CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Some of the previous studies on the relationship between bank lending and interest rate are discussed in this chapter. The literature review is divided into two sections. The first section is on the previous studies on bank lending and interest rate for the case of other countries. The second section reviews the previous studies for the case of Malaysia.

2.2 Bank Lending and Interest Rate for the Case of Other Countries

Dell'Ariccia and Garibaldi (1998) pointed out that 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, they showed that the bank lending responds asymmetrically to positive and negative interest rate shocks in the money market for the case of United State and Mexico. A two-step procedure was employed to show that the response of bank lending to interest rate shocks is asymmetric. In the first step, the money market rate processes were estimated and the associated residuals were used for constructing positive and negative money market interest rate shocks. The second step involves regressing the aggregate real loans on its lagged values, lagged values of real

deposit, lagged values of positive and negative interest shocks, and time trend. They pointed out that the bank can quickly recall non-performing loans but there is considerable delay in expanding credit, so the response of bank lending to the interest rate changes is asymmetric. As a result positive shocks in the money market interest rate lead to an immediate contraction in bank lending, but negative shocks in money market interest rate give a slow expansion of bank lending.

Hardy (1998) suggested that the financial market reaction to a change in official interest rates depends on the extent to which the change is anticipated. The change in the official interest rate which is interpreted as a signal of future official policy causes the market to react accordingly. He separated such interest rate changes into the anticipated and unanticipated components. The reaction of the market to unexpected changes in the official rates is found to be vary immediate but moderate in magnitude. His study only focused on the market reaction to the anticipation and surprises in the interest rate policy of the central bank. However, he did not further discuss the impact of the anticipation and surprises in the interest rate policy on the aggregate commercial bank lending.

Bacchetta and Ballabriga (2000) estimated a vector autoregressive model with six variables namely the real bank reserves, short-term money market interest rate, real bank deposit, real bank loans, consumer price index, and industrial production. They computed the impulse response functions to examine the impact of a shock to the Federal fund rate. They highlighted that during monetary

contraction, the bank lending declines more than medium term funds. With interest rate shocks, the decline in bank loans is stronger than the decline in deposit in the medium term. However in shock term, the bank deposits react more than the bank loans. It means, loans are sticky and react less in the short run. In their study the interest rate shocks were used as a proxy to monetary policy changes. As they pointed out, the loans and output responses to an increase in interest rate tend to be more synchronized than those of money and output.

Moazzami (1999) studied the short and long run impacts of changes in the money market rates on the lending rates for the case of U.S. and Canada. He used the error-correction modelling framework to distinguish between short and long run equilibrium effects. He found that the differences in adjustment speed and stickiness are attributed to the structure of their financial systems. He pointed out that there was a movement towards fewer, larger banks that were less inclined to keep their lending rates in disequilibrium due to lower adjustment cost. He only studied the short and long-run impact of changes in money market rates on lending rates, but not on the aggregate commercial bank lending.

Winker (1999) highlighted that the deposit and loan rates do not adapt immediately to changes in the money market rate in the case of Germany. The loan rates react slower than deposit rates due to the effects of asymmetric information. In his research, the adjustment of deposit and loan rate to changes in the money market rate is estimated in an error correction model.

Hardy (1998) indicated that the ability of the central bank to send clear signals of its own intentions will depend on the market informational efficiency. He also pointed out that any intervention from the central bank in the financial market will affect the incentives for market participants to acquire information. Central bank interventions can cause the information to be less valuable to market participants. Consequently, there is less information content in the market prices. It was suggested that the optimal intervention rule should balance the need to intervene to keep money market prices in line with the operational target.

Stiglitz and Weiss (1981), modelled excess demand and excess supply in the credit market and showed that the interest rate directly affects the quality of the loan in a manner which matters to the bank. Their research showed that in equilibrium a loan market may be characterized by credit rationing. Banks are concerned about the interest rate they receive on the loan and the riskiness of the loan. However, the interest rate may affect the riskiness of the loan. Besides that, the adverse selection effect and the incentive effect are derived from the imperfect information in the loan markets.

2.3 Bank Lending and Interest Rate for the Case of Malaysia

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 usually fully clear the market for loans.

Scholnick (1996) studied the rigidity of commercial bank interest rates for the cases in Malaysia and Singapore. An asymmetric error-correction technique was used in his research. He highlighted that the asymmetric adjustment of commercial bank interest rate for Malaysia and Singapore. He concluded that the mean adjustment lag is shorter when the deposit rate is above its equilibrium.

2.4 Discussion

This literature review shows that studies on the response of bank lending to interest rate changes in the money market is relatively scarce. This is especially true for the case of Malaysia. Most of the studies concentrated on examining response of lending rates to money market interest rate shocks. It is hope that this research paper can contribute to the literature on the relationship between bank lending and interest rates.