

# Dynamics Linkages among Money, Output, Interest Rate and Price: The Case in Malaysia

Ai-Yee Ooi

Labuan International School of International Business and Finance

Universiti Malaysia Sabah, 8799 Labuan, Malaysia

E-mail: ooiay@yahoo.com

Rayenda Khresna Brahmana

School of Management, Universiti Sains Malaysia,

11800 USM Pulau Pinang, Malaysia

E-mail: raye\_brahm@yahoo.com

*Second author gratefully acknowledge the support of Universiti Sains Malaysia Fellowship Scheme*

## Abstract

This paper aims to examine the factors of monetary policy transmission that affecting output and inflation variability in Malaysia. By using quarterly data from 1980 to 2008, the results suggest that money is a lead output indicator and is also essential to curb inflation and maintain high growth rate in GDP. Interest rate is found as another important intermediate target in the monetary policy transmission mechanism in affecting output variability. The absence of causality from real GDP to price suggests that the excess of aggregates demand generated by increase in real GDP is absorbed by growth in aggregate supply.

**Keywords:** M2, Interest Rate, Price, Dynamics Linkages, Malaysia

## I. Introduction

Malaysia has sustained significant economic growth with more than 8% increase in real GDP for the past nine years before the 1997 Asian financial crisis. Prolong to the rapid economic progress since 1988, rising inflation expectations has been one of the major arising issues currently experienced by policy makers. In this context, Malaysia has been relatively successful in maintaining a low inflation environment (approximately 3.4%) with relatively high GDP growth (approximately 9.3%) per annum for the period 1990-1997(refer to Table 1).

Undeniable that monetary policy has played a major role in maintaining this low inflation, and thereby supporting the conditions for high rate of real output growth. These conditions did not persist over an extended period as 1998 episode of financial crisis has brought severe turmoil to Malaysia, with massive depreciation of local currency and thus caused a sharp increase in domestic price.

Prior to the mid-1990s, the monetary policy strategy had been implemented base on targeting monetary aggregates (M1, M2 or M3). Government first started focused targeting with M1 and shift in focus to M3 when the financial liberalization and innovation has rendered M1 less reliable for policy targeting. Evidence proves that velocities of M1 and M3 and their average values over the last ten year have diverged from their long trend (refer to table 2). Even though M2 showed divergent trend, nevertheless the divergence is comparatively smaller than that of M3. Thus, we employ M2 as monetary targets to examine its efficiency in attaining the stability of output growth and low inflation rate.

Few policy issues and questions arise and remain unresolved. What is the correct choice of a tradeoff between output variability and inflation variability? Do M2 play important role to minimize the tradeoff between these two variables' variability? Is monetary aggregate still an efficient and adequate as policy target? If not, is interest rate targeting is another potential channel for policy targeting?

Thus, this paper aims to examine the dynamic linkages among the money, output, interest rate and inflation to ascertain the importance of the monetary policy transmission mechanism by using Malaysia data. In particular, the specific objectives of this paper are:

1. To investigate if money aggregates (M2) is essential to curb inflation and maintain high growth rate in GDP.
2. To determine if interest rate is another important channel in the monetary policy transmission mechanism in affecting output and inflation variability.

The remainder of this paper is organized as follow: First section focus on the brief introduction about Malaysia economy in 1990's and the economic problems that still remain unresolved. Section 2 reviews empirically the