UNIVERSITI PUTRA MALAYSIA

SHORT-RUN AND LONG-RUN DETERMINANTS OF VIOLENT AND PROPERTY CRIMES IN MALAYSIA BASED ON NATIONAL AND STATE LEVEL DATA

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DOCTOR OF PHILOSOPHY
UNIVERSITI PUTRA MALAYSIA

2011
DEDICATION

DEDICATED TO MY MOTHER AND MY FATHER
MY WIFE, MY DAUGHTER AND MY SONS
MY FRIENDS
THOSE WHO HAVE CONTRIBUTED SOMETHING INTO MY LIFE
HOWEVER TRIVIAL IT MAY SEEM
Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

SHORT-RUN AND LONG-RUN DETERMINANTS OF VIOLENT AND PROPERTY CRIMES IN MALAYSIA BASED ON NATIONAL AND STATE LEVEL DATA

By

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August 2011

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This study aims to provide a systematic investigation of the socio-economic causes of crime offences in Malaysia for national and state levels. Two empirical analyses, time series and panel data analysis have been used to examine the interactions between different categories of crime and four explanatory variables namely: police size, unemployment rate, higher education level, and real GDP per capita. The econometric modeling adopted in this study is ARDL bound testing method for time series analysis and PMG estimating technique for panel data analysis, to examine both the long-run and short-run effects of socio-economic determinants on various categories of crime listed in the Malaysian crime index. The main findings of the study can be summarized as follows: First, the results have constantly shown that, for both the national and state level, except for higher education level, all socio-economic variables considered have more significant effect on property crimes than violent crimes in the long-run. However, the effect of higher education level on crime is different because it has more effect on violent crimes than property crimes. All socio-
economic variables considered do not affect or is less influential on most categories of the crime in the short-run. Second, the influences of the socio-economic factors on crime at the national and state level are slightly different. At the state level, the socio-economic variables considered have a significant effect on the most categories of property and violent crimes, especially in the long-run. The results are mixed with negative and positive correlation or even insignificant and show up most strongly for property crimes than violent crimes. However, their effects are different at the national level where police size, unemployment rate and higher educational level generally do not affect violent crime rate whether in the short-run or long-run. They do affect the property crime; however, police size and higher education level play a limited influence on this type of crime. Third, real GDP per capita and unemployment rate are the most important factors that influence property and violent crime for both at the national level and at the state level in the long-run. Therefore, our results are consistent with most of empirical studies in the economics of crime which suggests that economic conditions play an important role influencing particularly property crimes.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia Sebagai Memenuhi keperluan untuk ijazah Doktor Falsafah

PENENTU JENAYAH KEGANASAN DAN HARTA BENDA UNTUK JANGKA PENDEK DAN JANGKA PANJANG DI MALAYSIA BERDASARKAN DATA PERINGKAT NASIONAL DAN NEGERI

Oleh
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Kajian ini bertujuan untuk menyediakan penyiasatan yang sistematik bagi penyebab berlakunya jenayah di Malaysia di peringkat nasional dan negeri. Dua analisis empirikal telah digunakan iaitu analisis siri masa dan analisis data panel untuk menganalisa hubungan antara berbagai kategori jenayah yang berbeza dan empat pembolehubah bebas iaitu saiz polis, kadar pengangguran, tahap pendidikan tinggi dan Keluaran Dalam Negara Kasar (KDNK) benar per kapita. Model ekonometrik yang telah digunakan dalam kajian ini ialah kaedah ujian ARDL untuk analisis masa dan teknik anggaran PMG untuk analisis data panel, untuk menganalisa kesan jangka panjang dan jangka pendek bagi penentu sosio ekonomi terhadap berbagai kategori jenayah yang disenaraikan dalam Index Jenayah Malaysia. Dapatan utama kajian boleh diringkaskan seperti berikut: Pertama, hasil kajian secara tetap menunjukkan bagi peringkat nasional dan negeri, kecuali tahap pendidikan tinggi, semua pembolehubah sosio ekonomi yang diambilkira lebih mengesani jenayah harta benda berbanding jenayah kekerasan untuk jangka panjang. Bagaimanapun, kesan tahap
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I certify that a Thesis Examination Committee has met on 23 August 2010 to conduct the final examination of Tan Keat Siang on his thesis entitled “Short-run and Long-run Determinants of Violent and Property Crimes in Malaysia Based On National and State Level Data” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A)106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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DECLARATION

I declare that the thesis is my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or other institutions of higher learning.

TAN KEAT SIANG

Date: 23 AUGUST 2011
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEDICATION</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>APPROVAL</td>
<td>viii</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xv</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xvi</td>
</tr>
</tbody>
</table>

## CHAPTER

1 INTRODUCTION

1.1 Background 1

1.2 Crime Trends in Malaysian States 7

1.3 Problem Statement 12

1.4 Objectives of the Study 20

1.5 Significance of the Study 20

1.6 Scope of the Study 23

1.7 Organization of the Study 23

2 DETERMINANTS OF CRIME: A REVIEW OF RELATED LITERATURES

2.1 Introduction 25

2.2 Crime Theory 26

2.3 The Basic Concept of Economics of Crime Model 30

2.4 Theoretical Framework – The Economic or Rational Choice Crime Model 34

2.5 Determinants of Crime – Some Empirical Evidences 45

2.5.1 Unemployment and Crime 48

2.5.2 Higher Education Level and Crime 63

2.5.3 Real GDP Per Capita and Crime 72

2.5.4 Police Size and Crime 77

2.6 Conclusion 89

3 METHODOLOGY

3.1 Introduction 91

3.2 The Econometric Model 92

3.3 The ARDL Model 96
3.3.1 The Unit Root Tests
  3.3.1.1 Augmented Dickey Fuller (ADF) Unit Root Test
  3.3.1.2 Phillips-Peron (PP) Unit Root Test
  3.3.1.3 Ng and Perron (NP) Unit Root Test
3.3.2 Cointegration Test
3.3.3 ARDL Bounds Testing Procedure
3.3.4 Diagnostic Checking and Weight Construction

3.4 Panel Data Analysis
  3.4.1 Pooled Mean Group (PMG) Model
  3.4.2 Panel Unit Root Tests
    3.4.2.1 Levin, Lin and Chu (LLC; 2002)
    3.4.2.2 Im, Pesaran and Shin (IPS; 1997)
    3.4.2.3 Maddala and Wu (MW; 1999)
  3.4.3 PMG Panel Analysis Procedure
  3.4.4 Hausman Test

3.5 Sources of Data and Variables Used
  3.5.1 Socio-economic Variables
  3.5.2 National Time Series Data and State Panel Data
    3.5.2.1 National Time Series Data
    3.5.2.2 Panel Data
  3.5.3 Sources of Data

4 EMPIRICAL RESULTS
  4.1 Introduction
  4.2 Results of the Time Series Analysis
    4.2.1 Time Series Unit Root Test
    4.2.2 Cointegration Analysis of ARDL Model
    4.2.3 CUSUM and CUSUM of Square Tests
    4.2.4 Other Diagnostic Tests
    4.2.5 Results of the Long-run Coefficient for ARDL Model
      4.2.5.1 Results of the Long-run Analysis for Violent Crime
      4.2.5.2 Results of the Long-run Analysis for Property Crime
    4.2.6 Results of the Short-run Analysis for ARDL Model
      4.2.6.1 Results of the Short-run Analysis for Violent Crime
      4.2.6.2 Results of the Short-run Analysis for Property Crime
    4.2.7 Summary of the Time Series Analysis
  4.3 Results of the Panel Data Analysis
    4.3.1 Panel Unit Root Tests
    4.3.2 Results of the Long-run Analysis for PMG Model
4.3.2.1 Results of the Long-run Analysis for Violent Crime 161
4.3.2.2 Results of the Long-run Analysis for Property Crime 165
4.3.3 Results of the Short-run Analysis for PMG Model 170
  4.3.3.1 Results of the Short-run Analysis for Violent Crime 171
  4.3.3.2 Results of the Short-run Analysis for Property Crime 176
4.3.4 Results of the Short-run Analysis of PMG Model for Different States 178
4.3.5 Summary of the Panel Data Analysis 179
4.4 Conclusion 183

5 CONCLUSION
  5.1 Introduction 188
  5.2 Summary of the Study 188
  5.3 Conclusion Remarks 195
  5.4 Policy Recommendations 200
  5.5 Limitation of the Study 204
  5.6 Recommendation of Further Study 206

REFERENCES
APPENDICES
BIODATA OF STUDENT
LIST OF PUBLICATIONS