INCOME INEQUALITY AND DEVELOPMENT IN MALAYSIA

Vivien Pua Fei Wen

Bachelor of Economics with Honours
(International Economics)
2015
INCOME INEQUALITY AND DEVELOPMENT IN MALAYSIA

VIVIEN PUA FEI WEN

This project is submitted in partial fulfillment of the requirement for the degree of Bachelor of Economics with Honours (International Economics)

Faculty of Economics and Business
UNIVERSITI MALAYSIA SARAWAK
2015
Statement of Originally

The work described in this Final Year Project, Entitled

“Income inequality and development in Malaysia”

is to the best of the author’s knowledge that of the author except where due reference is made.

8th JUNE 2015

Date submitted

Vivien Pua Fei Wen

39255
ABSTRACT

INCOME INEQUALITY AND DEVELOPMENT IN MALAYSIA

By

Vivien Pua Fei Wen

This study is to examine the relationship between income inequality and development across Malaysian states by using yearly data which cover the period ranging from 1984 to 2012. A panel analysis is used to run the estimation in 13 of Malaysian states. The methodologies that have been employed in this study included Breusch-Pagan Lagrange Multiplier Test, Hausman specification test and panel regression. A scattered graph between GDP per capita and GINI coefficient will be plotted to test the existence of Kuznets inverted-U curve hypothesis. The empirical findings show the existence of Kuznets inverted-U curve in seven out of thirteen of Malaysian states. There is a negative relationship between income inequality and development in Malaysia.
ABSTRAK

KETIDAKSAMAAN PENDAPATAN DAN PEMBANGUNAN DI MALAYSIA

Oleh

Vivien Pua Fei Wen

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere thanks and deepest appreciation to those who have helped me in accomplishing this study.

Firstly, I would like to express my sincere gratitude to my supervisor for his guidance in terms of valuable advices, comments and suggestions that enable this research paper to be completed.

Not forgetting also my family and fellow friends along the process of completing the research paper for their motivation, encouragement and understanding.

Lastly, I am very grateful to all the lecturers and staff of FEB UNIMAS who kindly help in conducting this study.
TABLE OF CONTENT

CHAPTER ONE: INTRODUCTION

1.1 Background of Study  
1.2 Foundation behind Inequality: Kuznets inverted-U Curve  
1.3 Problem Statement  
1.4 Objectives of Study
  1.4.1 General Objectives 
  1.4.2 Specific Objectives  
1.5 Significance of Study  
1.6 Scope and Organization of the Study

CHAPTER TWO: LITERATURE REVIEWS

2.1 Introduction  
2.2 Reviews Related to Developed Countries  
2.3 Reviews Related to Developing Countries  
2.4 Reviews Related to Both Developed and Developing Countries  
2.5 Concluding Remarks

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction  
3.2 Theoretical Framework  
3.3 Research Design
  3.3.1 General Model 
  3.3.2 Econometric Model  
3.4 Data Description  
3.5 Methodology of the Study
  3.5.1 Model Assumption  
  3.5.2 Research Analysis  
  3.5.3 Methods Used
    3.5.3.1 Breusch-Pagan Lagrange Multiplier Test 
    3.5.3.2 Hausman Specification Test 
    3.5.3.2 Panel Regression
CHAPTER FOUR: EMPIRICAL RESULT

4.1 Introduction 60
4.2 Informal Analysis 61
4.3 Scatter Graph Results 62
  4.3.1 GINI Coefficient and Log GDP Per Capita 62
  4.3.2 GINI Coefficient and The Square Term of Log GDP Per Capita 64
4.4 Model Specification Test 65
4.5 Panel Regression 67
  4.5.1 GINI Coefficient and Log GDP Per Capita 67
  4.5.2 GINI Coefficient and The Square Term of Log GDP Per Capita 68

CHAPTER FIVE: CONCLUSION

5.1 Conclusion 70
5.2 Policy Implications 71
5.3 Limitation and Recommendations for Future Study 72
References 74
LIST OF TABLE

Table                                                                 Page

Table 1: Review related to developed countries                         19
Table 2: Review related to developing Countries                      24
Table 3: Review related to both Developed and Developing Countries    35
Table 4: The ranking of 13 states of Malaysia by the average of GINI  61
  coefficient and GDP per capita from 1979 to 2012
Table 5: Estimation results of pooled, random effects and fixed effects 66
  models
Table 6: Results for Breusch–Pagan Lagrangian multiplier test and    66
  Hausman test
Table 7: Result for panel regression with GINI versus LGDP            67
Table 8: Result for panel regression with GINI versus LGDP2           68
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1: GINI coefficient of year 2004 and 2012 in 13 states of Malaysia</td>
<td>8</td>
</tr>
<tr>
<td>Figure 2: Kuznets inverted-U curve</td>
<td>10</td>
</tr>
<tr>
<td>Figure 3: Trend of GINI coefficient and log GDP per capita</td>
<td>62</td>
</tr>
<tr>
<td>Figure 4: Trend of GINI coefficient and the square term of log GDP per capita</td>
<td>64</td>
</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Inequality is a global phenomena and regional disparities or imbalance refers to a situation where per capita income, standard of living, consumption situation, industrial and agriculture and infrastructure development are not uniform in different parts of a given region (Krimi, Yusop & Law, 2010). In the conjunction, Forster, Jesuit and Smeeding (2005) also found that capital cities and major urban areas are mainly winners, while regions which are longer distances from central cities and which are further from their richer western neighbours characterize losers. This might be the reason behind why there is rising of differences between rich and poor regions as well as greater inequality within regions not only in developing countries but also developed countries.

From the study of Hassan (2004), in the case of Malaysia, regional disparities in terms of demographic or economic structure in Malaysian economic development have been strongly influenced by the country’s historical background. The colonial legacy for the period of 172 years resulted in a dualist economy in Peninsular Malaysia. The dualist economy was based on economic activity as well as ethnic and geographic linkages. It can be divided into three categories, based on location (urban-rural), economic activity (modern-traditional) and ethnicity (non Malay-Malay) (Hassan, 2004).
Malaysia has an abundance of natural resources, providing the basis for its key wealth-creating industries. These include rubber, tin, timber, oil palm, petroleum and natural gas (Government of Malaysia, 2005). Thus, the main thing that the colonial authority worked at that time was to link the colonial towns with other growth centres in order to obtain supply of raw materials, particularly tin ore. Gradually, the relevant growth centres expanded due to population increase, the provision of basic facilities including transportation network served as collection and distribution centre for goods (Masron, Yaakob, MohdAyob & Mokhtar, 2012).

Most of the large scale production and commercial activity using modern technology were concentrated in the rich west coast of Peninsular Malaysia where the immigration population was the majority. Most of the products were exported to the international market on the west-coast also. This can be clearly seen from the states of Penang, Malacca and Singapore (Hassan, 2004).

As the result, urban centers and towns in today’s Malaysia are the outcome of British administrative hegemony for over 200 year, which is part of the period of western colonial era in the country. Physically, rural areas were separated from the towns by distinct administrative boundary and physical differences. The development policy of the colonial administration favoured the urban centres and the urbanised areas where commercial activities usually concentrated. Failures of past balanced development policy of the 1950-1969 to bring out the necessary socio-economic equity has plunged the country into acute social imbalances that cut across ethnic and regions (Hadi, Idrus, Shah & Mohamed, 2011).
At the time of independence in 1957, Malaysia was a low-income, predominantly agricultural and rural economy. Around half of the country’s households were living below the national poverty line, with very little changes up to 1970. 49 per cent of households were recorded as poor at that period (Government of Malaysia, 2010).

Since 1981, states in Malaysia have been aggregated into six regions (Government of Malaysia, 1981). Each region is in a more or less uniform stage of development and may encompass an entire state or group of states. In general, these regions share similarities in resources and in term of economic activities, and have been dominated by single metropolitan area or growth centre (Aslam & Hassan, 2003). Peninsular Malaysia consists of four regions while East Malaysia consists of two regions.

Regions in Peninsular Malaysia (West Malaysia) consist of Northern region, Central region, Eastern region and Southern region;

1. Northern region; consists of four states – Perlis, Kedah, Pulau Pinang, Perak and Georgetown as the growth centre.

2. Central region; consists of four states - Selangor, Federal Territory of Kuala Lumpur, Negeri Sembilan, Melaka and Kuala Lumpur as the growth centre.

3. Eastern region; consists of three states - Kelantan, Terengganu, Pahang and Kuantan as the growth centre.
4. Southern region; consists of one state, Johor and Johor Baharu as the growth centre.

Regions in East Malaysia consist of two regions;

1. Sabah region, consists of Sabah (including Federal Territory of Labuan) state and Kota Kinabalu as the growth centre.

2. Sarawak region, consists of Sarawak state and Kuching as the growth centre (Aslam & Hassan, 2003).

Starting from 1981, states in Malaysia have been divided into three categories based on their level of GDP per capita;


2. Eight middle-income states: Johor, Melaka, Negeri Sembilan, Pahang, Perak, Pulau Pinang, Sabah and Sarawak.


When the starting of year 2001, the composite development index has been used and states in Malaysia have been divided again into two categories which are more developed state and less developed state.


During pre-independence period, the government concentrated economic development sector mainly in agricultural and infrastructure (Aslam & Hassan, 2003). The government started to introduce industrial development after independence in 1957 and up to year 1970. During this period, the development programmes was concerned accelerating economic growth at the expense of growing regional and rural-urban inequalities (Aslam & Hassan, 2003). The number of urban centres with population of 10,000 and above in Malaysia has increased from 8 in year 1911 to 140 in year 2000. There is an average of 11.1 percent increase each year with the rapid development of urbanization process in Malaysia (Masron, Yaakob, Ayob & Mokhtar, 2012).

During the post-independence period, transformation in the economic sectors from agriculture and mining to industries and services has become the key factor of population concentration in urban areas and its surrounding (Masron, Yaakob, Ayob & Mokhtar, 2012). Rapid economic growth and structural change have transformed Malaysia into a prosperous, urban, and industrialized economy. In year 2014, Malaysia has finally moves to a service centralized economy in the path to achieve vision 2020. Malaysia has experienced a period of high economic growth over the last few decades, propelling the nation from an agricultural and commodity-based economy to become a prosperous thriving middle-income nation. Malaysia’s real Gross Domestic Product (GDP) has grown by an average of 5.8% per annum from 1991 to 2010 (Government of Malaysia, 2010).
As social-economic imbalances worsening, and indigenous people, Malays (Bumiputera) left out in the economic (business) sector since colonized period, the government introduced a new development strategy. The New Economic Policy (NEP) has been formulated and the NEP incorporated in the twenty-year of First Outlined Perspective Plan, 1971-1990 (OPP1).

During the New Economic Policy (NEP) particularly during the First and Second Malaysia Plan where the focus was to restructure the society, public expenditure was given more to agricultural and rural area development. After the NEP period, public expenditure on agriculture and rural development was dropped tremendously while expenditure was given more to the social sector development particularly on education (Harun, Che’ Mat & Abdul Jalil, 2008).

The New Economic Policy (NEP), formulated in 1970, sought to lessen the association of race with economic function. Policies were motivated by the idea that all communities should share in the country’s growing prosperity. Successive five-year plans have sought to achieve growth with distribution (Government of Malaysia, 2007). The New Economic Policy (NEP) was introduced in 1971 to address extreme economic imbalances present at the time. Although the NEP’s remit ended in 1990, its underlying principle of growth with distribution was carried along through its successors, the National Development Policy (NDP), the National Vision Policy (NVS) and the National Mission (Government of Malaysia, 2010).

The regional development strategies under the NEP seek to bring about closer integration among the states of Malaysia (Aslam & Hassan, 2003). The industrial
dispersal strategy was used to promote industrial activities in the less developed states as manufacturing was seen as the engine of growth to restructure the society. On the other hand, the new land and resource development strategy was used to develop available land in the less developed areas and at the same time increase the income of the rural population and eradicate poverty rate of the rural poor population (Hassan, 2004). This will be achieved through redressing economic and structural imbalances among the regions in the country. It will draw and build upon the strengths of each region for agricultural and industrial development particularly in the less developed states, to ensure that regional development contributes towards the national goals for economic development (Roslan, 2008).

The current plan, the Tenth Malaysia Plan, Malaysia has undergoing between year 2011 to year 2015 will encapsulate the spirit of 1 Malaysia to create a fair and socially just society with national unity as its ultimate objective (Government of Malaysia, 2010). The inclusive development approach will ensure equitable access to economic participation among all Malaysians providing focused support towards encouraging greater participation from specific groups that are most in need, especially the bottom 40% household income group (Government of Malaysia, 2010). The achievement of the Tenth Malaysia Plan in eliminating regional imbalances issue is still an ambiguous and yet to be determined.
1.2 Foundation behind Inequality: Kuznets inverted-U Curve

The foundation of most works on income inequality is provided by Simon Kuznets. He first proposed his work in the year of 1955. In 1963, Kuznets suggested that the relationship between economic growth and income inequality shows an inverted U-shaped. In his study, Kuznets used cross-section data of 18 countries.

According to the Kuznets’s U-curve theory, urbanization increases inequality in developing countries during the first phase of industrialization. This argument is based on two assumptions. First, the increase in productivity is greater for the
industrial population; second, inequality in urban areas is greater than or equal to inequality for rural areas (Oyvat, 2014).

In a more simple way, Kuznet's inverted U hypothesis basically stated that incomes of people will get more unequal before they become more equal in a developing country throughout the urbanisation process. The idea is that while wages remain stagnant in rural communities, some people in urban communities will become wealthy. Hence, more workers from the rural area will tend to move to the urban area to get a higher wage (Kuznets, 1955). The wage of those who are still remaining in the rural area does not increase as fast as those who are in the urban communities. While the rich in the urban communities keep getting richer and the poor rural stay at the same level of income, the inequality increases. Eventually, the scarcity of workers in the rural sector brings up the wage as well which leads to the effect of decreasing inequality.

However, Kuznets' inverted U relationship is a development pattern and not a theory. From the Chenery’s study in year 1982, the main difference between a pattern and a theory is that a theory asserts causality and a pattern does not. In the same way, a pattern would show a relationship between variables but does not assert that a change in one variable is the cause of a change in another variable. Patterns are often used in development economics as every country develops in a unique way. The Kuznets’s study provides a basis for comparative analysis in order to make generalizations about the development process of a single country (Chenery, 1982).
As this study is aimed to examine regional inequality and development in Malaysia, the Kuznets’s theory has been used as the foundation to further study on this issue. The existence of Kuznets inverted-U curve in the Malaysian states will be examined as the explanation can be done based on this theory.

Figure 2: Kuznets inverted-U curve

Source: Kuznets (1955)
1.3 Problem Statement

What the Kuznets theory has told us is that the development process will experiences an inverted-U shape with the income inequality of its population (Kuznets, 1955). As income inequality does give impacts on the economic growth of one country especially those developing countries that have undergone industrialization process in the first stage of growth, thus, it is very crucial to highlight the development pattern of each state in Malaysia.

According to Birdsall (2006), money inequality matters for at least three reasons in developing country. The first reason is inequality inhibits growth through economic mechanisms when the markets are underdeveloped. The second reason is inequality worsen the problem of creating and maintaining accountable government, increasing the probability of economic and social policies that inhibit growth and poverty reduction when the government institutions are weak. The third reason is inequality further discourages the civic and social life that leads to the ineffective collective decision making that is necessary to the functioning of healthy societies when the social institutions are fragile (Birdsall, 2006). Those weak markets, weak governments and weak institutions as the characteristics of developing countries explain to us why income inequality brings more negative impacts to the developing countries.

As in the study of Birdsall (2006), inequality may be constructive in the rich countries as it will motivates individuals to work hard, innovate, and take productive
risks. But in developing countries it is more likely to be destructive. In Malaysia, the goal of bringing the low-income states to the general income level by 1985 has been set in the First Malaysia Plan in year 1965. Malaysian national development policy has been aimed towards accelerating rapid economic growth and at the same time reducing demographic and economic imbalance across regions since 1957, in the period of self-government (Hassan, 2004). However, throughout the years of independence and years of economic planning, the national agenda of bridging the income divide across states in Malaysia remains an unresolved issue (Veerasingam, 2007).

The income inequality has been the bigger obstacle throughout the transformation of Malaysia as a developing country. There were several policies as well as social and physical development plans implemented by the government in ensuring the social and economic progress running in balanced in every state in Malaysia from the starting of independence period (Masron, Yaakob, MohdAyob & Mokhtar, 2012). Even In the Eleventh Malaysia Plan, 2016-2020, one of the key thrust will still focus on enhancing inclusiveness and equitable opportunities for all Malaysians. However, the income inequality has not been reduced as much as the growing of GDP in Malaysia. The data from the household income survey (HIS) revealed that the GINI index which represent the overall income inequality in the country shows not much changing after the drop during year 1974 and there is no significant decrease although the country is experiencing impressive economic growth throughout the years. The overall income inequality remains high compare to
developed countries although Malaysia is on the track in achieving high income nation in vision 2020.

Inequality issue has been the objective measures that taken by Malaysia government from New Economic Policy (NEP) until the current implementation of Malaysia planning policy. However, the economic reforms measures and strategies undertaken by the Malaysia government since the Third Malaysia Plan beginning in 1971 until the Ninth Malaysia Plan have not brought about significant convergence in real per capita income and output across the states of the country. Despite all states recording economic growth, the development gaps between regions, states and rural-urban areas remained wide (Ali & Ahmad, 2009).

Income Inequality has remerged a policy concern especially in developing countries since the nineties until now. It can affects economic growth by hindering human capital accumulation, undermines education opportunities for disadvantaged individuals, lowering social mobility and hampering skills development. Policy makers are paying greater attention as the impacts of inequality on the development of one country will snow ball out more and more negative issues to retard the economic growth of one country. Hence, the changes of the income inequality in the process of a country's economic growth or the trends of income inequalities in Malaysia as a developing country are worth to study more.
1.4 Objectives of Study

1.4.1 General Objective

The main objective of this study is to examine income inequality and development in Malaysia.

1.4.2 Specific Objectives

The specific objectives of this study are as follow:

- To justify the existence of Kuznets hypothesis within Malaysian states.
- To study the relationship between income inequality and development in Malaysia.

1.5 Significance of Study

As Kuznets has first proposed the relationship between income inequality and development which shows an inverted U-shaped, the theory of kuznets curve can be better examined on how inequality has experienced by each of the Malaysia state over the last 50 years. Different state experiences different rate of economic growth. Some states are focusing on agriculture sector while some states are emphasizing on manufacturing sector. Hence, this study is aimed to give a better understanding on the growth of each state on economic side by showing the trend through the scatter graphs.