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**STABILITY OF MONEY DEMAND IN PAKISTAN: THE
IMPACT OF EXCHANGE RATE, REMITTANCES, AND
FINANCIAL LIBERALIZATION**



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UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
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By

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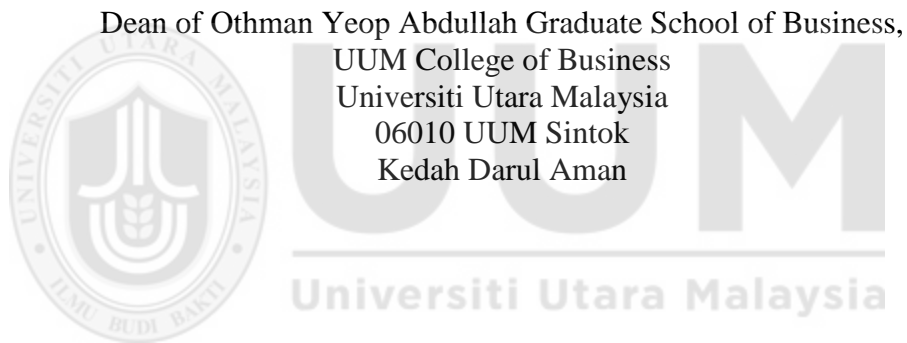
**Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
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In Fulfilment of the Requirement for the Degree of Doctor of Philosophy**

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ABSTRACT

Understanding the demand for money in an economy is an important prerequisite for formulating and conducting monetary policy. Several macroeconomic variables influence the money demand. Pakistan has undergone significant changes in the macroeconomic landscape over the years such as exchange rate changes with its volatility, remittances, and financial liberalization. Such changes in the economy might have caused shifts in the parameters of the money demand function over time, making the function unreliable for policy decisions. It is therefore necessary to investigate money demand function in the Pakistan, including exchange rate with its volatility, remittances, and financial liberalization in order to capture their long-run and short-run effects. Using Autoregressive Distributed Lag (ARDL) Bounds Testing Approach, this study sought to examine the relationship between demand for money and exchange rate with its volatility, remittances and the pace of financial liberalization in Pakistan using data from 1972 to 2014. Empirical results of the study reveal that exchange rate and its volatility support the wealth effect hypothesis, and uncertainty in the exchange rate drives more holding of the domestic currency. The positive and inelastic coefficient of remittances show the increasing patterns of consumption among the households and revealing inefficiency of regular channels of remittances in Pakistan. Financial liberalization increases money demand and its small coefficient reveals that the pace of financial liberalization is still growing. Finally, this thesis examines the stability of both models for policy implementation. The results reveal that only model for real narrow money demand is stable. Thus, the policy makers should consider real narrow money demand as a policy tool in Pakistan.

Keywords: money demand, volatility, remittances, financial liberalization, ARDL

ABSTRAK

Memahami permintaan wang dalam ekonomi adalah prasyarat penting bagi merangka dan menjalankan dasar kewangan. Permintaan wang dipengaruhi oleh beberapa pemboleh ubah makroekonomi. Selama ini, negara Pakistan telah mengalami perubahan yang ketara dalam landskap makroekonomi seperti perubahan kadar pertukaran yang tidak stabil, kiriman wang dan liberalisasi kewangan. Sebarang perubahan dalam ekonomi mungkin telah menyebabkan perubahan dalam parameter fungsi permintaan wang dari semasa ke semasa. Justeru itu, ia menjadikan fungsi itu tidak boleh dipercayai dalam membuat keputusan berkaitan dasar. Oleh itu, adalah perlu untuk mengkaji fungsi permintaan wang di Pakistan, termasuk kadar pertukaran yang tidak stabil, kiriman wang dan liberalisasi kewangan untuk melihat kesan jangka panjang dan jangka pendek. Dengan menggunakan pendekatan *Autoregresif Distributed lagged (ARDL) Bounds Testing*, kajian ini bertujuan untuk mengkaji hubungan antara permintaan wang dan pertukaran kadar mata wang yang tidak stabil, kiriman wang dan kadar liberalisasi kewangan di Pakistan dengan menggunakan data dari tahun 1972 hingga 2014. Keputusan empirikal mendedahkan bahawa kadar pertukaran yang tidak stabil menyokong hipotesis kesan kekayaan dan ketidaktentuan dalam pertukaran mata wang menyebabkan peningkatan dalam pegangan mata wang domestik. Pekali kiriman wang yang positif dan tidak anjal menunjukkan peningkatan dalam corak penggunaan dalam kalangan isi rumah dan mendedahkan ketidakcekapan saluran biasa kiriman wang di Pakistan. Liberalisasi kewangan meningkatkan permintaan wang dan pekalinnya yang kecil mendedahkan bahawa kadar liberalisasi kewangan masih dalam proses. Akhirnya, kajian ini mengkaji kestabilan kedua-dua model untuk pelaksanaan dasar. Keputusan menunjukkan bahawa hanya model permintaan wang sempit yang sebenar adalah stabil. Maka, pembuat dasar perlu mengambil kira permintaan wang sempit yang sebenar sebagai satu alat dasar di Pakistan.

Kata Kunci : permintaan wang, *volatility* , kiriman wang, liberalisasi kewangan, ARDL

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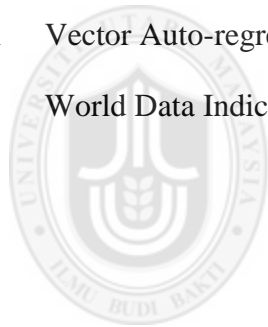
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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AIC	Akaike Information Criterion
ARDL	Auto-regressive Distributed lag
ASEAN	Association of South Asian Nations
BOE	Bank of England
BSC	Bayesian Schwartz Criterion
ECB	European Central Bank
EG	Engle Granger
EU	European Union
Fed	Federal Reserve Board
FSRs	Financial Structural Reforms
FY	Fiscal Year
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GNP	Gross National Product
HQC	Hannan Quinn Criterion
IADB	Inter-American Development Bank
IFS	International financial statistics
IMF	International Monetary Fund
JJ	Johansen Julius
KSA	Kingdom of Saudi Arabia
LDCs	Less Developed Countries
LN	Natural Logarithm

Log	Logarithm
PAD	Partial Adjustment Dynamic
PKR	Pak Rupee
SAP	Structural Adjustment Program
SBP	State Bank of Pakistan
UAE	United Arab Emirates
UK	United Kingdom
US	United States
USA	United States of America
USD	United States Dollar
VAR	Vector Auto-regressive
WDI	World Data Indicator



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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The function for money demand has long been a fundamental block in macroeconomic modelling and remained an important framework for monetary policy in the economy. This chapter presents background of the study, problem statement, research questions, research objectives, scope of the study, and significance of the study. Further, it discusses historical review of money supply, exchange rate, and remittances in the context of Pakistan, ending the chapter with summary and organization of the study.

1.2 Background of the Study

Money demand is considered as heart of the monetary policy in the field of monetary-economics. It can be defined as the amount of cash balances desired to hold in one's pockets. Money demand can be further divided into combination of liquid and semi-liquid assets that can be easily used as medium of exchange. It guides the policy makers in devising optimal monetary policy for the economy. Because of its importance, many studies have been conducted in both developed and developing economies in the past. There are basically two issues related to money demand world-wide. First, money demand should be in coordination with the announced objectives of monetary policy of an economy. Second, irrespective of the size of the economy, there should be specific form of money demand function which plays key role in the whole economy.

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