CHAPTER 1

INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction

This study examines the relationship between the aggregate lending of commercial banks and money market interest rate changes for the case of Malaysia. In practice, the process of credit expansion or contraction is not immediate following a change in the interest rate. This is due to the time needed for making new loans available in the case of credit expansion. Time is also required for commercial banks to recall existing loans. So, the aggregate commercial bank lending may not react immediately to the positive and negative interest rate shocks in the money market.

The response of the aggregate commercial bank lending to the positive and negative money market interest rate changes may be asymmetric. This may be due to market imperfections and asymmetric information in the financial market. Because of the market imperfections and asymmetric information, time is needed for screening potential new loans to avoid the free-rider problem. Time is also needed to recall existing loans and recover the non-performing loans. Therefore, the speed for releasing new loans and recalling existing loans may not be the same.

As pointed out by Dell'Ariccia and Garibaldi (1998), the response of aggregate bank lending to changes in the money market interest rates is likely to be asymmetric and depends crucially on two factors: the speed at which new loans become available, and the speed at which banks recall existing loans. In addition, Dell'Ariccia and Garibaldi (1998) showed that the bank lending respond asymmetrically to positive and negative interest rate shocks in the money market. The research by Dell'Ariccia and Garibaldi (1998) is for the case of United State and Mexico. This research paper attempts to examine if the findings are same for Malaysia.

Scholnick (1991) studied the disequilibrium model for lending rate determination for the case of Malaysia. He concluded that there is a long lag before the lending rates respond to exogenous shocks, and this does not fully clear the loan market. Do the exogenous shocks have symmetric effect to the aggregate commercial bank lending? How much changes are needed to clear the loan market? In this research, we try to look into the response of the aggregate commercial bank lending to the positive and negative money market interest rate shocks for the case of Malaysia.

1.2 Objectives

The main objective of this research is to examine the response of aggregate commercial bank lending to money market interest rate changes for the case of Malaysia. Interest rate shocks impinging on the money market could be positive or negative. This study investigates whether the responses of bank lending to positive shocks are symmetric to those to the negative shocks. In the process, the dynamics of the money market interest rates are modelled in order to obtain positive and negative interest rate shocks.

If the response of aggregate commercial bank lending to money market interest rate shocks is indeed asymmetric, the design and implementation of monetary policy should take into account the asymmetric lag structure between credit contractions and expansions and react accordingly. This motivates the current study.

Whether the responses of aggregate commercial bank lending to money market interest rate changes are asymmetric or symmetric have important implications for risk and credit management. To enhance the capability and capacity of the domestic financial system, the banking system needs to have strong risk and credit management skills in order to ensure that there is no excessive risk taking that could bring adverse results, given the increasing volatility of the financial environment.

We try to identify the response of the aggregate commercial bank lending to various the types of money market interest rate shocks namely the seven-day money market interest rate, one-month money market interest rate and three-month money market interest rate.

1.3 Structure Of The Financial System

The structure of the financial system in Malaysia can be divided into two main categories, the financial institutions and financial market. Table 1.1 shows the structure of the financial system in Malaysia.

1.3.1 Financial Institutions

In term of structure, the financial institutions can be divided into the banking system and non-banking financial intermediaries.

The banking system consists of the central bank (Bank Negara Malaysia), banking institutions (commercial banks, finance companies & merchant banks) and other financial institutions (discount houses, representative offices of foreign banks & offshore banks in Labuan IOFC).

The non-banking financial intermediaries (NBFI) consists of the provident and pension funds, insurance companies, development finance institutions, savings institutions and others.

In term of the total assets of the financial system, the banking system is the largest components. The banking system accounts for about seventy percent of RM1,000 billion total outstanding assets in the financial system in 1998. The commercial banks are also the major player in the banking system. The total asset in the commercial banks accounts for more than forty percent of the total assets in the financial system in 1998. Hence, in this research we focus on the response of commercial bank lending to the money market interest rate changes. The total assets in commercial bank grew by an annual average of sixteen percent during the period 1988 to 1998.

1.3.2 Financial Market

The financial market in Malaysia consists of money and foreign exchange markets, capital markets, derivatives markets and offshore markets. The money market provides a ready source of funds for commercial banks, merchant banks, discount houses and eligible finance companies (with a minimum capital requirement of RM350 million). It also provides short terms investment outlets for those with temporary surplus fund. The increase in the average volume of

PERPUSTAKAAN UNIVERSITI MALAYA

Table 1.1 Financial System

Financial Institutions	**Financial Market**
Banking System • Bank Negara Malaysia • Banking Institutions -Commercial Banks[1] -Finance Companies -Merchant Banks • Others -Discount Houses -Offshore Banks in Labuan IOFC Non-Bank Financial Intermediaries • Provident and Pension Funds • Insurance Companies[2] • Development Finance Institutions • Savings Institutions - National Savings Bank - Co-operative societies • Other Non-Bank Financial Intermediaries - Unit Trusts - Pilgrims Fund Board - Housing Credit Institutions - Cagamas Berhad - Credit Guarantee Corporation - Leasing Companies - Factoring Companies - Venture Capital Companies	Money & Foreign Exchange Market • Money Market • Foreign Exchange Market Capital Market • Equity Market • Bond Market - Public Debt Securities - Private Debt Securities Derivatives Market • Commodity Futures • KLSE CI Futures • KLIBOR Futures Offshore Market • Labuan International Offshore Financial Centre (IOFC)
[1] Including Islamic Banks [2] Including Takaful	

Source: The Central Bank and the Financial System in Malaysia, Bank Negara Malaysia.

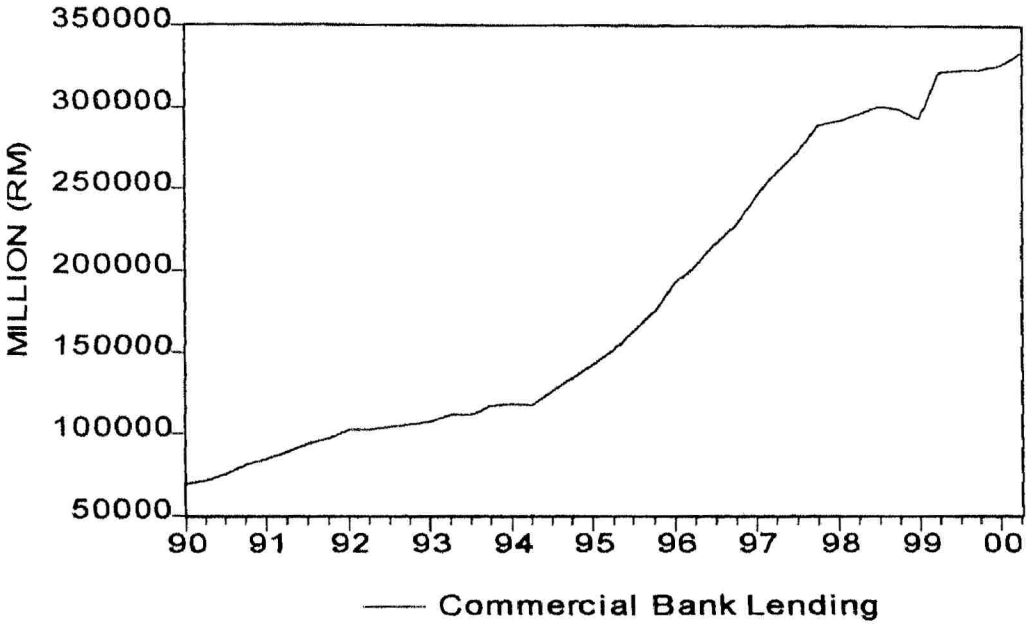
transactions in inter-bank money market reflects the greater reliance of banking institutions on the money market to meet their funding requirements as well as for portfolio adjustment. The average monthly volume of transactions in inter-bank deposits has increased from RM17.8 billion in 1989 to RM101.2 billion in 1999. Also, the average monthly volume of money market papers transacted has increased from RM2.6 billion in 1989 to RM18.0 billion in 1999.

1.4 Bank Lending and Inter-Bank Interest Rates

In this research, we focus on the commercial bank lending and inter-bank money market interest rates. The data on the total commercial bank lending and inter-bank rates from the first quarter of 1990 to second quarter of 2000 are used in this research.

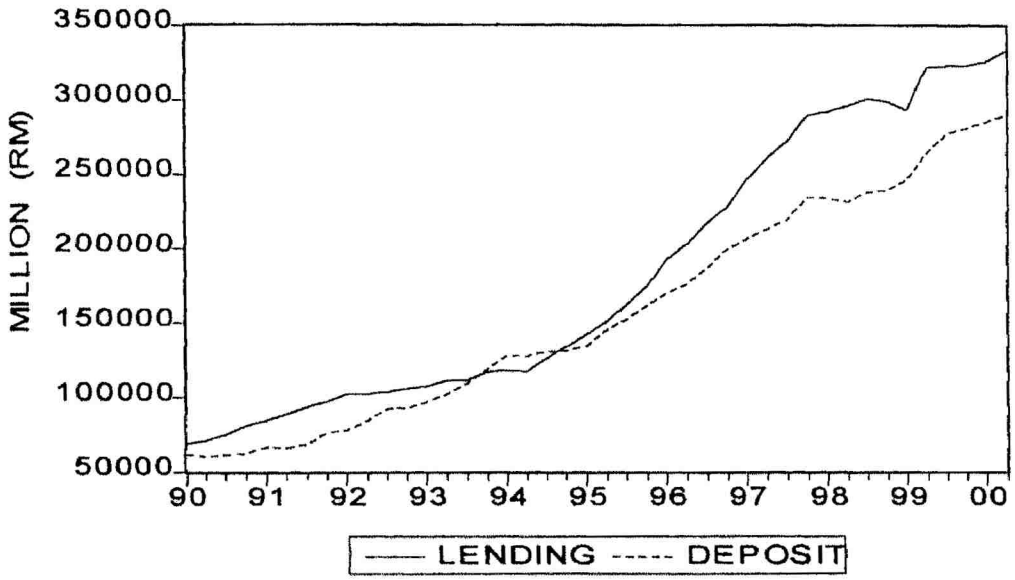
The total loans and advances of the commercial banks have grown from about RM70 billion in first quarter of year 1990 to about RM334 billion in the second quarter of year 2000. This shows that the total loans and advances in the commercial banks in Malaysia is on a growing trend during 1990 to 2000, except a decrease in the first quarter of 1998 and first quarter of 1999 as shown in Figure 1.1. The commercial bank lending has grown most rapidly during 1994 to 1997 (Shaded part in the Figure 1.1).

Figure 1.1 Aggregate Commercial Bank Lending



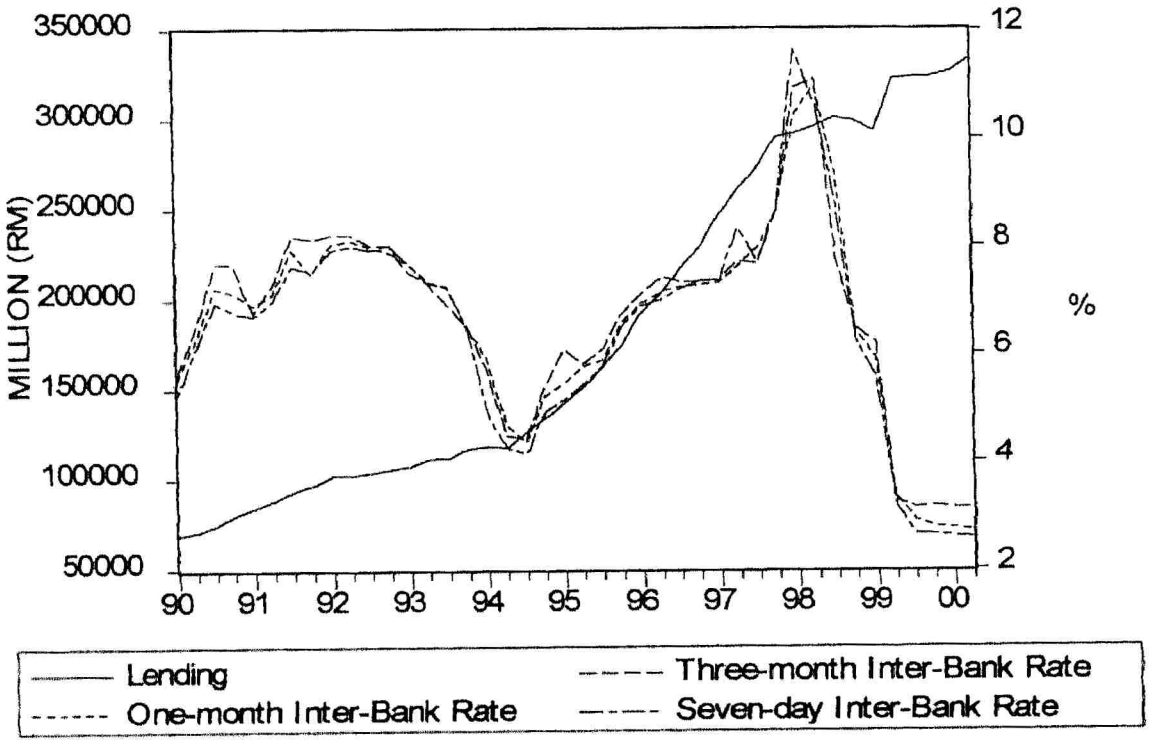
The total deposit in the commercial banks exhibits an upward trend as shown in Figure 1.2. Both the total lending and deposit in the commercial banks exhibited rather similar upward trend. However, Figure 1.2 shows that the gap between the lending and deposit has become larger since 1997. This may be due to outflow of funds during the financial crisis.

Figure 1.2 Aggregate Lending and Deposit of Commercial Banks



As shown in Figure 1.3, when the inter-bank interest rate decreased from an average of 11% at the second quarter of 1998 to 3.2% at second quarter of 1999, the aggregate commercial bank loans and advances only increased from RM296 billion to RM322 billion. Further, when the inter-bank interest rate decreased from an average of 11% at the second quarter of 1998 to 6.2% at first quarter of 1999, but the aggregate commercial bank loans and advances decreased from RM296 billion to RM294 billion. This suggests that the interest rate is not the only factor which determines the aggregate commercial bank lending especially during the financial crisis. Other factors like the economic and business environment play a very important role to determine amount of new loans released by the commercial banks as well as to recall the existing loans.

Figure 1.3 Commercial Bank Lending and Inter-bank Rate



Scholnick (1991) studied the disequilibrium model of lending rate determination for the case of Malaysia. He concluded that there is a long lag before lending rates respond to exogenous shocks, and this does not fully clear the loan market. The commercial bank lending is sticky in responding to monetary shocks. Bacchetta and Ballabriga (2000) highlighted that for monetary contractions, the bank loans decline more than the amount of funds available in medium term. But in short run, loans are more sticky and react less than money.

In Malaysia, inter-bank money market interest rate could have small impact on some of the commercial bank lending to some extent. For instance, the total loans and advances released from the funds monitored by Bank Negara Malaysia are based on some other criteria. The government policy plays an important role in determining the aggregate loans and advances released to the market. This introduces differences in the adjustment speed and stickiness of the total commercial bank lending to interest rate shocks.

Moazzami (1999) studied the short and long run impacts of changes in the money market rate on lending rates for the case of U.S. and Canada. He found that the differences in the adjustment speed and stickiness are attributed to the structure of their financial system.

The three-month inter-bank interest rate is on increasing trend from the third quarter of 1994 to second quarter of 1998 and reached more than 11% at the peak. However, the three-month inter-bank rate has dropped since the implementation of capital control and several other measures during the financial crisis. Since that, the three-month inter-bank interest rate decreased sharply from 11% to 3% in one year but the impact on the aggregate commercial bank lending is not as obvious as expected.

PERPUSTAKAAN UNIVERSITI MALAYA

1.5 Organization Of Study

This research paper consists of six chapters. The first chapter introduces the objective of the study, provides some background information on the financial system of Malaysia and discusses the trend of aggregate commercial bank lending and interest rates. The second chapter focuses on the literature review. This is followed by a discussion of the methodology in Chapter 3. Chapter 4 discusses the empirical results of the study. The conclusion and recommendation for further research is given in Chapter 5.