degree of switching between time deposits and sight deposits during Phase One because if such developments occur to any substantial degree the amount of newly issued reserve money may need to be altered from that envisaged below. The volume of newly issued reserve money may need to be amended further to cater for changes in demand from the commercial banking system arising from economic growth or other factors not related to the reform process. Since the transition period will be implemented over a period of several years, there should be ample opportunity to modify the rate of increase of statutory reserve ratios and reserve money issuance to cater for such developments. Assuming no net switching between time and sight deposits, we propose that a minimum of approximately RM64

billion of new reserve money is issued by the authorities during Phase One in the manner described in Sections 3.1.2 and 3.1.3 (although if net switching does occur, it can be accommodated by the “monetisation” mechanisms proposed there). As a result of these monetisations, commercial banks’ holdings of reserve money in due course become equal to sight deposits allowing them to achieve 100% reserves ratios against those accounts. Given the requirement to hold 100% reserves, the concept of an “excess reserve” loses much of its meaning. Excess reserves presently held by commercial banks are combined into the total for required reserves and the total for this category therefore reduces to RM229 million in the proposed monetary structure. Notice also that currency in circulation is assumed to remain unaltered at RM26.8 billion. However, if holders decide to deposit cash or withdraw it from sight deposits at commercial banks, this may have a material effect on actual reserve ratios and will again need to be monitored by the authorities throughout the transition in order that appropriate adjustments can be made to the monetisation process.



2.4. Monetary Oversight Committee

A Monetary Oversight Committee will be established to implement and monitor monetary policy during the first and second phases of reform. This regulator would be established upon an independent constitution, its system of appointments and source of funding specified under law, and its operations audited by independent external auditors so as to minimise the potential for political interference and conflicts of interest to affect its operations.

2.4.1. First reform phase

During the first phase of reform, the committee’s objective would be to maintain the rate of inflation of a specified price index or GDP deflator within agreed bounds. An example in this regard is the use of the commodity index system proposed by

Professor Irving Fisher (*100% Money*, 1936) for guiding the expansion or contraction of reserve money issuance, according to the degree of inflationary pressure apparent in the index. It is possible that various forms of index be adopted, an average of regional indices for example, narrow or wide in their constituent components, but in each case chosen so as to avoid sensitivity to speculative activity, sector-specific events, and political manipulation. (If there is a strong intention to proceed to a Phase Two reform in due course, it would be preferable to adopt a commodity-based index that reflected the scope of the commodities to be adopted in the Phase Two transition.) During Phase One, the committee would:

- 2.4.1.1. Audit the issuance of reserve money by the Government
- 2.4.1.2. Collect the statistics necessary for the performance of its work.
- 2.4.1.3. Disseminate the guidelines under which the committee works in public, along with key statistical information on such matters as reserve money issuance and price index data, thereby imposing a degree of transparency upon the issuing authorities.
- 2.4.1.4. Act to ensure adherence within the deposit taking sector to the requirement for 100% reserves against sight deposits
- 2.4.1.5. Monitor developments that may undermine the intended operation of the new monetary system, particularly with regard to financial innovation. Of particular concern in this regard would be attempts to create new forms of account that technically fell within the definition of investment accounts but that offered liquidity on the same basis as that of sight deposits in order to avoid the 100% reserve requirement.

2.4.2. Second reform phase

Following the abolition of state issued reserve money in favour of commodity reserve money, the monetary oversight committee would perform the following functions:

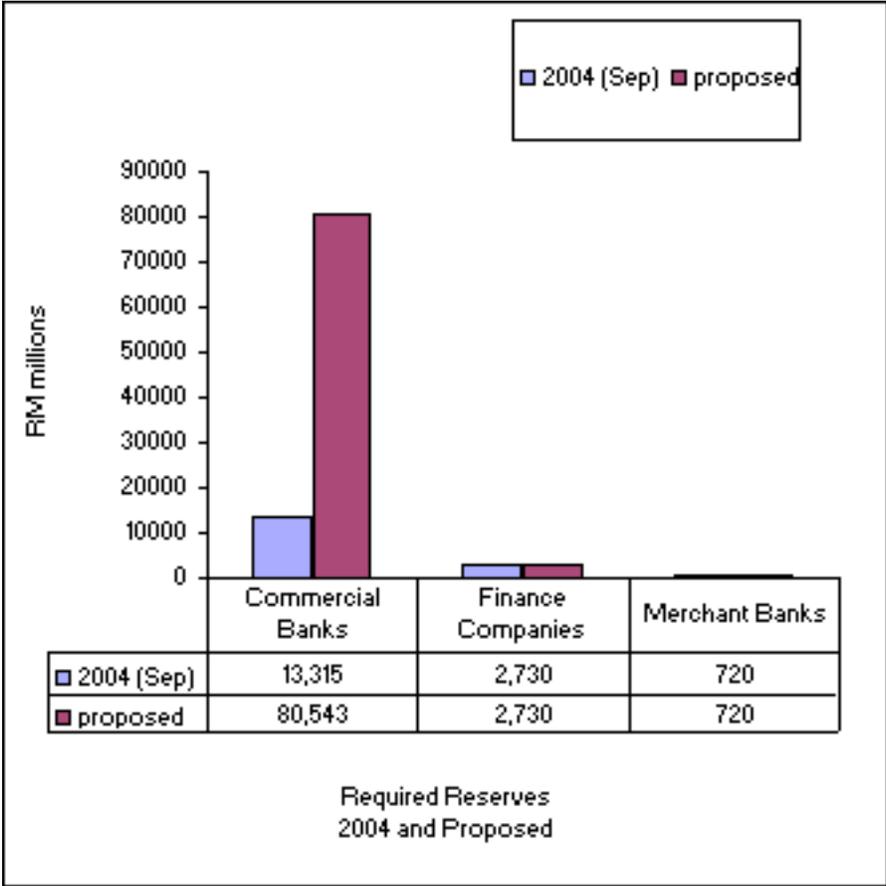
- 2.4.2.1. Establish and operate warehouse facilities across Malaysia where refined bullion and commodity coinage can be held on an allocated basis (meaning that separately identifiable storage palettes would be allocated to each customer) on behalf of commercial banks and other large accounts
- 2.4.2.2. Establish and operate various branch locations where refined bullion can be assayed on behalf of private and public sector counterparties
- 2.4.2.3. Accept assayed bullion in return for issuing minted commodity coinage or credits at the Government warehouse facility
- 2.4.2.4. Establish and operate industrial facilities where bullion is converted into minted coinage for circulation as cash
- 2.4.2.5. Monitor and regulate adherence to agreed standards of fineness and weight for minted coinage in circulation, including monitoring of abuses (for example clipping of coinage)
- 2.4.2.6. Research new technology for improving the security of commodity coinage in circulation (for example, the embedding of precious metal in clear plastic for circulation)
- 2.4.2.7. Research new technology for improving the efficiency of the payment system.
- 2.4.2.8. As 2.4.1.4 above.
- 2.4.2.9. As 2.4.1.5 above.

3. POLICY TOOLS

3.1. Fractional Reserves and Reserve Money

3.1.1. Synchronisation of changes in fractional reserves and reserve money

Each stepped increase in the required reserve ratio for commercial banks would, in the absence of corrective action, produce a contraction of M1 and the wider monetary aggregates which could be highly damaging to domestic economic activity. Hence Bank Negara Malaysia will need to accurately estimate and monitor the amount of newly issued reserve money required in order to avoid a material variation of wider aggregates. Each new increase in the statutory reserve ratio would be announced in advance and implemented simultaneously with the monetisation so as to allow commercial banks the opportunity to readjust their reserve holdings and deposit portfolios to accord with the new ratios. The size of such increases in the reserve ratio could be of the order of 0.5% per step initially, increasing to perhaps 2.5% per step in due course. It is worth repeating that, as a result of the higher statutory reserves, commercial banks will not be able to use newly created amounts of reserve money as a base for expanding their lending. To the extent that finance companies and merchant banks are not involved in the creation of bank money, the reserve ratio requirements will be removed from them in due course. This is on the basis that finance companies and merchant banks are not operating accounts with sight deposit features. However, pending consultation with the relevant authorities, the present reserve requirements upon both finance companies and merchant banks are maintained within the proposed figures.



3.1.2. Creation of new reserve money

The required new amounts of reserve money may be created in one of two ways:

- 3.1.2.1. As a direct liability upon the Treasury in the form of non-interest bearing notes denominated in Ringgit and specified as legal tender. This would probably require an amendment to the Central Bank of Malaysia Act and hence may be less preferable than the alternative measure.
- 3.1.2.2. Through the issuance of new reserve money by the central bank in return for the issuance of non-interest bearing Government securities or Treasury Bills. In this regard, it is worth considering the issuance of a new class of Government securities, perhaps named Reform Bonds, being callable and having long term tenors, in order to complete such a transaction. This would avoid the need for refinancing of the position at an early stage, and would allow the Government to retire the Reform Bonds at a later stage if deemed necessary for the purpose of monetary management. At any time following the call date, callable Reform Bonds could be repurchased at par from Bank Negara Malaysia (or from the open market if such securities had by then been sold on). The question of interest charges by Bank Negara Malaysia on its financing of Government borrowing is of course immaterial from a commercial point of view, since much of the Bank's net profit is returned to Government. Nevertheless, since the main theme of the monetary reform proposed in this document is that newly created money need not be the by-product of an interest-bearing loan, it would seem in tune with the thrust of the reform that such securities are issued on a non-interest-bearing basis. This would not prevent the selling on of Reform Bonds to market participants as zero-coupon bonds, and would indeed provide an investment asset for these participants until such time as interest-bearing financial instruments were abolished during Phase Two.

3.1.3. Injecting new reserve money into circulation

Four methods of injecting new reserve money into the commercial banking system are considered here. The first two are direct methods and the last two indirect. An indirect injection may or may not filter through to a new sight deposit at a commercial bank, and its impact is therefore less certain than a direct injection. The processes of redemption or repurchase of public sector debt considered here for adoption by the authorities might also be applied to debts issued by the private sector, given the necessary commercial and political approvals. Such purchases could be implemented at market prices using the facilities of institutions (such as Cagamas) that already purchase and aggregate loans from financial institutions as part of their securitisation activities. The five monetisation methods under consideration are:

- 3.1.3.1. The purchase or redemption of commercial banks' existing holdings of public sector debt (Treasury bills, Government securities, Central Bank obligations and debts of public sector corporations) will inject new reserves directly into the operational accounts of the commercial banks at Bank Negara and thereby allow them to meet the newly increased reserve ratios with a high degree of certainty. Government debt held by the commercial banking sector may be redeemed as those debts mature, without recourse to refinancing of the maturing amounts through new issues on the part of the Government. This would provide a natural and gradual schedule to the monetisation process.
- 3.1.3.2. Lending to the commercial banks on a discretionary basis where necessary at a 0% rate of interest, for example through overdraft facilities at the central bank, may be considered as a short term method.
- 3.1.3.3. Government debt held by the non-bank sector may be redeemed or repurchased. The Employees Provident Fund could be a participant in such an operation due to its existing relationship with the governing authorities.
- 3.1.3.4. Government expenditure, welfare programmes and tax rebates could be funded with new issues of reserve money. Recipients could hold the payments as cash, deposit them into sight deposits or repay bank and non-bank borrowings. Here, the impact on the commercial banks' reserve position is at its most uncertain.

3.2. Money and Bond Market Operations

3.2.1. Use of the three month intervention rate as a tool of reform policy

The three month intervention rate is the main policy rate adopted by Bank Negara Malaysia to vary the amount of reserve money circulating within the domestic monetary system. Other rates of interest and discount on shorter term borrowings (for example through repurchase agreements or the discounting of commercial and bank bills) tend to be affected by, but are subsidiary to, the three month intervention rate. By lowering the policy rate, Bank Negara Malaysia can encourage the commercial banking sector to acquire further amounts of reserve money for lending to their own borrowing clients and thereby encourage an increase in the wider monetary aggregates. During Phase One of the reform process, interest rate policy will continue to be used as a means of smoothing the potential volatility in commercial bank balance sheets. However, the intention will be that such policy is in due course abandoned, since its prime function in the pre-reform period is to act as a control upon the rate of money creation by the commercial banks, an activity that will no longer be conducted by them after Phase One is completed.

3.2.2. Open market operations

Bank Negara Malaysia may decide to repo, buy or sell fixed income securities such as Government securities and Treasury bills on the open market to increase or reduce the supply of reserve money. By varying the volume of purchases or sales of such securities, the reserve position of the commercial banks is altered although this normally has implications for the official discount rate. Central banks often try to keep the commercial banking system in a position of slight reserve shortage, enabling them to more easily determine the level of market interest rates (since the central bank is the lender of last resort and is therefore the monopoly provider of funds under such circumstances). In the transition away from bank issued money to state issued money, open market operations will be a main tool for injecting new reserves into circulation. Statutory or regulatory compulsion may be used to gradually enforce the sale of Government issued fixed income instruments by the commercial banks, although the increase in statutory reserve ratios will in any case encourage them to do so. However, purchases of securities in the open market will probably achieve much of the objective in this regard. As the statutory reserve ratio rises, Bank Negara Malaysia may enter the market to repurchase sufficient bills and Government securities, so as to ensure that the new minimum reserve position is attainable by the commercial banks. Any commercial bills purchased in open market operations will, however, be held to maturity when their redemption will cause a reduction in narrow money supply on a one for one basis. This latter operation is therefore only a temporary means of increasing reserve money in circulation.

3.3. Provision of Temporary Assistance by the Public Sector

A public authority could be established for the purpose of making temporary loans on preferential terms or to purchase equity interests and assume control, if necessary, of financial institutions and other private sector businesses whose operations are severely weakened by the reform process. This will help to avoid a default or other event that may result in damage to public confidence in the payments or banking system specifically, or wider economy more generally.

The authority might operate according to an agreed set of policies to hold equity or maintain loan facilities until such time as restructuring of the institution in question had taken place. The operation of Danaharta in the financial restructuring of the Malaysian banking system following the events of 1997 and the more recent establishment of the Special Relief Guarantee Fund and Rehabilitation Fund for Small Businesses would seem to provide precedents for the adoption of such a policy.

3.4. Risk, Capital Requirements and Asset-liability Structure

3.4.1. Reduction in financial sector risk

A substantial reduction in risk mismatches between a commercial bank's assets and liabilities is implicit in the fact that (i) 100% reserves are held against sight deposits; (ii) the redemption of investment accounts is dependent on the institution's actual liquidity position' and (iii) the rate of return available to investment account holders depends on the rate of return achieved by the bank when investing those funds as an investment manager. Under such a banking system, the need for risk assessment and a risk-based capital framework is substantially reduced. This is because the nature of the contract between the client and the bank is to share the various risks symmetrically and according to ex-post performance of the underlying assets.

3.4.2. Continued use of risk assessment and monitoring techniques

Naturally, risk analysis techniques will continue to be employed on the banking side, in investment evaluation and credit rating for example, in order to inform the decision to invest client money with particular users of funds. However, since policy makers will almost certainly allow commercial banks to hold non-cash assets against sight deposits during the transition period, the continued use of risk weighting ratios would be appropriate well into the reform process. The setting of these ratios may continue to be made within the context of a prudent transition to 100% reserve ratios so that, for example, low risk Government securities are made available that enable the commercial banking sector to generate returns from part of their sight deposit liabilities. Liquidity would need to be assured during the transition, through Bank Negara Malaysia's market operations, as is presently the case.

3.4.3. Preferential weightings

Subject to commitments under existing international agreements, regulators may consider the adoption of risk weighting methodologies that encourage a shift in financing behaviour away from overtly interest-based structures towards murabahah and ijara based products. The risk weightings for assets held against investment accounts and reserves held against sight deposits may be reduced towards zero on the basis that these have the profiles of an off-balance sheet item from a banking institution's perspective. The risk weightings applied to the various forms of interest-based loan and other financial assets held by commercial banks that had not been allocated to investment accounts would continue as present until phased out, and if permitted under existing international agreements, disincentives might be applied in a tapered fashion to these deposits in whatever form the authorities deem appropriate.

3.5. Central Bank Directives and Recommendations

3.5.1. Commercial banks

Bank Negara Malaysia may use a variety of informal means to encourage the commercial banks to alter their asset profile (by volume, target sector or geographical distribution) and lending criteria so as to achieve the desired commercial bank asset structure without resort to formal monetary policy instruments. These would have the advantage of allowing commercial banks to achieve the desired objectives at a pace that suited them on an individual basis, rather than through the imposition of blanket policies that affected different institutions in different ways.

3.5.2. Finance companies

The activities of finance companies would not directly impact money supply under the reformed system, however their activities as financiers of consumption and investment loans does allow the commercial banks a medium through which to expand their assets when funds become available to them. Commercial banks may therefore be encouraged to alter their lending policy to finance companies, and finance companies may in turn be encouraged to direct their financing activities towards target sectors of the economy, for example if required by a shortfall in commercial bank lending during the transition phases.

3.6. Foreign Exchange Market Intervention

A policy should be adopted for managing the foreign exchange market during the transition phase. Targets could be set for the attainment of mean mid-market values during each given period, a desired trend in the mean over time, or price volatility across periods. Against these targets Bank Negara Malaysia would use its reserves of foreign exchange and alter official interest rates as required to achieve the desired exchange rate. (The use of reserves would of course be conditioned by the transition to commodity money in Phase Two). However, attempts to defend the Ringgit's foreign exchange value by means of substantial increases in official interest rates should be avoided so as to protect the domestic economy. Increases in interest rates affect the cash-flow of all existing floating rate borrowers within the economy, as well as the decisions of potential borrowers. Therefore, raising of the short term interest rate is to be seen as a blunt tool and used sparingly during the transition phase.

3.7. Establishment of Conduits for Temporary Refinancing of the Private Sector

The authorities should seek to have at their disposal the intermediating capabilities of one or more commercial banking institutions and finance companies, either existing or established especially for the purpose, operating under the direction of the relevant Government department. Such institutions would allow the Government to speedily inject or withdraw money into or from the private sector should this be necessary during the reform period, due for example to changes in the availability of liquidity from other sources. The institutions in question would most likely be an existing commercial bank in which the Malaysian Government has a controlling stake. Contingency policies and outline lending criteria for these institutions would be drawn up in advance of the commencement of the reform process for both personal and corporate lending. Such preparations could be extended to all Government controlled commercial banks and finance companies. The institutions would focus mainly but not exclusively on preparing refinancing facilities and policies for those cases where refinancing might be refused following commencement of the transition. For example, an appropriately labelled fast-track refinancing package could be publicised in advance of the commencement of the reforms, allowing distressed borrowers the opportunity to refinance themselves quickly in the event that private sector lenders were to restrain their lending in any large measure.

3.8. Financial Trading Strategies

3.8.1. Public sector

Foreknowledge of reform implementation should provide the Malaysian authorities with substantial opportunities for implementing successful financial market trading strategies. Success here does not necessarily mean the achievement of trading profit so much as a defence of financial and monetary stability such that the reform process can be completed successfully. Trading strategies effected by Government could include the purchase and sale of Ringgit on the foreign exchange market, Ringgit or foreign denominated Government bills and bonds, commodities and precious metals. It should be expected that international markets will view with uncertainty any formal announcement of reform and it may therefore be best that no such announcement is made at any stage. Information management would clearly be a major part of the financial market trading strategy, however it would have to be undertaken in a way that did not severely prejudice foreign parties against Malaysian interests.

3.8.2. Private sector

The ability of private investment funds, banks and traders to take out large positions on currency and Government securities presents the authorities with a need to develop protective strategies. In particular, these should include appropriate restrictions on the advancement of Ringgit loans to foreign banks and counterparties which might subsequently be used to short-sell the Ringgit on the foreign exchange markets. Tighter restrictions should be considered for daily limit moves and margin requirements on the various Malaysia financial market exchanges so as to reduce the potential for price volatility and systemic market failure during the transition.

3.9. Restrictions and Disincentives to the Use of Interest-based Financing

The long term success of the monetary reform process will depend upon the abolition of interest-based financing techniques within both the private and public sector. It is therefore necessary to develop a longer term plan for the removal of interest-based finance domestically, as well to regulate the provision of such finance from international sources. The commencement of this process may provide easier “wins” than the latter stages. Early wins might include:

3.9.1. Interest rate ceilings

Maximum lending rates may be introduced, or lowered where they already exist (for example in credit card lending), so as to reduce the burden of interest-based lending upon vulnerable sectors and to reduce the profitability incentive that presently attracts lending institutions. Rates above the quoted maximum interest rate would not be enforceable under Malaysian law. The maximum rate could be reduced over time on interest rates for personal customers (for example on credit cards, personal loans, mortgages), yields for corporate customers (for example, on internal rates of return at the issue date for corporate bonds) and for Government (on Government securities and bills, where these remain in use).

3.9.2. Removal of tax incentives

Tax incentives in favour of interest-based financing could be gradually removed to further reduce the incentive for interest-based financing and encourage equity type financing in its place.

3.9.3. Non-interest-based late payment penalties

If interest penalties on late payment are to be removed, repossession and other rights of recourse for trade creditors would be simultaneously strengthened.

3.9.4. Regulation of loan-to-value ratios and other measures

Interest-based personal finance would be discouraged, possibly through the imposition of maximum loan-to-value and loan-to-income ratios on residential property financing for example, and encouragement of capital risk sharing and interest-free Government sponsored alternatives for the financing of lower income groups

3.10. Encouragement of Public and Private Interest-free Finance Facilities

The provision of genuine non-interest-bearing financial alternatives could be greatly augmented if Government were to support the entrance of private sector operators into the sector or to step into the sector as a service provider itself:

3.10.1. Interest-free mutuality

As an example of private sector involvement, interest-free mutuality could be promoted as a concept in specific areas such as home finance, door-to-door cash lending and small business loans. In each of these cases, communities could be supported to fund themselves by recycling surplus funds to borrowers, perhaps through the medium of a regional or national organisation that would administer the systems and processes, and thereby reduce unit overhead costs through economies of scale.

3.10.2. Government interest-free loans

An example of Government involvement in the provision of interest-free financing is that of Saudi Arabia, where until recently, the state provided interest-free loans to Saudi nationals to enable them to purchase residential property. This scheme used academic qualifications as a determinant of loan size (PhD's received more funding than holders of Bachelor degrees), saving Saudis very large sums in financing costs over its life. Another possible entrance point for the state would be as a refinancier of interest-based loans under conditions of subsequent abstinence from interest-based credit by the refinanced party. Such a service could perhaps be used as part of a financial restructuring package for severely indebted individuals who might otherwise find themselves in bankruptcy (for reasons other than persistent loan delinquency).

The provision of export financing in critical sectors might also be expanded, but conditionality would need to be put in place to prevent artificial cross-border transactions being undertaken for the purpose of arbitrage.

3.10.3. Other Avenues

As a further plank of policy, private sector financial organisations could be encouraged to expand the funding of commercial clients on a purely profit-sharing basis. Perhaps most important in terms of funding volume, the promotion of asset based financing in the form of operating leases of capital equipment, or inventory financing, for example, could be supported. Likewise, venture capital organisations could be encouraged to expand their start-up and business development financing operations. In all of these sectors, the Government could reduce the bureaucratic and tax burden on the organisations involved by reducing formal reporting requirements during the early years, and by granting tax privileges and other financial incentives as appropriate.

4. IMPLICATIONS FOR FINANCIAL MARKETS

4.1. Financial Market Activity Post-reform

No material alteration in the structure of the equity or foreign exchange markets need arise as a result of the proposed reforms. As for the turnover on these markets, it is to be expected that trading volumes on the Malaysian equity market will increase substantially if the abolition of interest is implemented under a Phase Two reform, because profit-sharing instruments will at that stage be the only income-yielding financial assets permitted domestically. Similarly, the turnover on foreign exchange markets may decline by this stage of the reform, since the Ringgit will by then be a proxy for an underlying commodity or set of commodities. However, the operation of the Federal Government debt market and the domestic money market will alter substantially both in structure and in turnover.

4.1.1. Market for Federal Government debt

The size of the Federal Government debt market will shrink during Phase One as the monetisation process is enacted. However, Government may wish to continue financing itself by raising reserve money from the domestic non-bank sector. (Since such financings will be satisfied from existing money, and not from money newly created by the commercial banking system, there is no reason to legislate against this form of fund raising.) However, there will need to be a debate as to whether such financing will be raised on an interest-bearing or non-interest bearing basis and this will constitute part of the decision to proceed with Phase Two. The use of asset backed bonds (for example, lease-backed bonds as recently popularised in the Islamic finance sector) may emerge as one solution that brings together the various interest groups in such a debate. These would provide low risk low returns to institutional investors who seek them, although it may also be possible to design new forms of Government finance where the return is linked to a specified performance measure or underlying investment in a particular sector. Where Government finances infrastructure development for example, it may be possible to issue bonds whose coupons are determined by revenues received by the underlying infrastructure project (tolls on tolls roads, perhaps). Alternatively, general securities may be issued in which returns are linked to the growth of GDP during the most recent period.

4.1.2. Domestic money market

The extent to which the domestic money market undergoes change during the first and second phases of reform depends largely upon the limits that are placed upon the use of interest-based financing. If the authorities determine that interest-based techniques shall remain more or less in place, then the role played by Bank Negara Malaysia, discount houses and commercial banks will remain largely unchanged. Otherwise, major and fundamental changes in the money market will occur. However, of itself, the conversion to 100% reserves need not affect the structure or operation of the money market.

During Phase One of the reform, Government will retain the right to issue reserve money and will therefore be able to provide liquidity to the money market should this be required. Indeed it is envisaged that the provision of liquidity by or through the medium of Bank Negara Malaysia to the commercial banks will be a vital part of the reform. This is in order that confidence in the monetary system is maintained during the transition. The provision of shorter-term liquidity could be undertaken through the current technique of discounting bank bills or commercial bills, agreeing repos, allowing overdrafts on commercial banks' operational accounts at the central bank, or temporarily reducing statutory reserve requirements in more extreme cases. These various liquidity operations will no longer be needed following the achievement of 100% reserves since liquidity risk will at that stage, by definition, be eradicated for commercial banks. (However, emergency loans may still be required from Bank Negara Malaysia in cases of mismanagement within private sector financial institutions, and such facilities will continue to be made available in the post-reform system).

During Phase Two, the introduction of commodity money will remove the right of money creation from the state and therefore remove from the money market the facility of a “lender of last resort”. This function will be transferred in a loose sense to commodity producers and refiners who will be the providers of new money to the economy, either by investing it, lending it or spending it into circulation. The cash requirements of the commercial banks, no longer being affected by unexpected developments within the fractional reserve system, will now be the result of developments in the real sector (export slumps, Government deficits, and so on). If a money market exists, it will be one in which commodity money holders and commodity money producers offer funds to bidders (on a commercial basis) and the possibility arises that from time to time suppliers of money will not be willing or able to meet the demand for money on such a market. None of this will create a confidence crisis in the commercial banking system of course, since 100% reserves will be held against sight deposits throughout. However, it is indeed possible that public sector and private sector spending will be rationed in a way that has not been experienced for many decades. The economic implications of this change at the core of monetary management are indeed complex, although our philosophical position is that a system built upon economic justice is unlikely, in the long term, to be the source of economic injustice.

4.2. Securities Market Regulation

The following policy initiatives in fixed income, derivatives and equity securities markets may be considered for implementation during the transition phase of reform:

4.2.1. Trading limits

Tighter regulations on margin requirements, maximum limit moves and alterations in the length of account settlement periods should be considered in order to encourage lower volatility in financial market prices throughout both transition phases.

4.2.2. Listing restrictions

Monitoring and restrictions would be considered upon new market listings of vehicles that might be used for undertaking interest-based lending on terms that broke any of the reform regulations in an indirect manner. For example, vehicles whose main activity was the selling of consumer goods on an instalment basis at high internal rates of return might be prevented from subsequently selling securities backed by those assets.

4.2.3. Leveraged speculation

The restrictions outlined in Section 4.2.1 would largely curtail speculative activity if implemented thoroughly, however the regulation of broker loans and other methods of financing security positions provides a further target for restrictive measures. The use of repos for example is a particularly powerful means of leveraging exposure to fixed income securities and is widely used by financial market operators. If means could be found of effectively restricting the use of such instruments (without merely sending them offshore, for example) then volatility and speculative activity in the domestic market would be further reduced.

4.3. Capital Controls and Foreign Ownership Issues

The following policy initiatives in respect of international capital movements and foreign ownership may be considered for implementation during the transition phase of reform:

4.3.1. Restrictions on strategic ownership

Restrictions on the purchase of controlling stakes in financial organisations critical to the reform process could be reviewed and tightened as a long term strategy to prevent undermining of the reform objectives.

4.3.2. Overseas funding

Overseas interest-based funding of Malaysian and non-Malaysian controlled organisations, particularly those in strategic sectors (including banking and finance)

should be monitored and regulated to guard against actions that may destabilise the reforms, particularly those that seek to produce instability in the loan and equity markets.

4.3.3. Investment by foreign entities

Investment by foreign entities in critical financial organisations (e.g. payment system and banking sector) should be monitored and regulated at short notice if it appears that the reform strategy is being undermined at the executive level, for example by tardiness or deliberate failures to implement guidance from the relevant Malaysian authorities.

4.3.4. Withholding taxes

Withholding taxes may be used to discourage foreign interest-based or quasi-interest-based investment into Malaysia, whether securitised or non-securitised, lending or asset based.

4.3.5. Repatriation penalties

Controls on the repatriation of funds from Malaysia by corporations and individuals should be prepared so as to dampen (not prevent) capital flight during transition.

4.4. Foreign Exchange Market

4.4.1. Currency controls

Purchase and sale of Malaysian currency by foreign counterparties should be regulated during Phase One in order to prevent short selling or ramping by foreign counterparties. A currency peg may be considered as a temporary measure.

4.4.2. Short selling

Short selling might occur through the borrowing of Ringgit by offshore parties from the Malaysian banking system, for subsequent sale on the foreign exchange market. The creation of Ringgit by Malaysian commercial banks presently allows foreign counterparties to fund their short-selling of the currency to a greater extent than would be possible following the transition to 100% reserve banking.

4.4.3. Personal foreign exchange allowances

If any foreign exchange restrictions are imposed, purchase and sale of Malaysian currency by private Malaysian residents could be allowed with generous per person limits so as to support public confidence and maintain political support for reform.

4.5. Precious Metals and Commodity Markets

4.5.1. Domestic trading in precious metals

The purchase of precious metals and commodities within Malaysia by domestic residents and organisations would be lightly regulated initially with the objective of achieving “fair price discovery” through free market transactions for precious metals prior to the commencement of Phase Two. As part of this process, Bank Negara Malaysia or another public sector institution (such as the Monetary Oversight Committee) might stand in the domestic market as a two way market maker with a tight bid-offer spread in order to better measure market flows and sentiment.

4.5.2. Trading by foreign counterparties

Purchase of precious metals and commodities within Malaysia by foreign residents and organisations would be heavily regulated in the event that a decision to proceed to Phase Two was taken. The aim would be to minimise the opportunities for hoarding or deliberate disruption of the markets relevant to the Phase Two implementation. In due course, a free commodity market might be allowed to develop for overseas counterparties, so long as Malaysia’s trading position with the countries of origin of such counterparties was also maintained on a free basis.

4.5.3. Delaying final conversion to commodity money

An efficient bullion market with representation of overseas brokers, dealers and state sector market makers would help to forestall attempts to manipulate domestic bullion prices by allowing arbitrageurs to maintain a reasonably tight price equilibrium with foreign commodity markets. An attempt to manipulate Malaysian commodity prices would then become, in effect, an attempt to manipulate the global price of the commodity or commodities in question. Under the Phase Two monetary arrangements, foreign holders of commodities would be able to flood the Malaysian market with their commodity only if sufficient Malaysian sellers of goods and services were willing to part with their produce in return for the commodity in question. Basic market forces will therefore make it very difficult for foreign parties to achieve such a result. However, if the authorities are concerned by the possibility that foreign actions may disrupt the Phase Two transition, then the final step of converting fiat money to commodity money that is described in Section 2.2.2 may be delayed.

4.5.4. Incentives to commodity trading

Incentives to retail operators in the bullion market would be provided from an early stage of the Phase One reform in order to familiarise the public with the purchase and sale of bullion, to encourage public awareness of its pricing, and to de-emphasise the role of the jewellery market as a means of holding precious metals (since the implied cost of doing so is very high compared to holdings in bullion form). Low bid-offer spreads and competitive commission rates would emerge as competition spread among commodity dealers for public custom.

5. COMMERCIAL BANKING POSITION

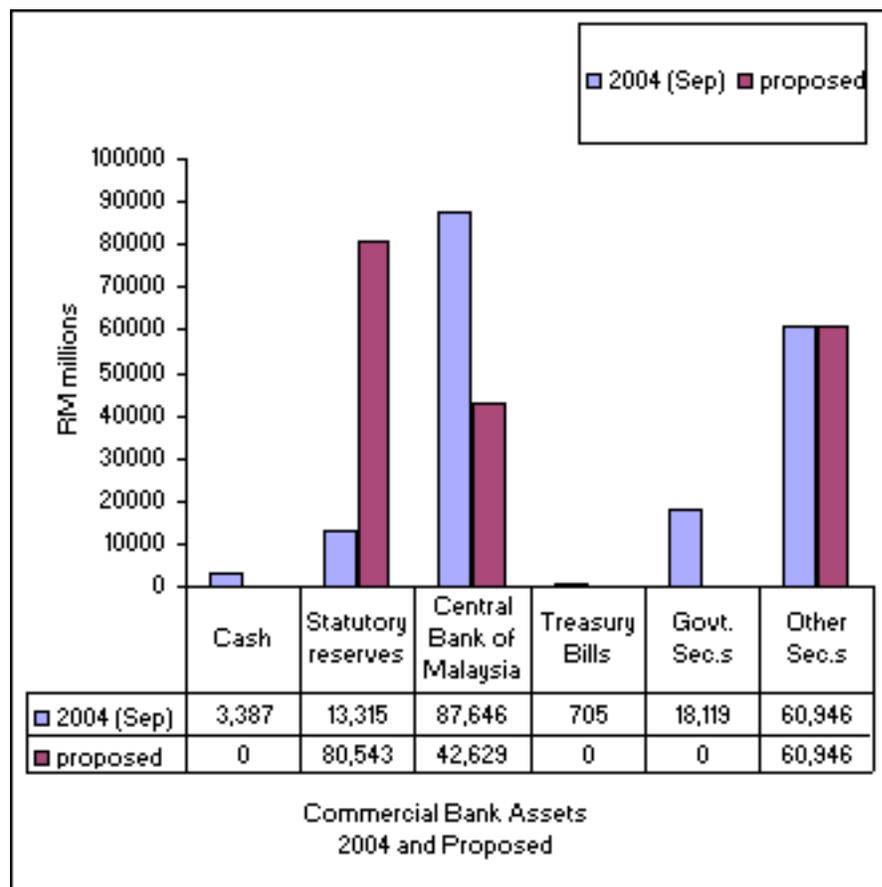
5.1. Forecast Balance Sheet

5.1.1. Factors affecting asset structure

The asset position of the commercial banking system will vary widely depending upon the method deployed by the authorities for injecting new reserve money into circulation. Where the authorities purchase government debt from a commercial bank, the commercial bank will experience a substitution of one asset (an amount of debt receivable) for another asset (reserve money). The same will result where the private sector receives new reserve money (as a welfare payment for example) and uses such funds to repay debt owed to the commercial banks. Where the authorities purchase government debt from the non-bank sector, the commercial banks will experience an increase in assets (the reserve money received following the sale of the non-bank holder's government debt) and an increase in liabilities (sight deposits). In short, monetisation may lead either to a substitution of assets, or to an increase in both assets and liabilities.

5.1.2. Comparison of current and proposed structure

The asset structure proposed here assumes that the purchases from the commercial banks of public sector debt produce the substitution in asset structure detailed in Section 5.1.1. As a result there is no net increase in commercial banking assets, ceteris paribus, since an increase of some RM67.2 billion in holdings of reserves is offset by a decline of RM3.4 billion in cash holdings, RM18.8 billion in total government debt holdings, and of RM45 billion in debts owed by the central bank and other issuers.



It is assumed that present holdings of commercial bank assets classified in the Bank Negara Malaysia statistical returns as “Amounts due from Central Bank of Malaysia” and of securities classified as “Other Securities” comprise sufficient public and quasi-public sector obligations to allow for a monetisation of approximately RM45 billion between the two asset classes. This will obviate the need for any indirect injections of reserve money into circulation during Phase One (by, for example, the purchase of government debt from non-bank institutions or an increase in welfare payments). Pending a detailed investigation, the proposed structure shows that obligations of the central bank will be reduced by the full RM45 billion.

5.1.3. Post-reform lending

Loan disbursements by the banking system represented 89.7% of total gross financing in Malaysia during 2003, amounting to RM441.7 billion. This total remains unaffected by the Phase One reform and the commercial banks will continue to be the most important source of finance for domestic borrowers well into Phase Two.

5.1.4. Post-reform cash and statutory reserves

Although the reserve requirement of 100% against sight deposits will be a legal one upon the commercial banks, statutory reserves under the reformed arrangements will be held either in an operational account with the central bank or as till cash at the commercial bank, whereas presently all statutory reserves must be held at Bank Negara Malaysia. Hence, in this forecast, the proposed cash holdings of commercial banks post-reform decline to zero. In practice, they may still hold some petty cash.

5.2. Management of Changes in Statutory Reserve Ratio

5.2.1. Potential switches to sight deposits

New reserve money issued on behalf of the Government and injected into circulation through the non-bank sector will be deposited into the operational account of the seller's commercial bank at Bank Negara Malaysia. If the seller decides to continue holding the newly received reserve money in his sight deposit account, then the commercial bank will have a higher sight deposit liability which is exactly compensated by a higher reserve money asset on its balance sheet. Prior to the achieving of a 100% reserve ratio, an equal increase in both sight deposit and reserve money will produce, *ceteris paribus*, a higher ratio of reserve money to sight deposits at a commercial bank, and will therefore enable the commercial banks to meet the higher reserve ratio requirement set by authorities.

5.2.2. Unexpected withdrawals of cash from sight deposits

If non-bank sector sight deposit holders decide to withdraw cash from commercial banks at a time when the authorities are monetising securities previously held by them, then it might not be possible for the reserve ratios at commercial banks to increase as much as required by the authorities. In these circumstances the newly increased reserve ratio target would need to be scaled back to account for the behaviour of sight deposit holders.

5.3. Account Types Post-reform

5.3.1. Sight deposits

The modification in the nature of reserves will allow commercial banks to satisfy withdrawals of any size at immediate notice from sight deposits, although in practice commercial banks may ask for one or two days' notice for very large withdrawals. In all cases, non-cash transfers out of sight deposit accounts will continue to be satisfied through existing clearing arrangements, for example by cheque or electronic transfer, and will result in a movement of reserve money between the operational accounts of the paying and receiving commercial banks at Bank Negara Malaysia.

5.3.2. Investment accounts

Commercial banks will need to prepare for the abolition of time deposits and the

establishment of a replacement in the form of investment accounts. Investment accounts could take many forms, but during Phase One the two main principles would be their establishment as off-balance sheet items and that withdrawal would be subject to the liquidity of the underlying investments. Hence, if a commercial bank were to sell units in a venture capital fund through an investment account, account holders would purchase units on the understanding that liquidation of their holdings into reserve money might not be achievable at short notice. At this stage, commercial banks could compete for investment account funds by offering various risk return profiles, or by forming partnerships with specialist fund managers. During Phase Two, the restriction and abolition of interest-based financing techniques would introduce a third principle, that of profit and loss sharing, into the operation of investment accounts.

5.4. Liquidity Management for Investment Accounts

The central bank may wish to intervene in the investment account market as a provider of liquidity, for example by purchasing investment account units through the commercial banks at times when net redemptions are being requested by existing holders. This activity could form the basis of a liquidity management facility analogous to the present discounting and repo operations provided by the Bank. Such liquidity operations would require the creation of new reserve money and would therefore apply to Phase One only. They would be carried out with regard to the rules laid down by the proposed Monetary Oversight Committee.

5.5. Forecast Impact Upon Profitability

In theory if a depositor places 100 units of reserve money into a commercial bank account that operates with a 10% reserve ratio, then a maximum expansion of 1000 units of bank money can result. If the lending counterpart of this bank money attracts an interest margin of 3%, then the commercial bank will earn an extra 27 units of income ($900 * 0.03$) because of the initial deposit of 100. In 2003, the Malaysian banking system's gross interest margin was 3.69% and the average ratio of commercial bank statutory reserves held against sight deposits was 16.53%. With statutory commercial bank reserves totalling RM13.315 billion in September 2004, an approximate minimum estimate of the annual loss of revenue to the commercial banking system of moving to 100% reserves is in excess of RM2.1 billion. The estimate is derived by measuring the gross interest margin lost as a result of the reduction of commercial bank loan assets (in this case a reduction of some RM64 billion) that accompanies an increase in reserve ratios to 100%. This loss in revenue is of the same order as the saving in public sector debt service estimated using the alternative approach set out in Section 6.2. Any net switching from time deposits to sight deposits during Phase One would increase the size of the revenue loss to the commercial banks. The extent and speed of implementation of reform is therefore to be judged partly against the ability of the commercial banking system to withstand the decline in its profitability.

5.6. Costs of Payment Transmission Services

Bernard Lietaer reports in *The Future of Money* (2001) that banks in the United States of America earn some 40% of their revenue from the provision of payment services to their customers. Despite this fact, it remains true that commercial banks tend to cross-subsidise the cost of payment transmission with profits earned from interest-revenues gained by means of money creation. Hence, a substantial sight deposit will often earn the depositor the right to free banking services. It is therefore to be expected that there will be an increase in charges for basic banking services as a result of the move to 100% reserves on sight deposits. Furthermore, because a recipient of banking services does not pay tax on those services, the ending of free banking services will represent the loss of a tax free benefit.

5.7. Dual or Single Track Approach?

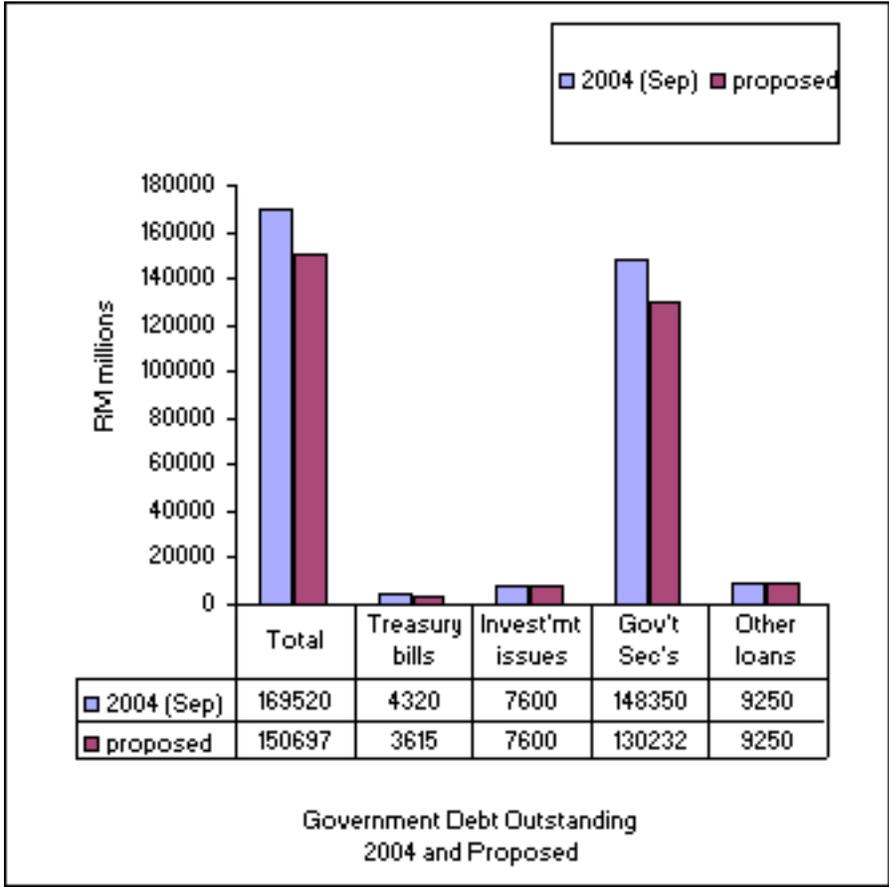
The implementation of a dual system of both fractional and 100% reserve banks operating side by side, would give a substantial commercial advantage to the former group for the reason outlined in 5.5 above. The adoption of such an approach to the introduction of reform is therefore unlikely to succeed if left to market forces alone. A single track approach would in any case be easier to legislate for and to administer, and we therefore recommend that strategy be formulated within a "single track" framework wherever possible.

6. FEDERAL POSITION

6.1. Domestic Federal Debt Levels Post-reform

6.1.1. Total outstanding debt

The eradication of a substantial portion of Federal Government debt and the subsequent maintenance of debt at the reduced level is achievable so long as Government maintains a balanced budget following the monetisation.



Here, an initial reduction of some RM18.8 billion in Government debt is proposed (comprising some RM18.1 billion in Government securities and RM0.7 billion in Treasury Bills held by the commercial banks). The proposed reduction in domestic Federal debt from approximately RM169.5 billion to RM150.7 billion will allow debt as a percentage of GDP to be reduced by some 6% assuming no change in other variables (Federal debt was 48.2% of GDP as of end 2003).

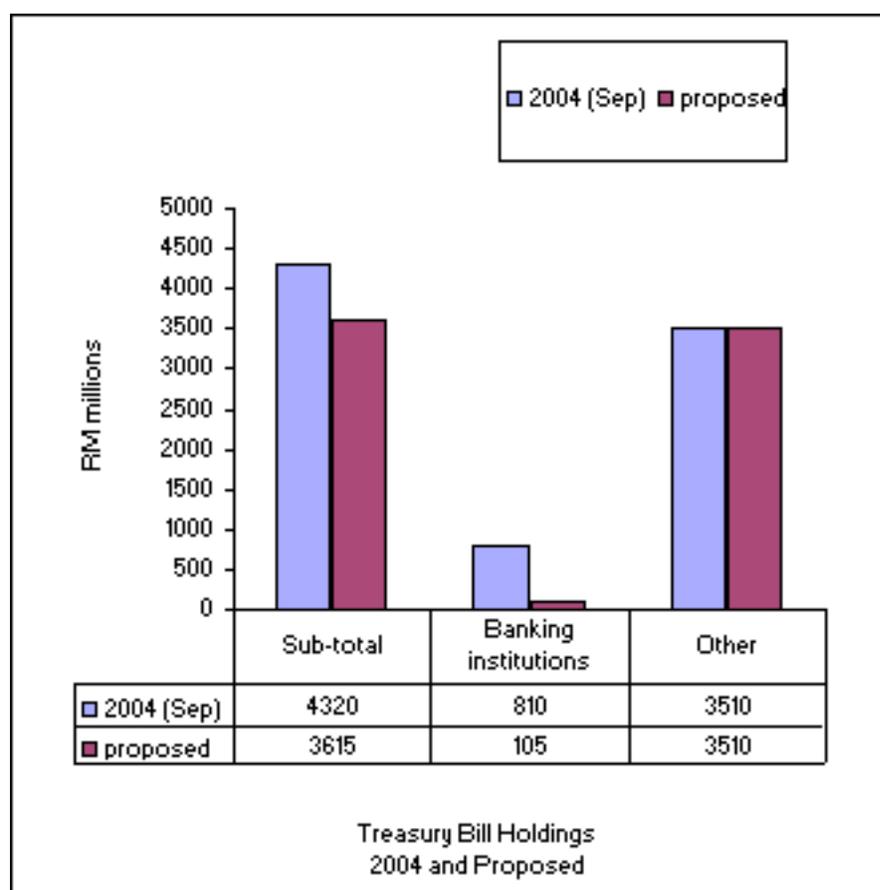
The initial reduction would be achieved early in Phase One. It is assumed that some proportion (possibly all) of the "Investment issues" and "Other loans" will also be identified for monetisation as discussed in Section 3.1.3, especially if these debts are held by the commercial banks. Given the 2004 figures detailed above, it is possible that a further RM16.8 billion of Government debt will be monetised in this way.

Annual budget deficits will improve because of the reduction in debt service charges following the monetisation, and as GDP continues to grow, comparisons between total Federal debt and GDP will improve over time.

External Federal debt (debt to non-Malaysians) need not be affected by the monetisation (the external Federal debt was RM37.3 billion during 2003). However, where the terms of the external borrowings allow, redemption or early repayment of external debts may be concluded using external reserves that are surplus to the requirements of Phase Two.

6.1.2. Treasury bill holdings

Holdings of treasury bills by the commercial banking sector will be reduced to zero during Phase One of the reform. These instruments are usually held by the commercial banks as a means of generating interest income on short term liquidity at zero credit or capital risk. With the imposition of 100% reserves on sight deposits, commercial banks will only be able to hold treasury bills through funds held on behalf of investment account holders or as part of their equity reserves.

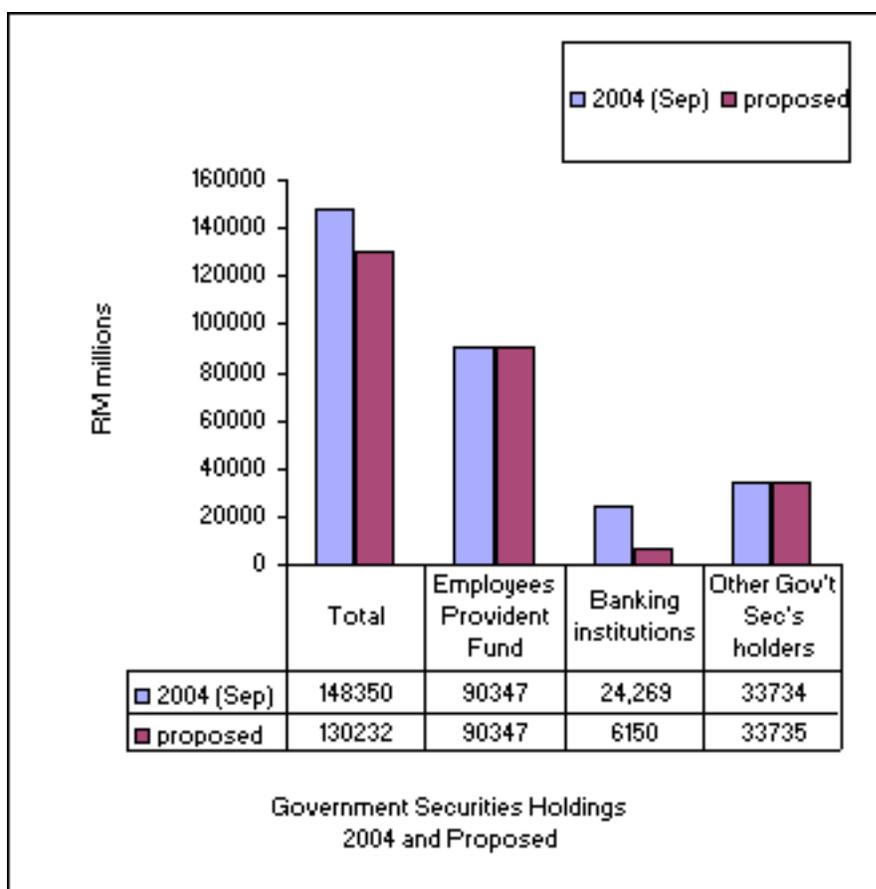


Banks will hold cash instead of Treasury Bills by the end of Phase One, and will therefore see an income generating asset replaced by a non-income generating asset on the balance sheets. Of course, this will not provide a material problem for the commercial banks as they will be required to hold the newly acquired reserve money against sight deposits, which will in turn be offered on a non-income bearing basis to depositors.

6.1.3. Government securities

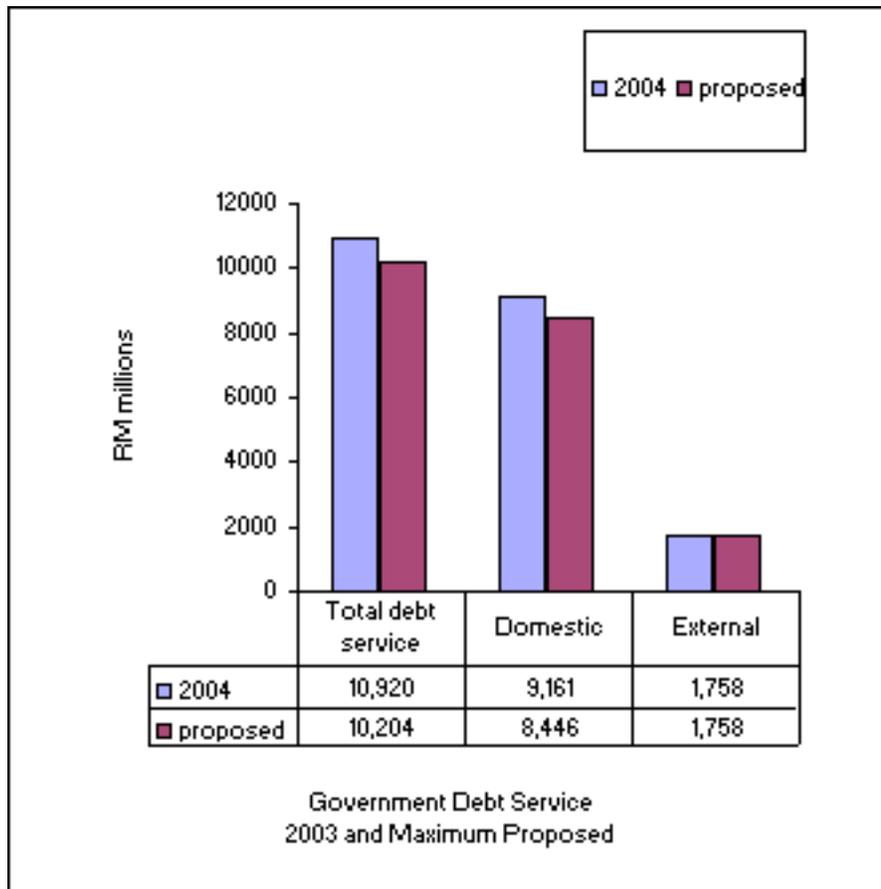
The initial reduction in outstanding Government securities depicted below impacts entirely upon the commercial banking system. The other major holders indicated in the following chart include the Employees Provident Fund. Since it has close ties to the authorities, the Fund may be approached if it is required that injection of new

reserves is achieved through the monetisation of non-bank sector holdings of Government securities. If this is the case, or indeed if any of the other indirect methods of injecting new reserve money are adopted as described in Section 3.1.3, then the amount of monetisation required will depend upon the manner and degree to which this reserve money filters back to the commercial banking system. Much of the new reserves may do so, but it is also possible that some of the newly created amounts will be held as cash in the hands of the private sector, or exchanged for foreign exchange and thereby returned to an exchange equalisation account or other reserve at Bank Negara Malaysia. In all cases, the amount of Government debt monetisation proposed in this Section is a minimum, and therefore the impact on Federal debt service shown in Section 6.2 is a conservative estimate.



6.2. Impact on Federal Debt Service

The following chart shows the extent of the reduction in Federal debt service that would be produced by a monetisation of approximately RM18.8 billion of Government debt, assuming that Federal debt attracts an average interest yield of 3.8% per annum across Treasury bills and Government securities. (During 2003, Malaysian Government securities with maturities of between 5 and 10 years had coupons of between 3.702% and 3.917%. For maturities of between 10 and 15 years the range was 4.24% to 4.41%.) The estimated recurrent annual saving in debt service of some RM0.7 billion would increase to approximately RM1.5 billion should the further monetisation of RM16.8 billion in other forms of Government debt contemplated in Section 6.1 be implemented. Further annual public sector debt service savings of approximately RM1.5 billion could arise if the monetisation of debt issued by the central bank or by public sector corporations was undertaken in preference to the other forms of injecting reserve money discussed in Section 3.1.3



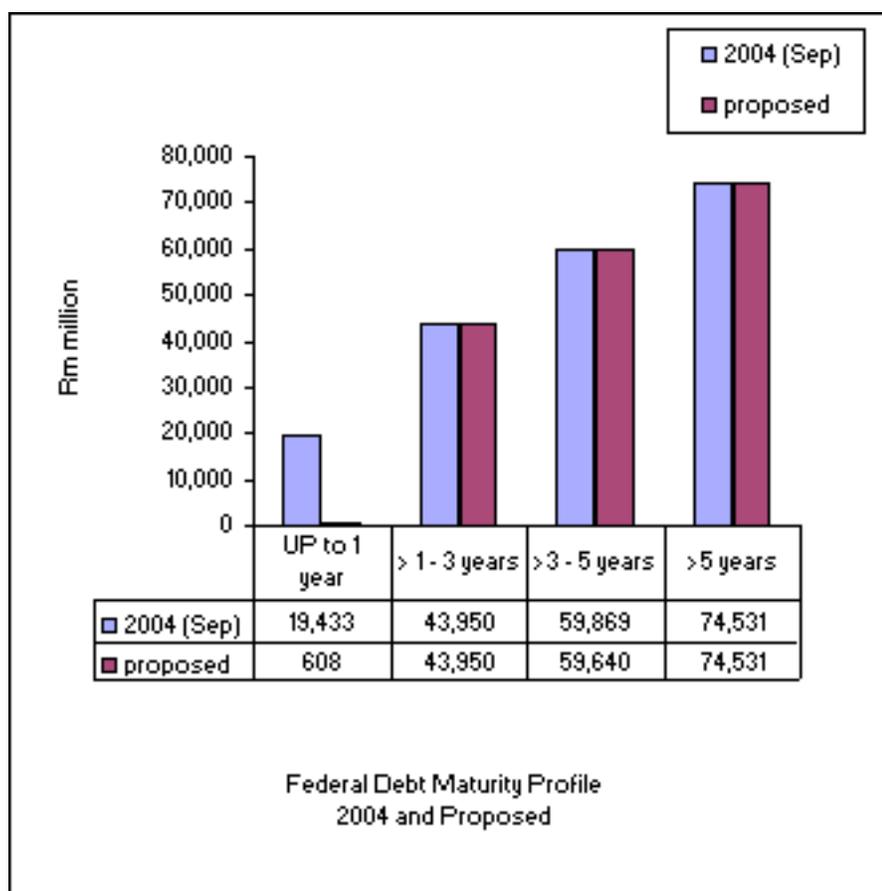
6.3. Utilising the Monetisation Dividend

The annual debt service saving of between RM0.7 billion and RM3 billion highlighted in Section 6.2 compares with the following levels of annual Federal operating expenditure in various sectors of the economy. An opportunity clearly exists to substantially improve service provision in each of these sectors on a continuing basis using the amounts of debt service saved through the monetisation process (what might be termed the "monetisation dividend"):

Annual Operational Expenditure	2003 (RM millions)
Education	10,194
Healthcare	2,684
Pensions and Gratuities	5,870

6.4. Government Debt Maturity Profile

The following chart shows the maturity profile of Government securities and indicates that the up to RM19.4 billion of Government debt can be earmarked for monetisation within the 0 to 1 year maturity bracket and a further RM43.9 billion within the 1 to 3 year maturity bracket. These amounts will be more than sufficient to allow the commercial banks to achieve the 100% reserve ratio during the period, even if the non-bank sector demands a substantially increased volume of sight deposits post-reform.



6.5. Federal Revenue

Federal revenues are likely to be affected by the reforms in ways that are hard to quantify at this stage. The main factors to be balanced in this regard are the likely reduction in taxes levied from the commercial banking sector resulting from the expected decline in total profits there, and the likely increase in tax revenues resulting from increases in production in the non-bank sector as well as among non-interest-based financial organisations and service providers. Qualitative improvements in economic performance following the move to 100% reserves (for example, greater economic stability and a less stressed workforce) are likely to provide quantitative revenue benefits in the longer term. Allocation of the monetisation dividend towards healthcare, education, housing and infrastructure is also likely to bear such fruit in the longer term.

7. CENTRAL BANK BALANCE SHEET

7.1. Reform bonds

Should Bank Negara Malaysia issue new reserve money in return for the Reform Bonds or other securities contemplated in Section 3.1.2, as opposed to such money being issued as a direct obligation on the Treasury department of Government, then these would become assets on the Bank's books balanced by the liability resulting from the issues of Ringgit reserve money.

7.2. Reserve money outside the central bank

The present status of reserve money held outside Bank Negara Malaysia as a liability of the Bank will continue following the Phase One reform. During Phase Two, however, the note issue will be substituted with the central bank's commodity reserves, and both the note issue and Bank Negara Malaysia's reserves will disappear from the Bank's balance sheet. Commodity money will thenceforth be an asset in the hand of the holder but will not be any other party's liability. At present of course, the domestic note issue of most (all?) countries is a liability of the respective central bank, albeit a liability which is discharged by redemption with a further note issue. Following Phase Two, the holder of Malaysian commodity currency in circulation will have no recourse to any issuer for "redemption" of his holding since the unit of currency would be defined as the commodity (or commodity basket) itself. (Holders of sight accounts at commercial banks would of course continue to have the legal right to redemption of account balances in the form of commodity money, and of course commercial banks would have the right of redemption of operational accounts at Bank Negara Malaysia in the form of commodity money).

7.3. Short term liabilities

Open market operations are used by Bank Negara Malaysia to absorb excess liquidity from the banking system, especially where a current account surplus produces such liquidity via the foreign exchange market. These operations typically produce a substantial amount of obligations outstanding from Bank Negara Malaysia to the commercial banks. In these proposals, a large proportion of these obligations will be repaid in order to provide the commercial banks with some of the reserve money that is required for the attainment of 100% reserves. The amount of this reduction could be as much as RM45 billion, as described in Section 5.1.2.

7.4. Domestic reserves during the Phase One reform

Meanwhile, reserves of domestic currency at the central bank may increase as a result of the imposition of 100% reserve requirements on commercial banks' sight deposit accounts. This is not certain however, for it may be the case that commercial banks decide to hold substantial amounts of reserve money as till cash rather than in a reserve account at Bank Negara Malaysia. During Phase One, this reserve account will become an operational account, as opposed to a non-operational account, in the sense that reserves deposited there will be free for withdrawal by the commercial banks. Of course, commercial banks will continue to provide regular returns to the central bank detailing their sight deposit liabilities and reserve holdings.

7.5. External reserve position under the Phase One reform

Bank Negara Malaysia's external reserves need show no immediate change as a result of the first phase of the proposed reform process. However, it is to be expected that external factors that are indirectly related to the reform process may cause some pressure on external reserves. For example, if institutions in the foreign exchange market sell Ringgit in any substantial quantity, then the central bank may be required to support the currency by selling part of its reserves. These reserves currently total RM169 billion, greater than the current total of sight deposits within the Malaysian monetary system and therefore sufficient to convert the entire Ringgit sight deposit money stock into foreign exchange or other assets at current market prices, which is unlikely in the extreme of course. However, given the expectation that sight deposits will rise moderately following the reform due to conversion of part of the existing time deposit stock into sight deposits, the scale of central bank external reserves vis-à-vis sight deposits will be less excessive. The regulations proposed in Section 4.4.2 regarding the borrowing of Ringgit by foreign institutions for use in short sales of the Ringgit

on the foreign exchange market are designed to limit speculative attacks on the currency. Therefore, we estimate that Bank Negara Malaysia's reserves are sufficient to cope with the scale of any likely foreign exchange operations against the Ringgit during Phase One of the reform.

7.6. External reserve position under the Phase Two reform

In order to convert the stock of fiat reserve money into commodity based reserve money, part or all of Bank Negara Malaysia's present external reserve assets will in effect be converted into the selected form of underlying commodity and released into the ownership of the holders of sight deposits and cash in circulation. The conversion of foreign exchange reserves and other external assets into the chosen commodity or commodities will therefore need to be managed carefully so as not to unsettle the various commodity markets at the centre of the conversion. It may be necessary to phase in the required purchases quickly or gradually, depending upon the market and the political factors in play. It is probably not fruitful to debate the nature of the decision-making process so far in advance of implementation. Once completed however, the required portions of the central bank's reserves will be transferred to allocated or unallocated palettes (at Bank Negara Malaysia or the Monetary Oversight Committee, as determined in due course) as the property of the holders of operational accounts at the central bank (these being public sector and commercial bank entities for the most part) or released to the custody of private holders outside the central bank as requested.

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