

# “Implementation of Laffer Curve for Direct Taxes to optimize Malaysian Economic Growth”

15<sup>th</sup> November 2016

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**Supervisor**

**Professor Dr Syed Omar Syed Agil**



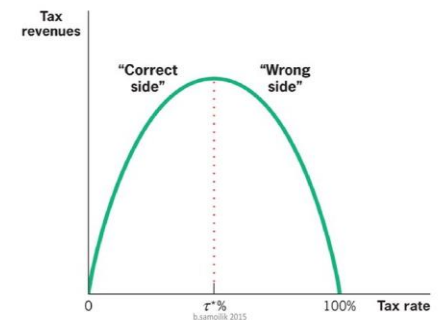
At the beginning of a dynasty, taxation yields a large revenue from small assessments. At the end of the dynasty, taxation yields a small revenue from large assessments.

Ibn Khaldun

QuoteAddicts



Laffer curve



# INTRODUCTION

TAX

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graph LR; TAX[TAX] --> A[Finance Government Expenditures and Government Debts]; TAX --> B[Building high income nation (Economic Transformation Programme) with GDP of 6% and above annually]; TAX --> C[Ensuring equal wealth distribution and well being of nation];
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Finance Government Expenditures and Government Debts

Building high income nation (Economic Transformation Programme) with GDP of 6% and above annually

Ensuring equal wealth distribution and well being of nation

# BACKGROUND OF STUDY

14<sup>th</sup> Century

Ibn Khaldun

- Initiated the concept of “higher assessments , revenue is smaller”
- The simple solution to ensure higher tax revenue by lowering tax rates – studied by Laffer, 1981

20<sup>th</sup> Century

John Maynard Keynes,  
Adam Smith

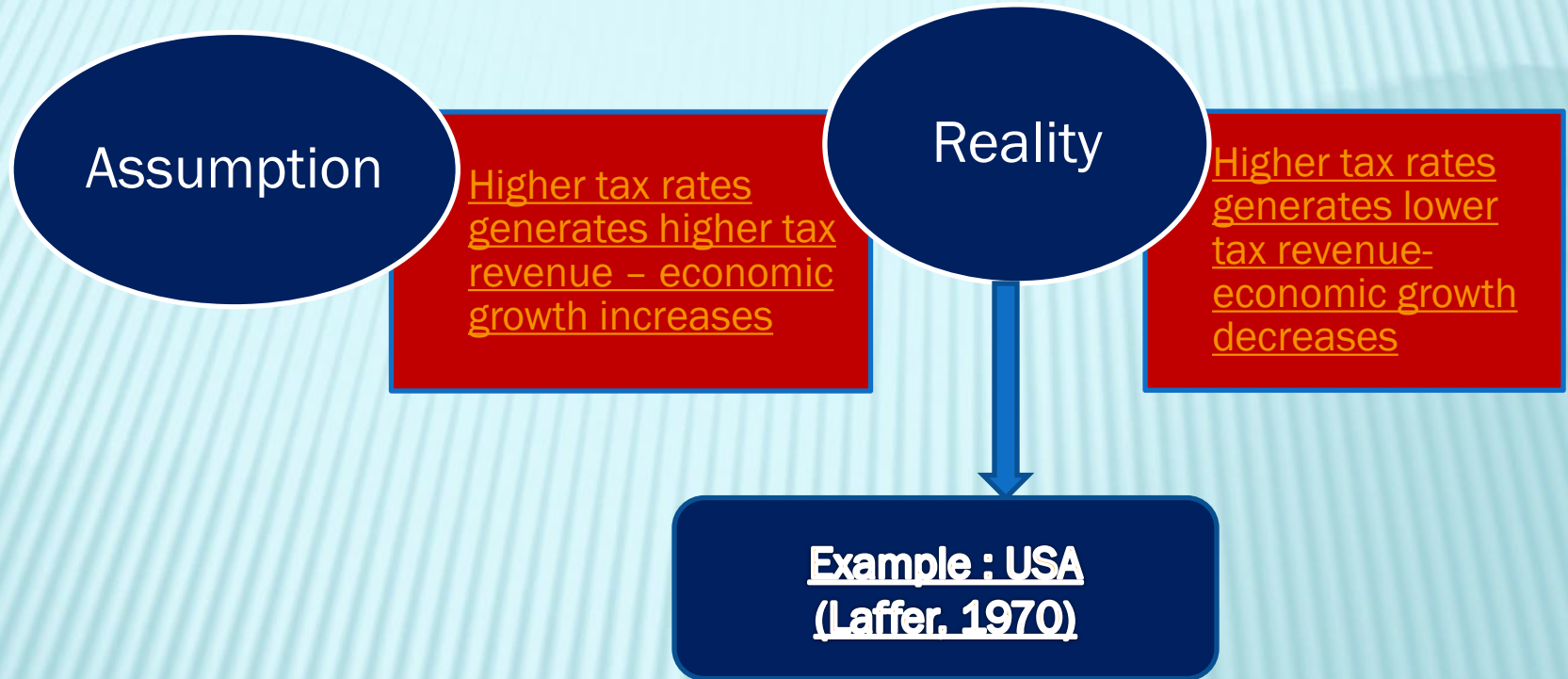
- Increased debt, difficulty in financing government expenditure
- Unsolved stagflation issues resulting in high unemployment, higher inflation over the years
- Policy of tax reduction was introduced (Burfa, Wyplosz,1993)
- Concept of Laffer Curve (Laffer, 1981)

21<sup>st</sup> century

Karas, Levy-Garboua,  
Masclet, Montmarquette

- High debts and low funds to finance government expenditure
- High budget deficits, high inflation rate, lower GDP, high unemployment

# GENERAL PERSPECTIVE





# SELECTED COUNTRIES - TAX RATES, TAX REVENUE AND GDP GROWTH RATE

Countries	TAX REVENUE (% OF GDP)	INDIVIDUAL TAX RATES	CORPORATE TAX RATES	REAL GDP GROWTH RATE
USA (U.S)	26.9%	39.6%	40%	4.2%
United Kingdom (U.K)	39.0%	45%	23%	1.8%
Australia	30.8%	45%	30%	3.7%
India	17.7%	33.99%	33.99%	5.3%
China	17.0%	45%	25%	7.4%
Hong Kong	13%	15%	16.5%	2.9%
Singapore	14.2%	17%	18%	3.5%
Malaysia	12.2%	25%	25%	1.8%

Sources by *Economy Watch, 2011 (Tax Revenue, % of GDP)*  
*KPMG, 2013 (Individual/Corporate Tax Rate, 2014)*  
*CIA World Fact book (Real GDP Growth)*

# RESEARCH PROBLEM



Low tax revenue – prohibitive range of Laffer Curve

Escalating government debt due to high levels of borrowings

Budget Deficits > 15 years  
due to government spending higher than government revenue

# RESEARCH QUESTIONS

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Is there a non-linear effect of individual/corporate tax rates on individual/corporate tax revenue?

What is the optimum tax rate for individual/corporate?

Is there an effect of individual/corporate tax rate on economic growth?

Is there a relationship between individual/corporate tax revenue and macroeconomics variables ?

# RESEARCH OBJECTIVES

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The main objective is to examine how direct tax, mainly individual/corporate tax rates affects tax revenue thus leading to higher economic growth.

The four specific research objectives are as follows:

1. To examine the non-linear effect of individual/corporate tax rate on individual/corporate tax revenues in Malaysia.
2. To obtain the approximate optimum tax rates for individual and corporate sector in order to generate maximum individual/corporate tax revenue in Malaysia.
3. To examine the effects of individual/corporate tax rates on economic growth.
4. To examine the relationship between individual/corporate tax revenue and macroeconomic variables.



# HYPOTHESIS

Hypothesis	Significant/Not significant
$H_0$	There is no non-linear effect of individual/corporate tax rates on individual/corporate tax revenue.
$H_1$	There is non-linear effect of individual/corporate tax rates on individual/corporate tax revenue
$H_0$	There is no optimum individual/corporate tax rate.
$H_2$	There is optimum individual/corporate tax rate.
$H_0$	There is no effect of individual/corporate tax rates on economic growth.
$H_3$	There is a effect between individual/corporate tax rates on economic growth.
$H_0$	There is no relationship between individual/corporate tax revenue and macroeconomic variables.
$H_4$	There is a relationship between individual/corporate tax revenue and macroeconomic variables.

# **RESEARCH GAP**

## **Studies done in European Countries, USA**

### **Optimum Tax Rate**

Previous studies examined the optimum tax using tax rates and Government revenue as the variables. Most of the research done is focused on sales tax, income tax and corporate tax. Many countries impose Marginal tax revenue versus GDP to obtain optimum tax rates.

### **Macroeconomic Variables**

Studies used variables such as Inflation, Labour Supply, GDP, profits, capital, FDI against Government revenue, and total tax revenue/government tax revenue

# RESEARCH GAP

## Study done in Malaysia

This study is the first research done in Malaysia in attempt to

- Determine the optimum tax rate for both individual and corporate tax rate using Individual /Corporate Tax rates vs Individual/ Corporate Tax Revenue
- examine the relationship between Individual/Corporate Tax Revenue versus inflation, unemployment, government debt, government expenditure, exchange rate, base lending rate and current account balance

# SCOPE OF STUDY

Tax Revenue	Non-Tax Revenue	Non Revenue Receipt
<p>Direct Tax</p> <ul style="list-style-type: none"> <li>✓ income tax on individuals</li> <li>✓ Corporations</li> <li>✓ petroleum income tax</li> <li>✓ stamp duty</li> <li>✓ real property gains tax.</li> </ul> <p>Indirect Tax</p> <ul style="list-style-type: none"> <li>✓ import duties</li> <li>✓ export duties</li> <li>✓ excise duties</li> <li>✓ sales tax</li> <li>✓ service tax</li> <li>✓ goods and services tax (GST) that replace sales tax and service tax.</li> </ul>	<ul style="list-style-type: none"> <li>✓ issuance of licences and permits</li> <li>✓ fees for specific services</li> <li>✓ proceeds from sale of government assets</li> <li>✓ rental of government property</li> <li>✓ bank interests</li> <li>✓ returns from Government investments (including gains from sales of investments) fines and forfeitures.</li> </ul>	<ul style="list-style-type: none"> <li>✓ repayments and reimbursements such as refunds of overpayments in previous years and repayment of loans from the Federal Government's Consolidated Fund (Revenue Account) received from other Federal Government Agencies and State Governments.</li> </ul>



# LITERATURE REVIEW

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Individual /Corporate Tax Revenue and Individual/Corporate Tax Rate



Optimum tax for Individual/ Corporate Tax Rate



Individual/Corporate Tax Rate vs economic growth



Individual/Corporate Tax Revenue vs Macroeconomic variables

# RESEARCH METHODOLOGY

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Contents discussed are as follows:

- Research Approach, Method and Design
- Theoretical Framework
- Data Collection - Secondary Data, Data Measurement, Data Source, Year and number of observations
- Estimating Models
- Testing Testing.pptx

# ESTIMATION ANALYSIS

## OBJECTIVE 1

To identify the linear/non-linear relationship between individual/corporate tax revenue and individual/corporate tax rates

Estimation Analysis Obj 1.docx

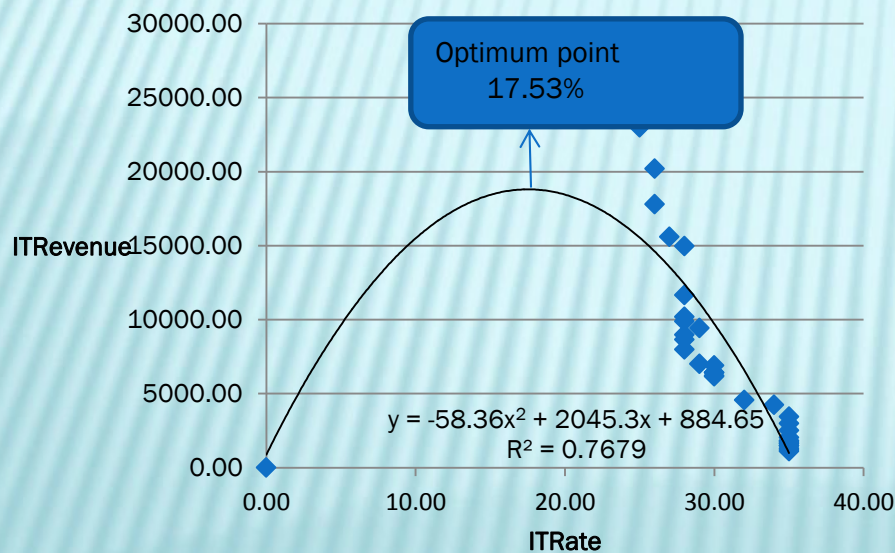
Description	Log-Log	Polynomial
Significant empirical results	Yes and more prominent	Yes
Relationship	Negative	-
Laffer Curve	Static (Sarunas Cekeras, 2012)	Dynamic (Laffer Curve, 1974)
Conclusion	Best Model	-

# ESTIMATION ANALYSIS

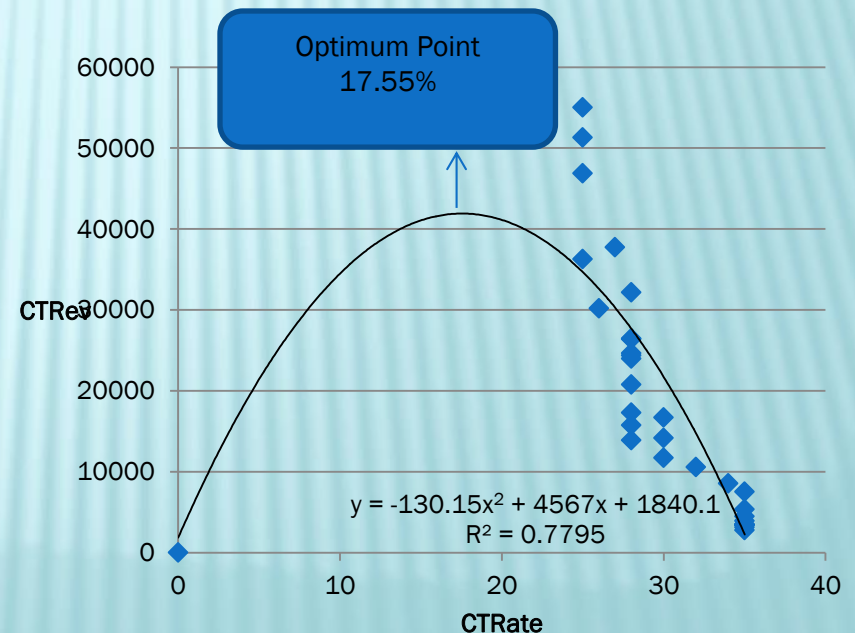
## OBJECTIVE 2 (Ibn Kaldhun, 14<sup>th</sup> Century, Laffer Curve, 1974)

To obtain the approximate optimum tax rates for individual and corporate sector in order to generate maximum individual/corporate tax revenue in Malaysia.

Malaysia Individual Tax Rate



Malaysian Optimum Corporate Tax Rate





# ESTIMATION ANALYSIS

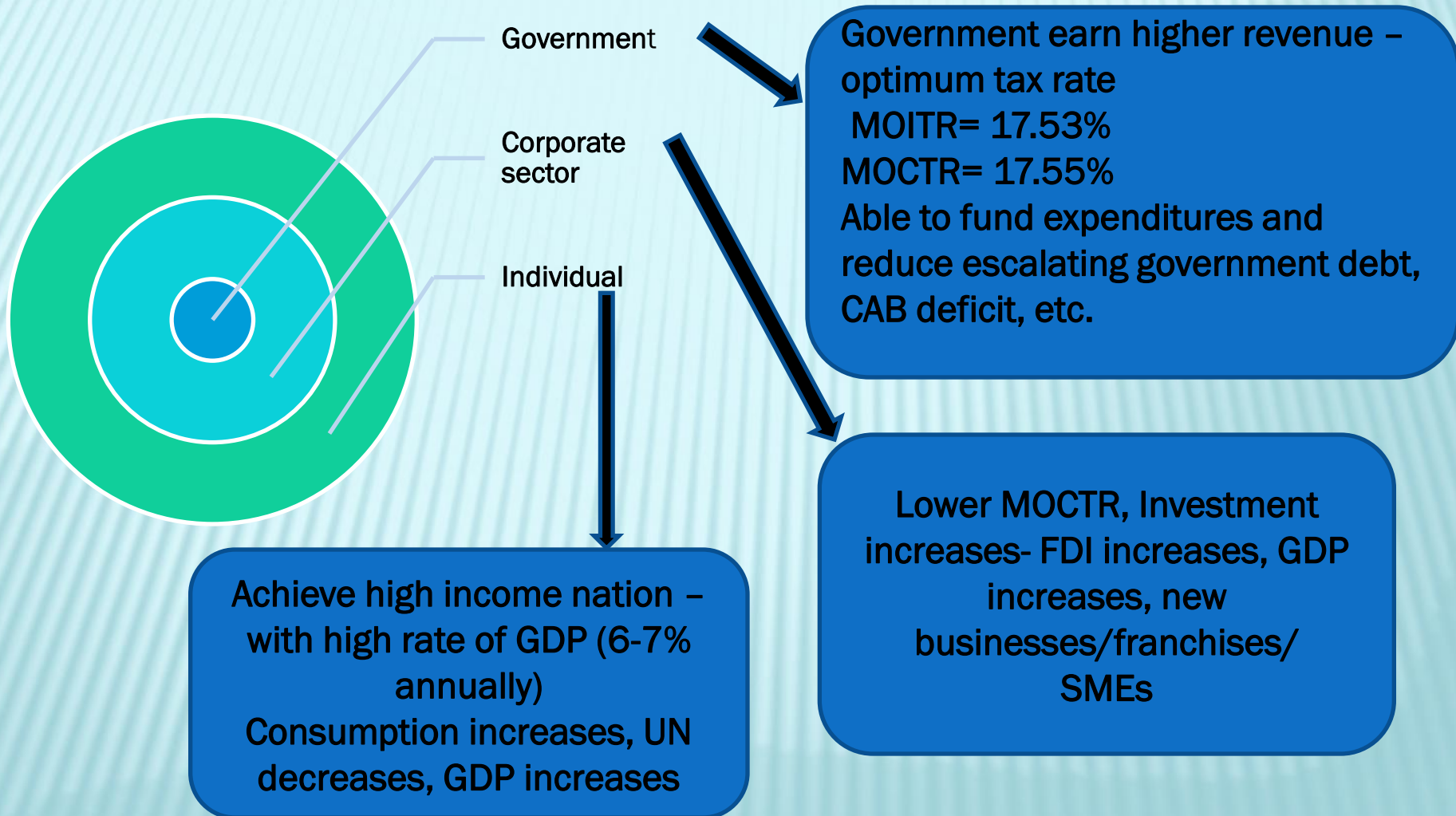
## OBJECTIVE 3

To examine the effect of tax rate ( individual/corporate) on economic growth in Malaysia.

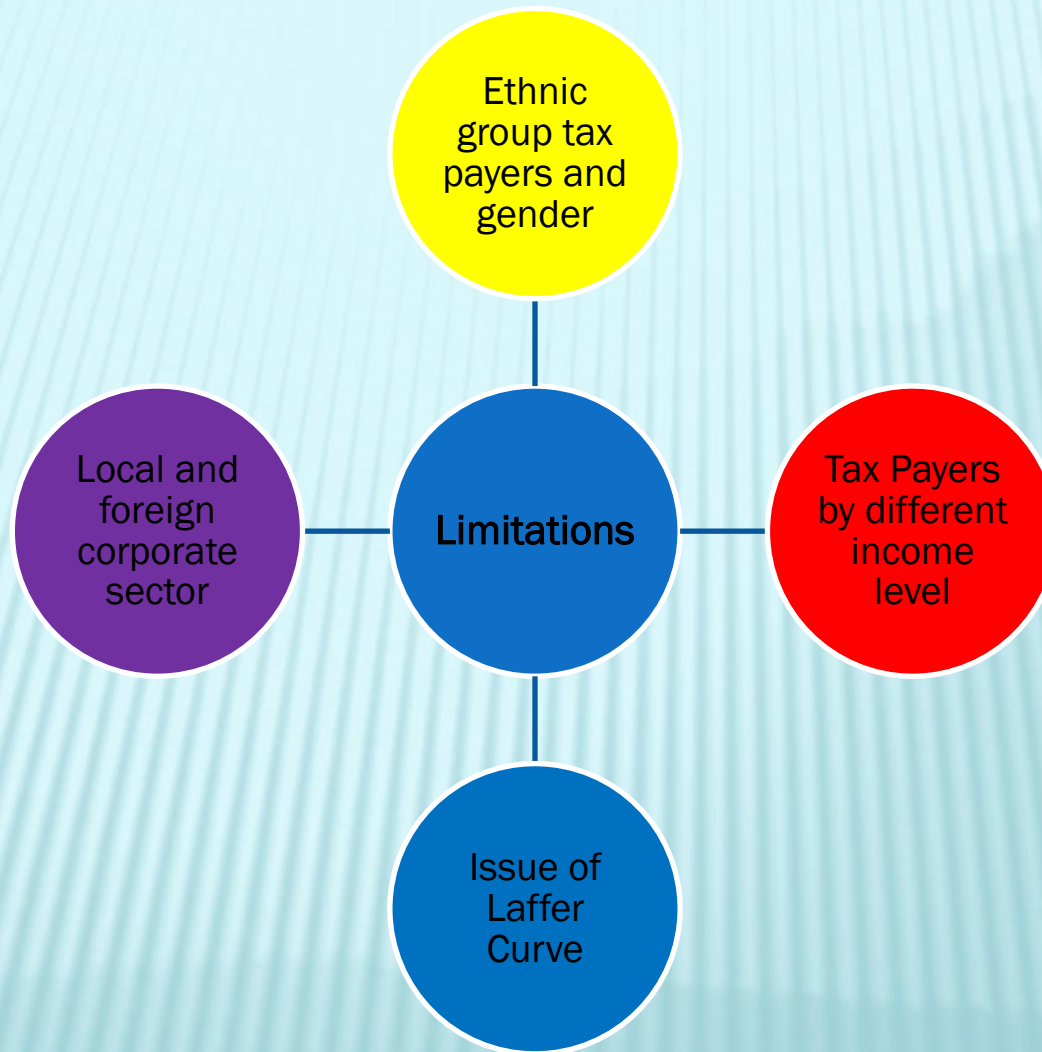
Estimation analysis obj 3.Docx

Description	Linear-linear	Quadratic	Log-log
Relationship	Negative	ITRate = 34.5% CTRate = 34.1%	Negative
Best Model			√
Granger causality			ITRate causes GDP CTRate causes GDP

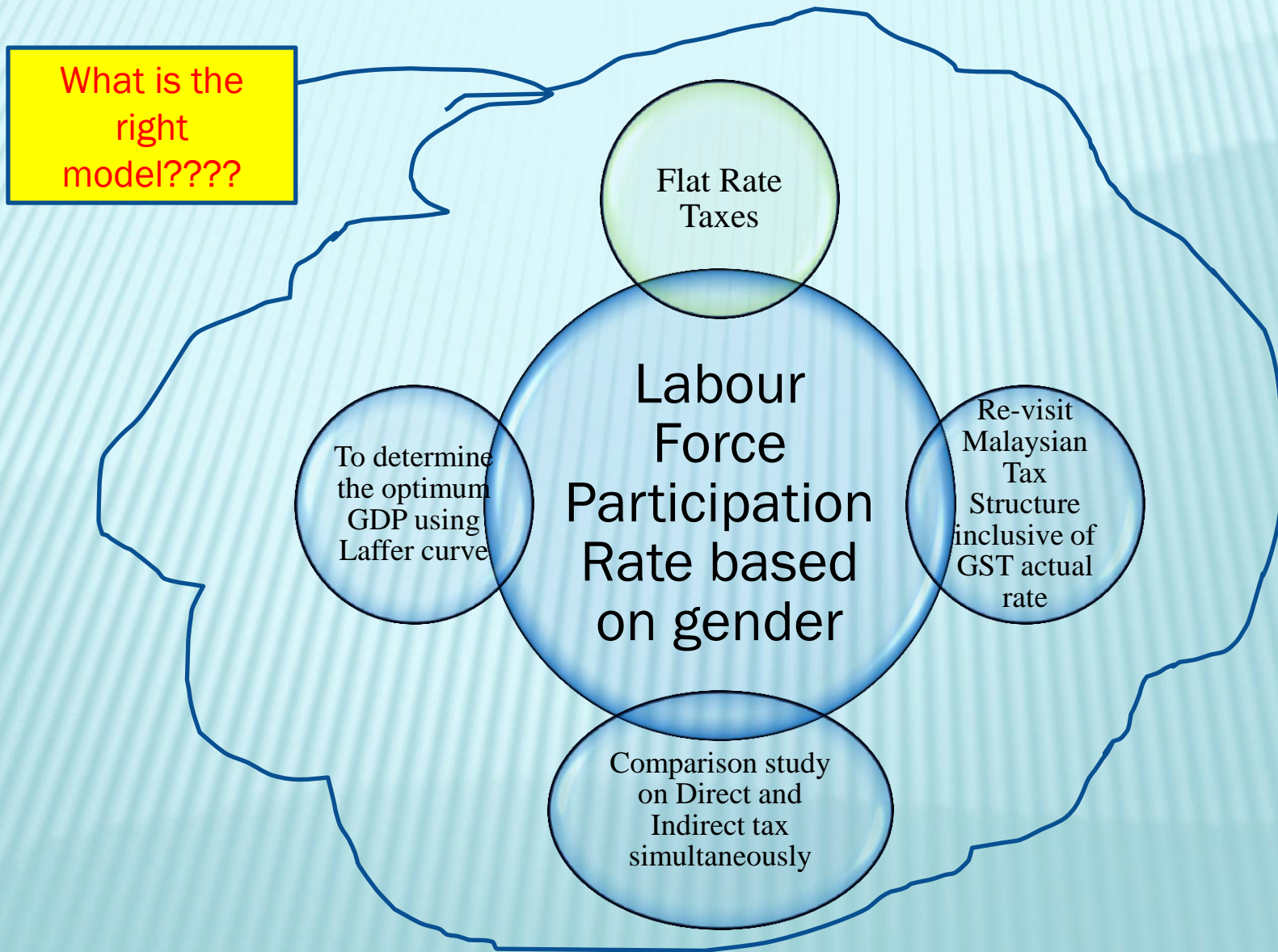
# CONTRIBUTION OF THIS RESEARCH STUDY



# **LIMITATIONS OF STUDY**



# RECOMMENDATIONS





## **SPEAKER FOR CONFERENCE**

**Date** :17<sup>th</sup> November ,2015

**Topic** :Synergising GST rate with Direct Tax Rate in sustaining economic growth in Malaysia: Is There A Laffer Curve?

**Author** :*Sherly George, Supervisor : Prof. Dr Syed Omar Syed Agil*

**Track** :Taxation

**Venue** : MyStats 2015, “Enriching Statistics in an Inter-connected and Digital World”, Sasana Kijang, Bank Negara Malaysia,

### **Speakers:**

1. Puan Tan Bee Bee (Department of Statistics, Malaysia)
2. Ms. Siriporn Muksakunratana (Bank of Thailand)
3. Dr. Juita Mohamad, Institute of Strategic and International Studies (ISIS)
4. Puan Sherly George (Multimedia University Cyberjaya)

**Chairperson:** Professor Dr. Habshah Midi, University Putra Malaysia

## **SPEAKER FOR CONFERENCE**

**Date** : 16<sup>th</sup>-19<sup>th</sup> November, 2014

**Topic** :The Relationship between Tax Rates and Tax Revenue in Malaysia: Is there a Laffer Curve?

**Author** : *Sherly George, Supervisor : Prof. Dr Syed Omar Syed Agil*

**Venue** :International Statistical Institute, Regional Statistics Conference,  
“Statistical Science for a Better Tomorrow”, Sasana Kijang, Bank Negara Malaysia,

**Track** :Taxation

**Speakers:**

1. Dr Veerinderjeet Singh (Taxand Malaysia),
2. Prof Jeyapalan Kasipillay( Monash University),
3. Sherly George , University Tun Abdul Razak
4. Dicussant: Prof Kim Leng Yeah (MUST)

**Chairperson** : SM Thanneermalai (Price Water Corporations),





### Session 22: Enhancing The Malaysian Tax System

Sherly George presented a paper jointly written with Syed Omar Syed Agil arguing that the current individual and corporate tax rate in Malaysia is not generating the best possible tax revenue at its maximum point thus indirectly affecting economic

growth. The paper determines the optimum tax rate using the Laffer curve concept and Optimum Tax Theory models.



In the same session, Jeyapalan Kasipillai presented a paper analysing the “hidden

economy” in Malaysia. The “hidden economy” references activities between individuals that are hidden from authorities and thus escape taxation. Jeyapalan describes the qualitative and quantitative parameters that need to be addressed in Malaysia to yield better estimates of the hidden economy.

## CONFERENCE PAPERS

**2015 The Relationship between Tax Rates and Tax Revenue in Malaysia: Is there a Laffer Curve?**

International Statistical Institute, Regional Statistics Conference, Statistical Science for a Better Tomorrow, Sasana Kijang, Bank Negara Malaysia, Track : Taxation [IS22 ID362](#), *Author : Sherly George, Supervisor : Prof. Dr Syed Omar Syed Agil*

**2014 :The Relationship between Tax Rates and Tax Revenue in Malaysia: Is there A Laffer Curve? 3<sup>rd</sup>**

International Conference on Accounting, Business and Economics 2014, Empowering Resource Management for Sustainable Future. Track : Taxation, 26<sup>th</sup>-28<sup>th</sup> August 2014, University Malaysia Terengganu, Kuala Terengganu..*Author : Sherly George, Supervisor : Prof. Dr Syed Omar Syed Agil*

**2012: The Effects of Tax Rates on Tax Returns and Growth: A Case Study on Malaysia.**

**ISBN 978-967-5705-05-2** 3<sup>rd</sup> International Conference on Business and Economic Research 2012, 12-13 March 2012, Bandung. *Author : Sherly George, Supervisor : Prof Dr Syed Omar Syed Agil*

**2009: “ Berjaya Immersion Methodology”** organized by NATIONAL HIGHER EDUCATION RESEARCH INSTITUTE (IPPTN), Universiti Sains Malaysia. Theme: Global Higher Education:

Current Trends, Future Perspectives, Global Higher Education Forum (GHEF2009), 13-16 Dec 2009, Penang, Malaysia . *Author : Sherly George*



# PUBLICATIONS AND JOURNALS

## JOURNAL

### Journal

**Journal Publication 2013 : The Effects of Tax Rates on Tax Returns and Growth: A Case Study on Malaysia**

Journal of Global Business and Economics, Volume 6, Number 1, January 2013. ISSN 2180-3625

*Author : Sherly George, co-Author : Prof Dr Syed Omar Syed Agil*

**Journal Publication 2013: Key Indicators Influencing Foreign Direct Investment in Malaysia** Journal of Contemporary Issues and Thoughts , JCIT Vol 3, 2013

## OTHERS

### Poster

**Poster** : Research Excellence in Business, Innovation and Entrepreneurship, 3-4<sup>th</sup> July 2012, Putrajaya Marriott Hotel, AKEPT, Ministry of Higher Education.

### Monograph

**Monograph 2012 : “Towards an East Asia Regional Entrepreneurship Development Framework”,** Regional Entrepreneurship Development Symposium (REDS2012), AKEPT, Ministry of Higher Education.

*Author : Sherly George*

# **PUBLICATIONS AND JOURNALS**

## **BOOK PUBLICATION**

### **Book Publication**

**Publication 2012 :** "Foreign Direct Investment in Malaysia", Lambert Publication, Germany, ISBN 978-3-659-31499-5, *Author : Sherly George*

**Publication 2016 :** "Effects of Direct Tax Rate on Revenue and Economic Growth in Malaysia", Lambert Publication, publishing year 2016. *Author : Sherly George and Prof Dr Syed Omar Syed Agil*

## QUESTION AND ANSWERS

