

CF01

Introduction To Monetary Economics And The Malaysian Financial System

8 MAY 2000

1. Time allowed : Three (3) hours
2. Total number of questions : Seven (7) questions
3. Number of questions to be answered : Five (5) questions
Part A : Two (2) questions [20 marks each]
Part B : Three (3) questions [20 marks each]
4. Candidates must obtain a minimum of 30 marks in Part B as well as pass the paper as a whole.
5. Begin each answer to a new question on a fresh page.
6. Answer **all** questions in **English**.

PART A

ANSWER TWO (2) QUESTIONS ONLY

1. (a) Using diagrams, explain the demand curve and supply curve of a product. [6]
- (b) Explain how the equilibrium price of a product can be determined, using the demand and supply curves. [6]
- (c) Explain **two** possible effects of an increase in demand on the final equilibrium price and output of a product. State any assumptions made. [8]
- (Total:20 marks)
2. **Product = Income = Output**
- Explain briefly how national income statistics can be compiled using each of the above **three** different approaches. (Total:20 marks)
3. (a) Explain, with examples, what a barter trade system is and discuss **three** problems of this system. [10]
- (b) List and explain **four** functions of money. [10]
- (Total:20 marks)

PART B

ANSWER THREE (3) QUESTIONS ONLY

4. In order to achieve its monetary policy objectives, Bank Negara Malaysia (BNM) has at its disposal the following monetary policy instruments:
- (a) open market operations [4]
- (b) Statutory Reserve Requirements [4]
- (c) centralisation of deposits of the Government and Employees Provident Fund with BNM [4]
- (d) lending guidelines to the priority sectors, and selective credit and administrative measures [4]
- (e) moral suasion [4]
- Elaborate on **all five** of the above instruments. (Total:20 marks)
5. Financial intermediaries are providers of financial services, which fall into **two** main categories, namely, retail financial services and wholesale financial services. Outline the services offered by commercial banks, finance companies and merchant banks from **any five** of the following sub-categories:
- Retail financial services:**
- (a) deposit-taking [4]
- (b) lending activities [4]
- Wholesale financial services:**
- (c) corporate finance and advisory [4]
- (d) investment and portfolio services [4]
- (e) corporate banking [4]
- (f) money market and treasury [4]
- (Total:20 marks)

6. A financial system consists of an intricate network of markets and participants.
- (a) What are the functions of the financial system? [10]
 - (b) Who are the participants in the financial system and what roles do they play? [10]
- (Total:20 marks)
7. (a) What are development finance institutions (DFIs)? Describe their functions and specialities. [10]
- (b) Describe the principal objectives and the main source of funds of **any two** of the following DFIs:
- (i) Malaysian Industrial Development Finance [5]
 - (ii) Bank Pembangunan dan Infrastruktur Malaysia Berhad [5]
 - (iii) Bank Industri & Teknologi Malaysia Berhad [5]
- (Total:20 marks)

- END OF QUESTION PAPER -

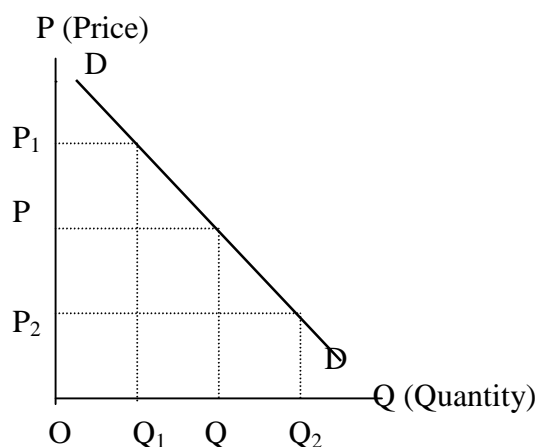
OUTLINE ANSWERS

PART A

Question 1

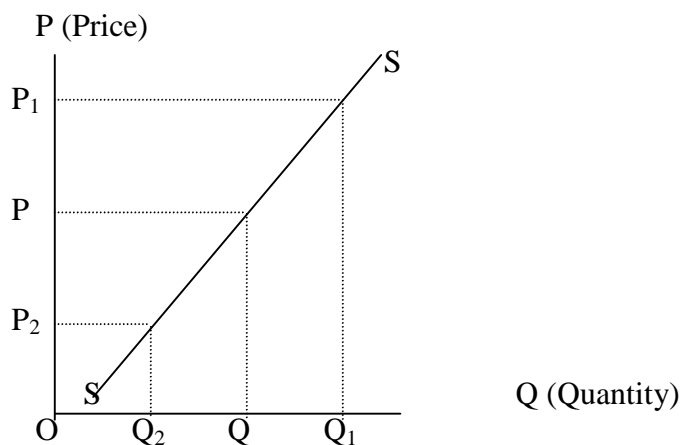
A popular question answered by most candidates. A few managed to pass, while some candidates, however, lost marks when they could not distinguish between long-run and short-run changes in demand and supply.

1. (a) Demand curve of a product shows the relationship between price and quantity demanded. In a normal demand curve, there is an inverse relationship between price and quantity demanded as shown below:



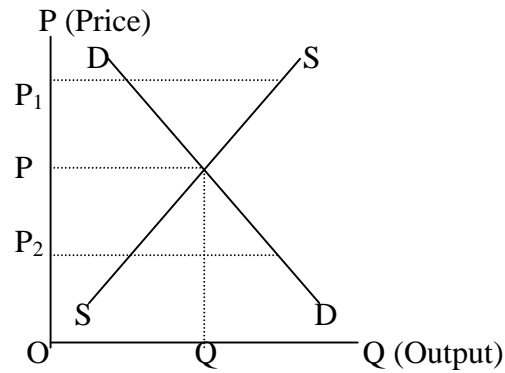
In the above graph, DD is the demand curve. At the price of OP, quantity demanded is OQ. If the price increases to OP₁, quantity demanded will decrease to OQ₁ and if the price falls to OP₂, quantity demanded will increase to OQ₂.

Supply curve of a product shows the relationship between price and quantity supplied as shown below:



In the above diagram, SS is the supply curve. At the price of OP, quantity supplied is at OQ. If the price increases to OP₁, quantity supplied will increase to OQ₁. If the price falls to OP₂, quantity supplied will decrease to OQ₂.

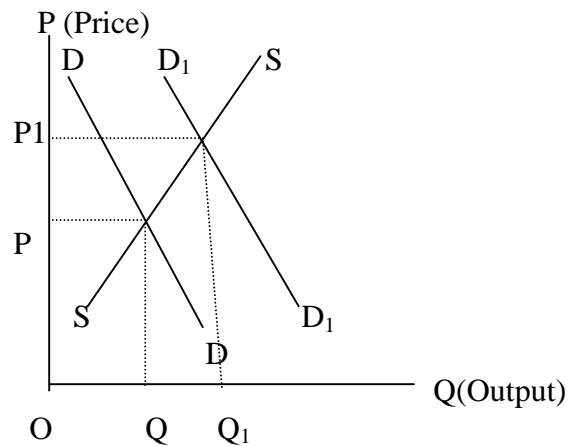
- (b) Equilibrium price is the price where quantity demanded is equal to quantity supplied as shown below:



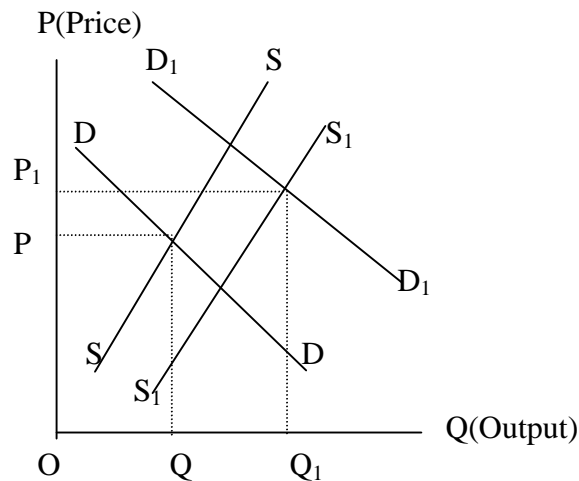
In the above diagram, OP and OQ are the original equilibrium price and output. If the price is higher than OP at OP_1 , quantity supplied is higher than quantity demanded resulting in a fall in price and if the price is lower than OP at OP_2 , quantity demanded exceeds quantity supplied resulting in a rise in price. Therefore, at the price of OP , quantity demanded is equal to quantity supplied which is known as the equilibrium price and OQ is the equilibrium output.

- (c) The effect of an increase in demand on the final equilibrium price and output depends if it is in the short or long run.

In the short run, when demand increases from DD to D_1D_1 , with no change in supply, the equilibrium price will increase from OP to OP_1 while the equilibrium output will increase from OQ to OQ_1 , as shown in the diagram below.



However in the long run, supply will increase in response to increase in demand as shown in the diagram below.



In the above diagram, DD and SS are the original demand and supply curves. OP and OQ are the original equilibrium price and output. Assuming that when demand increases to D_1D_1 and supply increases to S_1S_1 , the new equilibrium price is at OP_1 . The new equilibrium price can be higher, same or lower than the original equilibrium price of OP , depending on the extent of the changes in demand and supply. However, the equilibrium output OQ_1 will always be more than OQ .

Question 2

The least attempted question was on national income statistics. Some candidates lost marks when they failed to explain how Gross Domestic product is derived.

2. National income or output is the total monetary value of goods and services produced in the country over a period of time, usually one year. The national output can be compiled using three different methods, i.e. product (output), income or expenditure.

(i) Product (Output) method

The economy is divided into various sectors, for example the agriculture sector, the mining and quarrying sector, the manufacturing sector, the construction sector and etc. The values of the final goods and services in each of the sectors are compiled and added up. The figure arrived at is known as gross domestic product. By adding net factor income from abroad, the value is known as gross national product.

(ii) Income method

The components of income are divided into 4 broad categories as follows:

- Wages and salary
- Interest and dividend
- Rent, including imputed rent
- Profit, including both undistributed and income of self-employed

By adding up the income of the four categories, we will arrive at gross domestic income.

(iii) Expenditure method

The amount of expenditure spent are classified into the following, shown with an example:

- Private consumption expenditure: Expenditure spent by people on food and clothing.
- Private investment expenditure: Expenditure spent by business firms on building of factories.
- Public consumption expenditure: Expenditure spent by government on food and clothing for armed forces personnel.
- Public investment expenditure: Expenditure spent by government on building of roads and development of land.
- Net exports: Export minus import of goods.

The expenditure spent on each of the above five components are recorded and by adding them up, we arrive at gross domestic expenditure, which is equal to gross domestic income or gross domestic product.

Question 3

Many students answered the questions on barter trade system and functions of money. About half of the candidates managed to secure 60% of the allocated marks for this question. Those who marginally passed were unable to elaborate on the functions of money.

3. (a) A barter trade system is a system whereby people exchange goods for other goods. For example, Ahmad has a goat and would like to have a horse while Ah Chong has a horse and would like to have a goat. Ahmad can then exchange his goat for Ah Chong's horse.

There are many problems facing the barter trade. Three of these problems are:

i) Double coincidence of wants

In the above example, there is double coincidence of wants and therefore, the exchange can take place. Problems will arise if Ahmad wants cattle, instead of a horse. Then the exchange between Ahmad and Ah Chong will not take place due to lack of double coincidence of wants.

ii) Rate of exchange

Assuming that there is double coincidence of wants, there is then the next problem of agreeing on the rate of exchange. Is it going to be one horse for one goat or one horse for two goats? The problem of agreeing on the rate of exchange or the term of trade will arise.

iii) Divisibility

Assuming that it is agreed that the rate of exchange is one horse for two goats. As Ahmad has only one goat, how is it possible to exchange one goat for half a horse? Obviously, Ah Chong will not want to cut the horse into two halves. Hence, there is the problem of divisibility.

- (b) The four functions of money are as follows:

i) Medium of exchange

This is the first function of money in order to overcome the problem of the lack of double coincidence of wants. In other words, anything that is generally acceptable can perform the function of medium of exchange. In the olden days, various types of commodities have been used to perform this function, e.g. cattle.

ii) Unit of account

Money becomes the measuring yardstick for goods and services. Therefore, the value of all goods is expressed in terms of money. In the accounting records of an estate, the value of rubber trees, oil palm trees and machinery are expressed in terms of money, i.e. RM. Imagine how the accounting records would look like without the use of money.

iii) Store of value

People need to ensure that for the efforts they put in today, they are able to store the returns of their efforts for future use. Money can provide the people with these needs as the benefits of today's efforts can be paid in terms of money, which they can save for future use.

iv) Standard for deferred payment

In many business transactions, people will want to agree today on the prices of goods or wages of workers to be paid at a later date. The use of money makes it convenient for people to negotiate the price today but paid in the future, i.e. money acts as a standard for deferred payments.

PART B

Question 4

The question on monetary policy instruments was not well answered. Candidates lost marks when they were unable to explain the mechanism of open market operations satisfactorily. The most obvious mistake was on the centralisation of deposits of the Employees provident Fund (EPF) and Government with Bank Negara Malaysia (BNM). Many thought that the centralisation of EPF deposits at BNM is meant to protect the safety of contributors' money and that it could be used by BNM for development purposes.

4. (a) Money Market Operations (MMO)

Money market operations (MMO) are operations conducted by BNM to influence the liquidity situation in the system. MMO can be conducted by the following:

- (i) Open market operations (OMO) transacted mainly via the sale and purchase of Government papers; or
- (ii) borrowing or lending by BNM in the interbank market.

During tight monetary policy stance, BNM will contract liquidity by borrowing, issuing BNM papers or selling Government papers to market participants. These operations have an immediate impact on the availability of funds in the system and hence, limit the bank's ability to create money through the multiplier process.

(b) Statutory Reserve Requirements (SRR)

Under section 37(1)(c) of the Central Bank Ordinance, the banking institutions are required to maintain a certain percentage of their reserves with BNM. SRR is defined in terms of a bank's eligible liabilities (EL). The EL base comprises deposits (including NIDs and repos) and net interbank borrowings. All banking institutions are required to place a certain percentage of their EL as cash reserves with BNM.

SRR is a powerful instrument because it affects the level of deposits and loans that a bank can legally support given the size of its reserves. A restrictive monetary policy stance can be pursued through an increase in the ratio. This will reduce the level of excess reserves available to the banking institutions, thereby leading to a contraction of loans and deposits.

As such reserves do not earn interest, the cost is usually passed on to customers through higher lending rate. This will discourage borrowings, particularly for conspicuous spending. Conversely, a lower ratio will increase the lending ability of the banking institutions.

Although the variation of the SRR has been used as a monetary policy instrument, the imposition of SRR itself is part of a safety net put in place for the protection of depositors.

- (c) **Centralisation of deposits of the Government and Employees Provident Fund with BNM**
The Money Market Operations (MMO) Account of the Accountant-General (AG) provides BNM with an effective instrument for monetary management, not only to control liquidity at source but more importantly, to ensure that the Government operations are consistent with the objective of monetary policy.

The MMO Account of the AG which was reactivated in April 1990 was one of the key measures taken during the period 1990-96 to ensure that the Government does not accumulate its deposits with the banking system unnecessarily, as this would negate the tight monetary policy stance adopted by BNM during that period.

Under this arrangement, BNM will manage the Government's funds, consistent with the desired interest rate level and underlying excess liquidity conditions. During a tight liquidity situation, BNM could recycle these deposits to the banking system. A similar arrangement was also made with the EPF since October 1992.

- (d) **Guidelines on lending to the priority sectors and selective credit and administrative measures**

Selective control of credit extension is among the most effective measures available to BNM in regulating the volume and direction of credit. The use of this particular instrument is necessary to ensure that its economic and social objectives are met, consistent with the national objectives.

Apart from the general credit control guidelines, BNM has also employed a number of selective measures of credit control. Such credit controls are specific and targeted at only certain sectors. By holding down the demand for credit without limiting the available supply, selective instruments do not tend to raise interest rates.

Nevertheless, as these guidelines would have an undesirable impact on the efficiency of distribution of resources in the economy, particularly over the long-run, such guidelines are introduced only under compelling circumstances and for a limited period.

- (e) **Moral suasion**

Moral suasion refers to a traditional central bank technique of informally inducing a voluntary response from the financial system to its policy initiatives. Moral suasion has been used frequently in Malaysia since the 1970s and early 1980s.

Some of these include:

- Financial institutions were discouraged from lending excessively for speculation activity.
- At the same time, the financial institutions were encouraged to extend more longer-term financing loans, to be granted on the basis of viability of projects rather than depending purely on meeting collateral requirements.
- Commercial banks were encouraged to step up their lending to priority areas such as the Bumiputera community and small borrowers.
- Banking institutions were also urged to limit lending secured by shares to protect the banking system from over-exposure to the volatility of the stock market.

Question 5

Candidates were unable to elaborate on the financial services provided by commercial banks, finance companies and merchant banks. Only a few candidates managed to pass this question. Although many were able to outline the deposit-taking and lending activities of financial institutions, there were a majority that failed to highlight the wholesale financial services.

5. Retail financial services

(a) Deposit taking

A wide range of investment options is available to the retail investor. Competition between financial intermediaries for the retail investor's money is strong. Commercial banks, finance companies and merchant banks in particular, all offer products designed to attract retail funds.

Besides the conventional savings, fixed and current deposits, banking institutions also offer repos and negotiable instruments of deposits. Interest rates paid on these deposits are influenced by the demand for borrowings from financial intermediaries, i.e. when demand for retail borrowings is high, financial institutions need to attract deposits to fund those loans and therefore must offer competitive rates.

Interest rates are also influenced by the ease of access to those funds required by the lender. Short-term funds in general, pay a lower rate than funds committed for longer period. This relates to the intermediary's role in matching the imbalances between borrowers and lenders. From the intermediary's viewpoint, a premium must be paid to the lender in return for obtaining funds for a definite period. A premium in this context is a higher rate of return to the depositor.

(b) Lending activities

Retail lending, i.e. lending to individuals and small businesses takes a number of forms, including housing loans, personal loans, credit cards, overdrafts, term loans, hire purchase, leasing and retail credit. Housing loans refer to loans granted to individuals for the purchase of residential property. Hire-purchase refers to lending facilities usually granted to individuals and firms for the purchase of capital assets, particularly motor vehicles, machinery and equipment and consumer durables. Overdraft refers to debit balances of the current account of customers.

Services such as overdrafts, leasing and term loans are utilised by both the wholesale and retail markets. The difference between the two markets is the amount borrowed/lent. Financial institutions providing these services include commercial banks, finance companies and merchant banks.

Wholesale financial services

(c) Corporate finance and advisory

- Acting as advisers to quoted and unquoted companies and to individuals
- The management and underwriting of public and private securities
- Identification of investors for new ventures or for the expansion of established business
- Handling of public and private companies' mergers, acquisitions and restructuring
- Advisory services for joint ventures, acquisitions, mergers & takeovers, and corporate restructuring
- Preparation of submission to the approving Government authorities
- Advice on capital and operational reconstructions
- Arrangements of private placement of shares
- Advisory services on formulation and implementation of financial schemes
- Corporate restructuring and interpretation of Government policies and regulations
- Undertaking of industry research or project feasibility studies
- Undertaking of shares valuations for various purposes
- Private placements of debt and equity
- Advice on privatisation proposals

(d) Investment and portfolio services

- Nominee and registration services including custodianship of all types of securities
- Trading of stocks, shares, Government bonds and money market securities
- Management of corporate and private portfolios, trusts and pension funds
- Share register and share registration services
- Management of investment portfolios
- Management of investment and unit trusts and property trust funds
- Fund management services

(e) Corporate banking

- Management of syndicated and consortium facilities in local and foreign currencies
- Provision of trade financing facilities
- Syndication and provision of guarantee facilities
- Management and underwriting of commercial papers
- Provision and arrangement of short, medium and long-term loans in Malaysia and overseas
- Provision of bridging finance and project finance
- Provision of factoring and leasing facilities
- Capital market issues
- Block discounting of hire purchase agreements

(f) Money market and treasury

- Dealing in all authorised money market instruments
- Accepting fixed term deposits from public corporations, private companies and FIS
- Undertaking money market placements to financial institutions
- Dealing in authorised commercial papers
- Mobilising short-term funds via repurchase agreements
- Discounting or rediscounting of bills

Question 6

This was the worst attempted question. Candidates were only able to outline the functions well. The second part, which emphasised on the participants in the financial system and the roles they play, however, was not answered very well. Candidates lost marks when they only focused on the financial institutions without realising that consumers, borrowers, depositors, corporate customers and Government agencies are also involved in the process.

6. **(a) Functions of a financial system**

The financial system provides for:

(i) Mobilisation of funds

It facilitates in the mobilisation of the public's savings and the transfer of these savings to sectors which make productive use of them. The financial system makes efficient use of resources when funds are allocated to the most efficient users of the funds, or transfers are carried out at least cost.

(ii) Flexibility in investment

The financial system also allows individuals to alter their existing portfolios, for example, by selling shares and buying government securities.

(iii) Implementation of monetary policy

Through the financial system, BNM can affect holdings in financial assets, exert its influence on interest rates and ultimately the level of spending on goods and services. BNM relies on monetary policy to influence the level of economic activity, the rate of inflation or the level of the Malaysian ringgit. BNM operates in the money market to influence the price of short-term securities and hence, influences interest rates in the financial markets.

(iv) An efficient savings process

By providing savers with a safe repository for their surplus funds, the financial system encourages savings, and thus, increases the volume of resources available for investment in productive assets, such as machinery and plant.

A financial system enables lenders to use their excess funds to produce more funds through the earning of interest. It also increases the resources available to borrowers and enables them to achieve a higher level of output or acquire more assets than would be possible without borrowed funds. In other words, the financial system encourages more productive use of funds and resources.

(b) Participants in the financial system

The financial system consists of individuals, companies, markets and government that are in some way involved in assisting the process of exchange of financial assets. The individuals, companies and government, which need to borrow, may be called the “deficit” units. However, if they have surplus funds to lend, they would be called the “surplus” units. The markets are the financial intermediaries whereby they mobilise funds from the surplus units to deficit units by issuing financial instruments. Generally, the participants and the roles played by them can be categorised as follows:

(i) Borrowers and lenders

Individuals engaged in the borrowing and lending of money, and individuals engaged in the depositing (saving) of money. This includes both the government and private sectors.

(ii) Capital raisers and investors

Individuals engaged in the raising of money to start or expand a business, and individuals who provide the money to buy a share in the profits (or losses) of that business, or who lend to that business.

(iii) Financial intermediaries

Individuals engaged in the buying or selling of shares (equity) in a business, or the buying and selling of the ownership of loans (debt securities) to a business, or other bodies.

(iv) Service providers

Individuals who supply professional and technical services to the industry.

Question 7

As in the previous sitting, most candidates answered the question on development finance institutions (DFIs) fairly well. They were able to elaborate on the objectives and activities of DFIs satisfactorily. However, many of them failed to reveal the source of funds for the DFIs.

7. (a) **Development finance institutions (DFIs)**

DFIs are specialised financial institutions, established by the Government to promote investments in the manufacturing and agriculture sectors. Some of the institutions have a distinct agricultural emphasis, while others operate primarily in the commercial and industrial sectors of the economy.

Their functions include the extension of financial assistance in the form of medium and long-term loans, participation in equity capital, underwriting and wherever relevant, acting as issuing house for public share issues, and the provision of guarantees for loans. In addition, they help in the identification of new projects, participate in their promotion, and where appropriate, provide ancillary financial, technical and managerial advice. The role played by development finance institutions tends normally to complement those of other financial institutions.

DFIs specialise in medium and long-term financing as well as supply of financial services not normally provided by commercial banks and finance companies. Commercial banks traditionally focus their business on only short-term lending to finance working capital. Their medium to long-term loans, wherever given, are generally extended to a select group of larger and more established enterprises with high credit standing. Further, commercial banks are not equipped with the expertise to appraise projects involving complex industrial and agricultural technology. To overcome the gap in the supply of financial services and as part of a development strategy, the Government has established specialised DFIs.

(b) **Principal objectives and main sources of funds**

(i) **Malaysian Industrial Development Finance Berhad**

Principal Objectives

To provide term financing to promote industrialisation in the country. Its principal roles include the extension of financial assistance to private industrial enterprises in the form of medium to long-term loans, factory mortgage loans and hire-purchase facilities, as well as to mobilise industrial capital in the form of direct equity participation and assistance for the underwriting and flotation of share issues.

Main Sources of Funds

Paid-up capital and long-term loans from the Government, domestic and foreign financial institutions.

(ii) **Bank Pembangunan Malaysia Berhad**

Principal Objectives

To promote Bumiputera equity participation in commerce and industry. Its financial role encompasses the provision of medium and long-term loans for Bumiputera entrepreneurs to embark on commercially viable projects and to provide and to provide financing for hire purchase, leasing, property development, plant hiring as well as guarantees for industrial machinery and equipment to Bumiputera industrialists. The Bank also provides management consultancy and advisory services, and implements entrepreneurship development programmes.

Main Sources of Funds

Paid-up capital and long-term borrowings from the Federal Government.

(iii) Bank Industri dan Teknologi Malaysia Berhad

Principal Objectives

To provide long-term financing to capital intensive and high-technology projects in the shipping and shipyard, engineering and export-oriented industries. The bank also provides finance for high-technology metal-based engineering industries, which includes those manufacturing electrical and electronic products. The bank expanded its activities into the area of export financing to promote the export of capital goods through a long-term export credit scheme.

Main Sources of Funds

Paid-up capital and concessional borrowings from the Federal Government, Central Bank and international organisations.