



UNIVERSITI PUTRA MALAYSIA

**RELATIONSHIP BETWEEN MILITARY EXPENDITURE AND ECONOMIC
DEVELOPMENT IN THE UNITED STATES OF AMERICA, FRANCE, INDIA AND
CHINA**

MASOUD ALI KHALID

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UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

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By

MASOUD ALI KHALID

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirement for the Degree of Master of Science.**

May 2014

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DEDICATION

To my ever-loving parents

To my dearest brother and my lovely sisters



Abstract of Thesis Presented to the Senate of Universiti Putra Malaysia in
Fulfillment of the Requirement for the Degree of Master of Science

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By

MASOUD ALI KHALID

MAY 2014

Chairperson: Zaleha Mohd Noor, PhD
Faculty: Economics and Management

This study investigated the relationship between government military expenditure and economic development in four countries namely, United States of America, France, China, and India over the period from 1970-2011. The specific objectives of this study are: (i) to determine the impact of military expenditure on economic growth, and (ii) to examine the determinants of military spending in the four countries. To achieve the two objectives in this study the researcher used Autoregressive distributed lag (ARDL) bounds test approach developed by Pesaran et al. (2001) on the new macroeconomic model by Romer and Taylor (2000), and Wagner's Law model by Peacock and Wiseman (1961). For the independent variables, several macroeconomic variables were used such as government non-military expenditure, real interest rate, Gross Domestic Product Growth, population and exports, while for the dependent variables, Gross Domestic Product and government military expenditure were employed..

The results for the first objective reveal that, in the short and long-run, the relationship between government military expenditure and economic growth is significant and negative in the case of the USA, while for France and China this relationship is significant and positive in the short-run . In contrast, this relationship is inconclusive in the long-run for both counties. Additionally, the correlations between these two variables are also inconclusive in the case of India.

The results for the second objective show that, population and export are the negative factors to determine military expenditure for the USA in the short-run, and statistically significant, but inconclusive in the long-run. Moreover, in the case of France, the result indicates that, Gross Domestic Product Growth plays a negative and significant role to

determine the government's military spending in both periods, while export plays a positive and significant role in military spending in the short-run, but it is insignificant in the long-run. Furthermore, the result for China indicates that, in the long-run, export is positive and significant and it is the main factor determining the Chinese military expenditure, while this result is in contrast to the short-term, and it is an inconclusive result. Population is an important determinant of military spending in the short-run, and positive and significant for the Chinese military sector. Furthermore, population and exports are extremely important factors in determining the Indian military spending in both periods.



Abstrak tesis dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi dikemukakan keperluan untuk Ijazah Masters Sains.

**HUBUNGAN DIANTARA PERBELANJAAN KETENTERAAN KERAJAAAN
DENGAN PEMBANGUNAN EKONOMI DI AMERICA, FRANCE, INDIA DAN
CHINA**

Oleh

MASOUD ALI KHALID

Mei 2014

Pengerusi: Zaleha Mohd Noor , PhD
Fakulti : Ekonomi dan Pengurusan

Kajian ini bertujuan untuk mengetahui kesan dari perbelanjaan ketenteraan oleh kerajaan ke atas pembangunan ekonomi bagi empat negara, iaitu Amerika Syarikat, Perancis, China dan India, bagi tempoh dari 1975 hingga 2011. Tujuan khusus kajian ini adalah, (i) untuk menentukan hubungan jangka pendek dan jangka panjang di antara perbelanjaan ketenteraan dan pembangunan ekonomi, dan (ii) untuk melihat apakah penentu-penentu bagi perbelanjaan ketenteraan di keempat-empat negara ini. Bagi mencapai kedua-dua objektif ini, kami telah menggunakan Autoregressive Distributed lag (ARDL) pendekatan ujian Bounds yang dikembangkan oleh Pesaran et al. (2001) ke atas model makroekonomi baru oleh Ferda Halicioglu (2004) dan model hukum Wagner oleh peacock and wiseman (1961). Bagi pemboleh ubah bebas kami telah menggunakan pemboleh ubah makroekonomi seperti perbelanjaan kerajaan bukan ketenteraan, perbelanjaan ketenteraan kerajaan, kadar faedah, kadar pertumbuhan bagi keluaran dalam negara kasar, populasi dan eksport.

Hasil kajian bagi objektif pertama mendapati dalam jangka pendek dan jangka panjang, perbelanjaan ketenteraan kerajaan memberikan kesan negatif kepada pembangunan ekonomi bagi kes di Amerika Syarikat, sementara bagi kes di Perancis dan China, perbelanjaan ketenteraan dalam jangka pendek memberi kesan positif kepada pembangunan ekonomi. Sebaliknya, hubungan yang tidak menyakinkan didapati bagi jangka panjang bagi kedua-dua negara ini. Tambahan lagi, hasil kajian mendapati tiada kesan jelas di antara perbelanjaan ketenteraan kerajaan dengan pembangunan ekonomi di India, baik bagi jangka pendek atau pun jangka panjang.

Hasil kajian bagi objektif kedua bagi Amerika Syarikat menunjukkan populasi dan eksport mempunyai kesan negatif dan signifikan ke atas perbelanjaan ketenteraan kerajaan dalam jangka pendek, tetapi tidak menunjukkan hubungan yang bermakna dalam jangka panjang. Tambahan pula, hasil kajian bagi negara Perancis menunjukkan pertumbuhan keluaran dalam negara kasar mempunyai hubungan negatif dan signifikan dengan perbelanjaan ketenteraan bagi kedua-dua jangkamasa, sementara eksport mempunyai pengaruh positif dan signifikan dalam jangka pendek tetapi mempunyai pengaruh negatif dalam jangka panjang. Seterusnya hasil kajian bagi negara China mendapati dalam jangka panjang, eksport merupakan faktor penting mempengaruhi perbelanjaan ketenteraan kerajaan secara positif dan signifikan. Populasi pula mempegaruhi perbelanjaan ketenteraan secara positif dalam jangka pendek. Juga didapati faktor-faktor populasi dan eksport adalah penting bagi menentukan perbelanjaan ketenteraan bagi negara India bagi kedua-dua jangka pendek dan panjang.



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I would like to thank my family and all my friends, thank you for your kind words and support, and I would not be where I am today if it were not for your love and support. Thank you for always believing in me. I would like to dedicate this thesis to my Mom and Dad, Aftab Faraj and Ali Khalid.

APPROVAL

I certify that an Examination Committee met on 7 May 2014 to conduct the final examination of Masoud Ali Khalid on his thesis entitled “Relationship between military expenditure and economic development in the United States of America, France, India and China” 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 Master of Science.

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DECLARATION

Declaration by Graduate Student

I hereby confirm that:

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Declaration by members of supervisory committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

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