

**THE DEMAND FOR MONEY IN MALAYSIA:
A COINTEGRATION AND ERROR CORRECTION MODEL**

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requirements for the degree Master of Economics,
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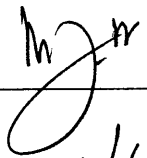
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Abstrak

Tujuan utama kertas penyelidikan ini adalah untuk menganggar fungsi permintaan wang (M1 dan M2) di Malaysia dengan menggunakan data suku tahunan. Kertas penyelidikan ini merangkumi tempoh dari 1982:1 hingga 1998:2 dan penggunaan teknik ekonometrik yang terkini iaitu “Cointegration dan Error Correction Modeling”. Untuk tujuan penilaian kesan krisis kewangan Asia Tenggara yang bermula pada pertengahan tahun 1997 ke atas fungsi permintaan wang di Malaysia, kami membahagikan sampel tersebut kepada dua sub-sampel iaitu 1982:1-1996:4 dan 1982:1-1998:2. Keputusan empirik menunjukkan bukti bahawa wujud kesan krisis kewangan ke atas fungsi permintaan wang di Malaysia. Keputusan empirik juga menunjukkan keseimbangan wang benar, pendapatan benar, kadar pulangan wang, kadar pulangan alternatif aset, harga saham, jangkaan susutnilai kadar pertukaran dan kadar bunga asing adalah berkointegrasi. Oleh demikian, kami telah menggunakan kaedah “Johansen’s Cointegration” untuk menganggar dan membentuk permintaan wang benar (M1 dan M2) jangka panjang. Pembolehubah rambang daripada permintaan wang benar jangka panjang tadi kemudian telah digunakan dalam pembentukan “error correction model” untuk M1 dan M2. Pendekatan “general-to-specific” oleh Hendry telah digunakan untuk mendapat bentuk akhir dinamik bagi permintaan wang benar (M1 dan M2) jangka pendek. Keputusan menunjukkan bahawa pembolehubah bebas yang mempengaruhi permintaan M1 jangka pendek adalah pendapatan benar, kadar pulangan wang, harga saham, jangkaan susutnilai kadar pertukaran wang, pembolehubah patung bermusim (seasonal dummy) dan pembolehubah “error-correction” yang diperoleh daripada permintaan M1 jangka panjang. Di samping itu, pembolehubah bebas yang mempengaruhi permintaan M2 jangka pendek pula adalah pendapatan benar, kadar pulangan alternatif aset, jangkaan susutnilai kadar pertukaran, kadar bunga asing, pembolehubah patung bermusim dan pembolehubah “error-correction” yang diperoleh daripada permintaan M2 jangka panjang. Akhirnya, ujian “CUSUM dan CUSUM of Squares” telah dijalankan dan keputusan ujian menunjukkan bahawa

anggaran fungsi permintaan adalah **stabil** semasa 1982: 1 hingga 1998:2 walaupun terdapat **liberalisasi** kewangan dan proses inovasi yang dialami oleh sistem kewangan Malaysia. Keputusan empirik **juga** menunjukkan bahawa wujud penggantian **mata** wang di Malaysia samasa tempoh kajian tersebut.

Abstract

The main purpose of this study is to estimate the demand for money (M1 and M2) in Malaysia using quarterly data over the period of 1982:1 to 1998:2 using recently developed econometric techniques of cointegration and error correction methodology. To take into account the effect of Asian Financial Crisis in mid 1997 on the behavior of the demand for money in Malaysia, the sample period is divided into two sub-samples: 1982:1 to 1996:4 and 1982:1 to 1998:2. The results provide evidence that the crisis somewhat affect the behavior of the money demand. The results of the study also show that the real money balances, real income, **money's** own rate of return, the rate of return of alternative assets, stock prices, expected exchange rate depreciation and foreign interest rate are cointegrated. Thus, the long run demand for real money balances for M1 and M2 are specified and estimated by using Johansen's cointegration method. Later, the calculated error terms from the long run money for M1 and M2 are then used in the error correction model of M1 and M2 respectively. The Hendry's general to specific procedure is used to reach the final form of the short run dynamic demand for M1 and M2. The results show that the variables that influence the demand for M1 in the short run are real income, money's own rate, stock prices, the expected exchange rate depreciation, seasonal dummy and the error correction term from the long-run demand for M1. On the other hand, the variables that influence the demand for M2 in the short run are real income, the rate of return of alternative assets, expected exchange rate depreciation, foreign interest rate, seasonal dummy and the error correction term from the long run demand for M2. Finally, the result of the CUSUM and CUSUM of Squares test suggest that the estimated demand functions remain stable over the 1983:2 to 1998:2 period in spite of the financial liberalization and innovation process that the Malaysian financial system has been experiencing. The findings also indicate the presence of currency substitution in Malaysia during the study period.

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**The Demand for Money in Malaysia:
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1.0 Introduction

1.1 Definition and the Roles of Money

Economists define money as anything that is generally accepted in payment for goods or services or in the repayment of debts. Whether money is shells or rocks or gold or paper, it has three primary functions in any economy: as a medium of exchange, a unit of account, and a store of value. The use of money as a medium of exchange will promote economic efficiency by eliminating much of the time spent in exchanging goods and services. Besides that, the used of money as a unit of account reduces transaction costs in an economy by reducing the number of prices that need to be considered. The benefit of money grows, as the economy becomes more complex. Finally, money can also contribute to economic development by enabling saving and investment through the transfer of funds from saver to borrowers.

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