

DETERMINANTS OF AUCTION SUCCESS AND AUCTION PRICE PREMIUM

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DETERMINANTS OF AUCTION SUCCESS AND AUCTION PRICE PREMIUM

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“To my beloved parents, special partner and my fellow friends, thank you for your support and encouragement”

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ABSTRACT

The property auction market is an effective sale method for disposing property. Nevertheless, little research has been conducted on property auction market in Malaysia, especially on what determines auction success and price premium. This study analyses the auction market for residential landed property, factors influencing auction outcomes and determinants of auction success sales and auction premium. Factors influencing auction outcomes were identified based on previous related studies and interviews with parties involved in the auction market. Using data of residential landed property in Johor Bahru auctioned from 2012Q1 to 2014Q2, the Logistic Regression and the Ordinary Least Square Regression were employed to identify the factors of auction success sales and auction premium. Results show a high percentage (82%) of properties sold with average premium of 36.23%, above the initial reserve price with a maximum premium of 132.5% and 103.03% for semi-detached and low cost houses respectively. Probabilities of sale and auction premium level are higher if the property is freehold, have lower reserve price and with lower number of auction attempts. Land area is significant and negatively associated with auction success sale but positive towards premium. Financial lenders should auction two storey low cost and semi-detached houses as they tend to produce high premium level. Investors should buy auctioned low cost houses at Taman Mount Austin and semi-detached at Taman Bukit Rinting as these locations produce the highest average auction premium whereas thorough consideration is needed for buyers to buy auctioned terrace houses at lowest premium location, that is in Taman Sri Austin.

ABSTRAK

Pasaran lelong harta tanah adalah satu kaedah jualan berkesan untuk melupuskan harta. Walau bagaimanapun, hanya sedikit penyelidikan yang telah dijalankan ke atas pasaran lelong harta tanah di Malaysia, terutamanya berkenaan faktor yang menentukan kejayaan lelong dan harga premium. Kajian ini menganalisis pasaran lelong harta tanah kediaman, faktor-faktor yang mempengaruhi hasil lelongan dan penentu kejayaan jualan lelong dan premium lelong. Faktor-faktor yang mempengaruhi hasil lelong dikenal pasti berdasarkan kajian lepas yang berkaitan dan temubual dengan pihak-pihak yang terlibat dalam pasaran lelong. Dengan menggunakan data kediaman harta tanah di Johor Bahru yang dilelong dari 2012Q1 ke 2014Q2, Regresi Logistik dan Regresi Kuasa Dua Terdikit Biasa digunakan untuk mengenal pasti faktor-faktor kejayaan jualan lelong dan premium lelong. Hasil kajian menunjukkan bahawa peratusan yang tinggi (82%) daripada harta tanah dijual dengan premium purata 36.23% di atas harga rizab awal dengan premium maksimum 132.5% dan 103.03% untuk rumah kos berkembar dan rendah. Kebarangkalian jualan dan tahap premium lelong adalah lebih tinggi jika harta itu adalah pegangan bebas, mempunyai harga rizab yang rendah dan dilelong dengan jumlah percubaan yang lebih rendah. Keluasan tanah adalah penting dan mempunyai perkaitan yang negatif dengan kejayaan jualan lelong tetapi berkait secara positif dengan premium. Pemberi pinjaman kewangan perlu melelong rumah dua tingkat kos rendah dan berkembar kerana harta-harta jenis ini cenderung untuk menghasilkan tahap premium yang tinggi. Pelabur perlu membeli rumah lelong kos rendah di Taman Mount Austin dan berkembar di Taman Bukit Rinting kerana lokasi tersebut menghasilkan purata premium lelong yang tertinggi manakala pertimbangan yang bijak di kalangan pembeli adalah diperlukan untuk membeli rumah teres yang dilelong di lokasi premium yang paling rendah, iaitu di Taman Sri Austin.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	THESIS STATUS DECLARATION	
	SUPERVISOR'S DECLARATION	
	TITLE	i
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xii
	LIST OF FIGURE	xiv
	LIST OF APPENDICES	xv
1	INTRODUCTION	
1.1	Background Study	1
1.2	Problem Statements	3
1.3	Objectives of Study	11
1.4	Scopes and Limitations of Study	13
1.5	Significant of Study	15

1.6	Research Flow Chart	11
1.7	Chapters Arrangement	14

2 AUCTION MARKET BACKGROUND AND LEGISLATION

2.1	Introduction	17
2.2	Definitions	17
2.3	Types of Auction in Malaysia	19
2.4	Auction Procedures	21
	2.4.1 Public Auction Procedure in High Court	22
	2.4.2 Public Auction Procedure in Land Office	22
	2.4.3 Public auction procedure via Loan Agreement Cum Assignment (LACA)	23
	2.4.4 General Auction Day Procedures	24
2.5	Auction Laws of Malaysia	24
	2.5.1 Johore Auction Sales Enactment (Enactment No. 117)	25
	2.5.2 National Land Code (Act 56 of 1965) and Arahan Amalan Pendaftar Mahkamah Tinggi Malaya Bil. 1/2014	27
2.6	Advantages and Disadvantages of Auction	28
2.7	Summary	29

3 THE AUCTION MARKET IN MALAYSIA

3.1	Introduction	31
3.2	The Profile of Auction in Malaysia	32
	3.2.1 Auction Market Size according to Country	32
	3.2.2 Total Number of Auctions in Malaysia by Year	33

3.2.3	Number of Auctions in Malaysia by Sales Outcomes	34
3.2.4	Auctions Distribution by States and Populations	35
3.2.5	Auctions by Property Types and Average Auctions Price in Malaysia	36
3.3	Comparison of Property Auctions in Malaysia with Matured Markets	38
3.4	Comparison between Auction Sales and Private Treaty Sales	43
3.5	Overview of Residential Property Market in Malaysia and Johor Bahru	46
3.5.1	Volume and Value of Residential Property Transaction	46
3.5.2	Number of Residential Property Transactions According to Property Types in Johor Bahru	47
3.5.3	Housing Price in Johor Bahru	49
3.6	Relationship between Reserve Prices and Final Auction Sale Prices	50
3.7	Price Effects of Properties Sold by Auction	51
3.7.1	Auction Price Discount	51
3.7.2	Auction Price Premium	52
3.8	Factors Influencing Auction Outcomes	53
3.9	Summary	58

4 RESEARCH METHODOLOGY

4.1	Introduction	60
4.2	Research Flow Chart	61
4.3	Data Collection	63
4.4	Auction Market for Residential Landed Properties	63
4.4.1	Data Collection	63

4.4.2	Data Analysis Technique	64
4.5	Factors Influencing Auction Outcomes	65
4.5.1	Data Analysis Technique	65
4.6	Determinants of Auction Success Sales and Auction Premium	65
4.6.1	Data Collection and Measurement	66
4.6.2	Pre-test by Pearson Correlation Test	68
4.6.3	Logistic Regression Analysis (LRA)	68
4.6.4	Ordinary Least Square (OLS)	69
4.6.5	Data Analysis Technique	71
4.7	Conclusion	71

5 DATA ANALYSIS AND FINDINGS

5.1	Introduction	72
5.2	Validity of Data	73
5.3	Objective 1: Auction Market for Residential Landed Properties	75
5.4	Comparison between Auction Prices with Primary and Sub Sale Market Prices	79
5.5	Descriptive Statistics	83
5.6	Summary Statistics of Auction Premium Samples	90
5.7	Average Auction Premium by Number of Auction Attempts	
5.8	Average Auction Premium by Location	95
5.9	Objective 2: Factors Influencing Auction Outcomes for Residential Landed Properties	104
5.10	Interview Results	106
5.11	Multicollinearity Test	113
5.12	Objective 3: Results on Determinants of Auction Success Sales	114
5.13	Objective 3: Results on Determinants of Auction Premium	116

5.14	Discussion for LRA and OLS Results	118
5.15	Summary	121
6	CONCLUSION AND RECOMMENDATION	
6.1	Introduction	125
6.2	Findings of Study	126
6.2.1	Objective 1: To analyse the auction market for residential landed properties in Johor Bahru	126
6.2.2	Objective 2: To identify the factors influencing auction outcomes for residential landed properties in Johor Bahru	128
6.2.3	Objective 3: To analyse the determinants of auction success sales and auction premium	129
6.3	Limitation of Study	129
6.4	Recommendation for Future Research	130
6.5	Conclusion	132
6.6	Contributions of Study	134
6.6.1	Financial Institutions	134
6.6.2	Property Investors	135
6.6.3	Public	135
6.6.4	Contribution to the Body of Knowledge	136
	REFERENCES	138
	Appendices A-H	145-168

LIST OF TABLES

TABLE NO.	TITLE	PAGE
2.1	The Differences between Judicial and Non-judicial Auction	20
3.1	The Total Auction Sales as A Percentage of Total Property Sales Transaction	33
3.2	Total Number of Auctions and Average Auctions Price by Property Types in Malaysia	37
3.3	Cross Comparison of Auction Markets Structure	39
3.4	Comparison between An Auction Sale and A Private-treaty Sale	44
3.5	Total Volume and Value of Residential Property Transaction From Year 2001 to Year 2012 in Malaysia	47
4.1	Variable Measurement	67
5.1	Auction Advertisement in Newspaper and <i>Lelongtips.com</i>	74
5.2	Number of Auctioned Properties Sold by Premium and Discount	75
5.3	Summary Statistic of Price Effects of Residential Properties Sold by Auctions	77
5.4	Comparison between the Auction Prices for Auction Premium Samples with Primary and Sub Sale Market Prices	82
5.5	Outcome of Auction Sale by Property Types	84
5.6	Average Reserve Price of Successful and Unsuccessful Sales for Low Cost and Terrace Houses	84
5.7	Number of Auction Attempt by Sold and Unsold auction Property	86
5.8	Average Reserve Price by Property Type	87
5.9	Semi-Detached and Detached Property by Tenure, Location and Land Area Factors	88

5.10	Auction Outcome by Tenure	89
5.11	Auction outcome by Legal Restriction	89
5.12	Summary Statistic of Auction Premium Samples by Property Types	90
5.13	Auction Premium for Low Cost and Semi-detached Property	91
5.14	Number of Auction Attempt with Average Auction Premium	93
5.15	Auction Properties Sold at 4 th Auction Attempt	94
5.16	Average Auction Premium by Location	96
5.17	High and Low Premium Locations by Property Type	102
5.18	Summary of the Factors Influencing Auction Outcomes	104
5.19	Particulars of Interviewees	107
5.20	Summary of Interviews with Parties Involved in Auction Market	107
5.21	Pearson Correlation Test	113
5.22	Pearson Correlation Test	113
5.23	Summary Results of Determinants of Auction Success Sales	114
5.24	Summary Results of OLS	116
5.25	Summary Findings by Objective	123

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
1.1	Total Housing Loans and Non-Performing Loans (NPL) for The Purchase of Residential Properties (December 1996 to September 2013)	4
1.2	Administrative Area of MBJB	9
1.3	Research Flow Chart	14
2.1	Types of Auctions in Malaysia	20
2.2	Procedures of Auction	27
3.1	Total Number of Auctions in Malaysia by Year	34
3.2	Number of Auctions in Malaysia from May to October 2013 by Sales Outcomes	35
3.3	Auctions Distribution by States and Populations	36
3.4	Johor All House Price Index	49
4.2	Research Process Flow Chart	62
6.1	Guideline for Stakeholders Involve in Auction Market	137

LIST OF APPENDICES

APPENDIX NO.	TITLE	PAGE
A	General Auction Day Procedures	145
B	Boundary for Flagship A of Iskandar Development Region (Johor Bahru City Centre)	146
C	List of Boundary for Flagship A of Iskandar Development Region (Johor Bahru City Centre)	147
D	Boundary for Non-city Centre and City Centre Regions under Administrative Area of MBBB	148
E	List of Boundary for Non-city Centres under Administrative Area of MBBB	149
F	List of Boundary for MBBB	150
G	Variables Data for LRA Model	152
H	Variables Data for OLS Model	161
I	LRA Results	165
J	OLS Results	167

CHAPTER 1

INTRODUCTION

1.1 Background Study

The Malaysia auction market existed since 1906 when the first auction law was enacted in the states of Penang and Melaka. Notwithstanding its long existence and despite continuously receiving the attention of the local media and public interest, little research has looked into the property auction market in Malaysia. This study examines the auction market landscape for residential landed property, factors influencing auction outcomes and the determinants of auction success sales and auction premium in order to assess the future prospect and performance of the auction market. The performance and prospect of the auction market have important public policy implications especially for government as well as many banks and developers who have significant real estate exposure in their portfolios.

Auction refers to a public sale in which goods or properties are sold to the highest bidder (Oxford English Dictionary, 2014). The sale of property through auction is a way of disposing of an asset in an open market at the highest possible market rate. In short, Patrick (2007) defined property auction as a public sale of a property that is sold to the highest bidder, provided that reserve price has been met.

Basically, there are two types of auctions in Malaysia, foreclosure or public auction and non-foreclosure or private auction. Public auction is initiated by the bank to sell distressed or foreclosure property if the borrower failed to pay the housing loan

whereas private auction is initiated by the property owner to voluntarily sell their property. According to our survey on the local auction's website, *Property Auction House*, 99.98% from the total of 20,385 auction properties are public auctions and only 50 or 0.02% are private auctions as on Aug 21, 2013. Therefore, this study will focus on public auction as the auction market in Malaysia is predominantly distress sales initiated by financial institutions to recoup their loan losses.

The auction market in Malaysia has received the attention of the local media and Malaysians are now more open and susceptible acceptable to the concept of auction as way of acquiring properties, and are less influenced by the taboo of bad feng shui (New Straits Times, 2007). An article published in *The Edge* (2013) also reveals that in a recent Ciy & Country Poll, local auctioneers agree that interest in the auction market has picked up in recent years due to dwindling disposable income and lack of affordable properties in the primary and secondary markets. The founder of Ehsan Auctioneers, Abdul Hamid P V Abdu correspondingly divulges that a slowdown in the secondary market has made property owners more willing to consider auction as another alternative to sell their properties more quickly and at the best possible price.

The auction mechanism has gained acceptance as an effective sale method as it is a speedy and unconditional method for disposing property. Yet, there is little research and understanding on the auction market in Malaysia. Auction offers a platform to sell real property in a win-win situation for both sellers and buyers. Buyers may acquire properties with prices lower to market value as prices of auction properties will be reduced by 10% after each unsuccessful auction sale whereas sellers may gain benefit as sometimes the prices can escalate beyond market value in competitive bidding situation. Besides, the transparent nature of the auction process enables buyer to see the property value and allows them to make informed decision. Further, auction properties are more viable as an investment choice due to rising price among property in primary market. For those who would like to buy a second home, auction houses are most suitable because they may be sold in very moderate prices. Thus, research of auction market is significant as the potential to grow in auction market is huge.

1.2 Problem statement

Total housing loans and Non-Performing Loans (NPL) for the purchase of residential properties from December 1996 to September 2013 were shown in Figure 1.1. According to Bank Negara Malaysia, in practice, loans are classified as non-performing when they are three months or more in arrears and the properties which are held as collateral will be put up for public auction sales. Hence, higher NPL indicates higher number of properties put up for auction sales. During the four year period, the NPL have increased more than 166% from RM5.2 billion in December 2002 to a staggering RM14 billion in December 2006. Banking system facing big problem by involving in high credit risk associated with NPL during that period. Thus, from December 2005, Bank Negara Malaysia (BNM) issued new guidelines to the financial institutions for the disposal of NPL, which resulted in many financial institutions disposal of NPL to third parties. Although the NPL had successfully decreased from 2007 to 2013, the number of outstanding loans worth RM5 to RM10 billions and 109,296 auctions has still been considered significant for the past 5 years in Malaysia. Thus, research in auction market is significant as the property auction industry involves recovery of outstanding loans worth billions of Ringgit. This study focuses on auctioned landed residential properties in Johor Bahru, a growing city in the Southern Peninsular of Malaysia. Johor Bahru is selected as there is an unprecedented boom in housing prices and transactions in recent years, spurred by the Iskandar Malaysia economic corridor. Landed residential properties are selected as they form the majority of residential properties in Johor Bahru.

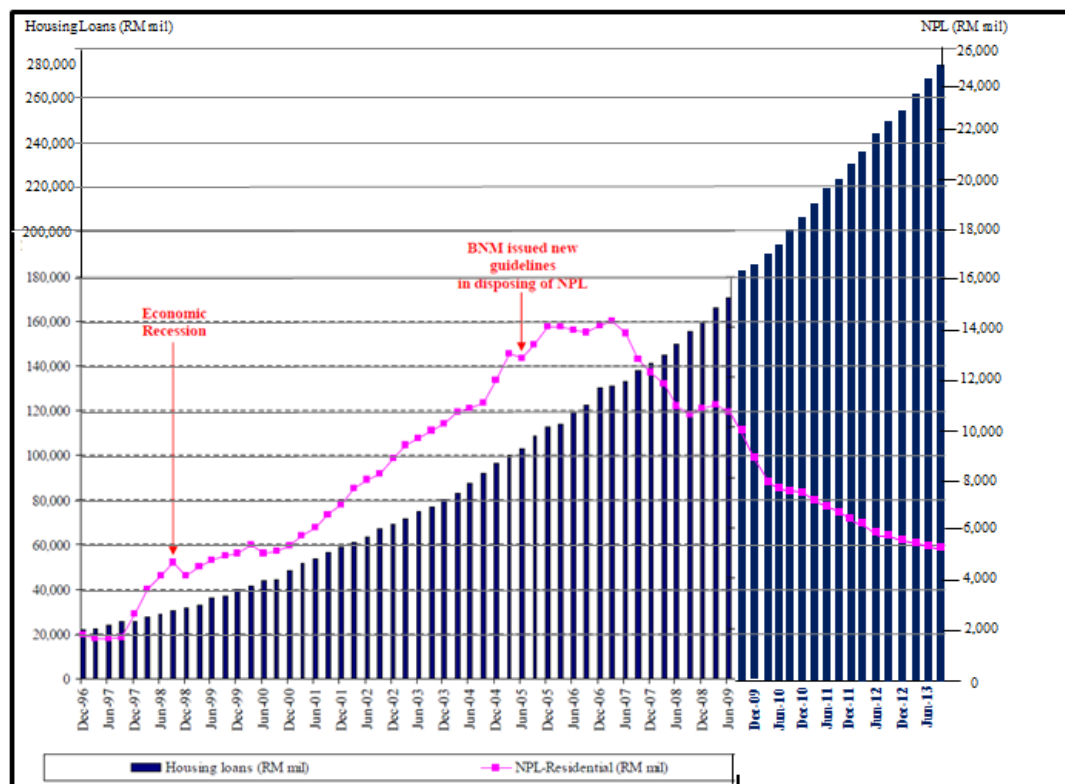


Figure 1.1 : Total Housing Loans and Non-Performing Loans (NPL) for The Purchase of Residential Properties (December 1996 to September 2013)

Source : Bank Negara Malaysia

More to the point, there is little knowledge and research on the auction market in Malaysia especially on the performance of auction market and price effects of properties sold by auctions despite its existence in the property market scene for over a century. According to Abdul and Abdul and Alirat (2009), auction premium presents when a property sold at a price higher than its first reserve price whereas auction discount presents when a property sold at a price lower than its first reserve price. By referring to previous studies, most auctions studies in the United States have found a price discount for auction sales arguing that auctions are a mechanism to dispose distressed properties in an urgent manner, following defaults on financing. Mayer (1998), for example, estimates auction price discounts of 9% and 21% in Los Angeles and Dallas, respectively. Similarly, Allen and Swisher (2000) find that auction prices exhibit discounts relative to predicted market values that vary across sub-samples of the data.

Contrary to the findings of Mayer (1998), and Allen and Swisher (2000), Ashenfelter and Genesove (1992) find evidence that auctioned properties sell at price premiums in a United States (US) sample.

Conversely, in the housing markets of Australia, New Zealand and Ireland, where auctions are commonly used for non-distressed property sales, empirical studies have identified a price premium associated with auctions. In the Melbourne, Australia's housing market, Lusht (1996) indicates that auctioning produces an 8% price premium. In Christchurch, New Zealand, Dotzour *et al.* (1998) also finds that auctioned properties sell at price premiums around 9.5% above average housing prices. In Dublin, Ireland, Stevenson and Young (2004) also discovers that auctioned properties sell on average 24.79% of high premium due to speculative behaviour at the market.

Prior studies overseas drew conflicting findings regarding the price effects of properties sold by auctions. The uncertainty of auction pricing effects and auction market deserves closer study as the findings may provide a guideline for stakeholders involved in auction market and to indicate the performance as well as future prospect of auction market sales.

According to the report by the National Property Information Centre (NAPIC) in year 2013, with only 0.03% of the total residential property sales transacted through the auction market in Malaysia, there is much potential for the Malaysian auction market to catch up with the other auction markets overseas. Moreover, past auction data in an online auction auction's website, *Lelongtips.com* recorded that the number of successfully sold auction properties is lower than the number of unsold auction properties from May to October 2013 in Malaysia. Thus, identifying the factors influencing auction outcomes is significant to improve the sales outcome and decrease the number of unsold auction properties in the market.

Moreover, past studies on the determinants of auction success include Dotzour *et al.* (1998) that found larger, higher quality and more expensive properties are more

likely to be sold via auction in New Zealand. Ong *et al.* (2005) investigated the factors influencing auction outcomes of residential properties in Singapore found that the probability of an auction sale is likely to improve if auctioned property is a distress sale, the market is not in a recession, homogenous properties, located in central region and there is a relatively high turnout. In Malaysia, Chan *et al.* (2008) investigated the characteristics of problematic residential properties which were left unsold after 3 consecutive auction attempts in Kuala Lumpur and Selangor. However, the factors of auction success still remain unidentified particularly for in Johor Bahru, a main growing city with strong growth of housing market. Hence, this further arises the importance of this study to fill these gaps by examining outcomes with a model using property-specific variables, location, reserve price and number of auction attempts to provide a more comprehensive research in auction market.

Lastly, according to an online auction's website, *Lelongtips.com*, recently a corner lot of double storey terraced house at Taman Bukit Kempas, Johor Bahru, with a reserve price of RM324,000, was eventually sold for RM500,000, or 54% higher, while a another corner lot of double storey terraced house at Taman Ehsan Jaya, Johor Bahru was successfully sold at RM550,000, 53% higher than its reserve price of RM360,000. These auction sales sold with high premium raise a question of why would someone be willing to pay more than the reserve price to buy an auction property. The actual causes have remained poorly understood.

Therefore, a few research questions have been brought out from the issues stated above which are as follows:

- a) How the auction market for residential landed property is performing?
- b) What are the factors influence auction outcomes?
- c) What are the determinants of auction success sales and auction premium?

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1.3 Objectives of Study

According to the problem statements mentioned, the objectives of this study are as follows:

- a) To analyse the auction market for residential landed properties in Johor Bahru.
- b) To identify the factors influencing auction outcomes for residential landed properties in Johor Bahru.
- c) To analyse the determinants of auction success sales and auction premium.

1.4 Scope and Limitation of Study

The research is limited to the scope as mentioned below:

- I. The scope of this research is focused on residential landed properties that put up for public auctions in the geographical coverage within the district of Johor Bahru and under the administrative area of Majlis Bandaraya Johor Bahru (MBJB) as shown in the Figure 1.2 below.
- II. In Malaysia, there is no published government data on auction properties. Data on auction properties can only be obtained through auctioneers' portals.
- III. The data used for the purpose of analysis in this research comprises residential landed properties in Johor Bahru that put up for public auctions in 2012Q1 to 2014Q2.
- IV. Private auctions are excluded in this study as it is rare in Malaysia.
- V. Aborted auction of property that has been called off from auction by the bank due to owner settlement or incomplete documentation and successful transacted auction properties with undisclosed final selling prices will be excluded from the study sample.
- VI. The scope of auction outcomes covers the auction success sales that immediately sold at first auction attempt and the presence of auction premium in which an auction property sold at a price higher than its first reserve price. Factors influencing auction outcomes are analysed through interviews with parties involved in the auction market and based on literature review.

1.5 Significance of the Study

This research is expected to benefit for the following parties:

a) Financial Institutions

The findings from this research paper will provide a guideline for financial institutions to approve housing loans and formulate credit policies to reduce their credit risk associated with non-performing loan for residential properties.

b) Property Investor

The results of this study will be beneficial to investors who invest in the auction market by providing better understanding on the prospect in auction market and act as a baseline in evaluating the performance of the auction market.

c) Public

This research will increase awareness and understanding of the public towards the auction market and decrease the negative stigma attached to auctioned properties among public.

1.6 Research Flow Chart

The first stage involved exploring the problem statement in this study and formulating the research questions from the issues stated in the study. After that, the objectives were determined to answer the research questions. The scope and limitation of study were identified for selecting the correct sample to meet the objectives of the research.

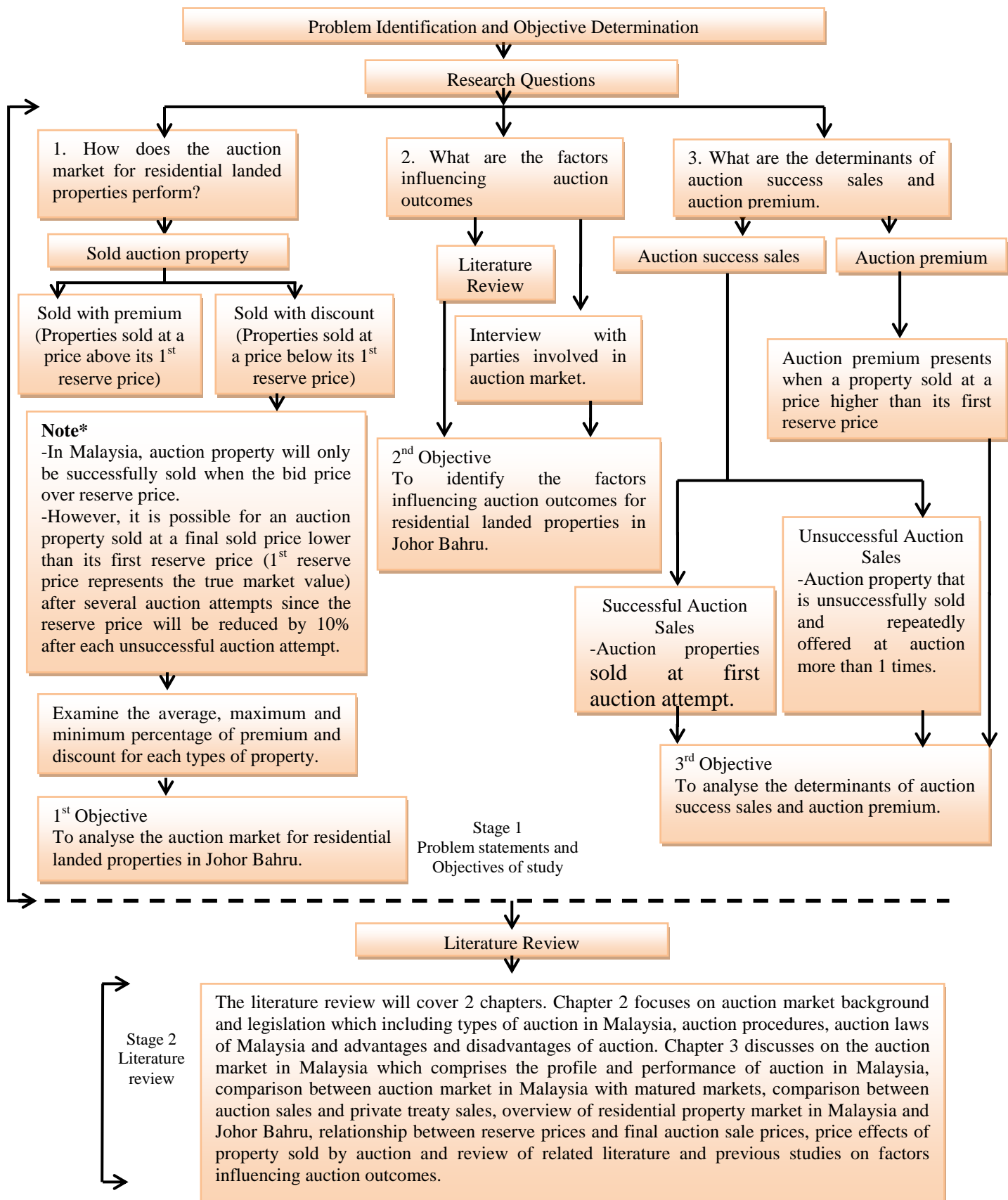
The second stage involved literature review by referring to secondary data such as journals, books, articles, newspapers and other reading materials to be applied in data analysis and provide more understanding on important theories and concepts relevant to this study.

The third stage of the study involved data collection. For the 1st and 3rd objectives, secondary data on residential landed properties put up for public auction in 2012Q1 to 2014Q2 were collected from the Malaysia online auction portal, *Lelongtips.com*. The sample data were selected based on the scope and limitation of this study. Data such as auction date, property type, location, reserve price, sold price, auction status, land area, tenure, restriction, auction bank, auctioneer, venue and assignor were recorded and tabulated in Microsoft Excel. To achieve the 2nd objective, primary data were collected through interviews with parties involved in the auction market whereas secondary data were reviewed from previous similar studies.

The fourth stage is data analysis, descriptive and inferential analyses were used to analysis the data and reach the objectives of this study. For the first objective, descriptive analysis was used to examine the auction market for residential landed property. To achieve the second objective, factors influencing auction outcomes were analyzed through interviews with parties involved in the auction market and based on previous similar literature and studies. For the third objective, the Logistic Regression

Analysis (LRA) and Ordinary Least Squares (OLS) were used to determine the level of significance and relationship of selected variables in associating with the auction attempt and auction premium respectively.

The final stage is conclusion and recommendation. Findings in the data analysis were evaluated and discussed in detail during this state. It would also answer all the issues stated in the problem statement as well as achieving the objectives of this study. Further, some recommendations have also been suggested for future research.



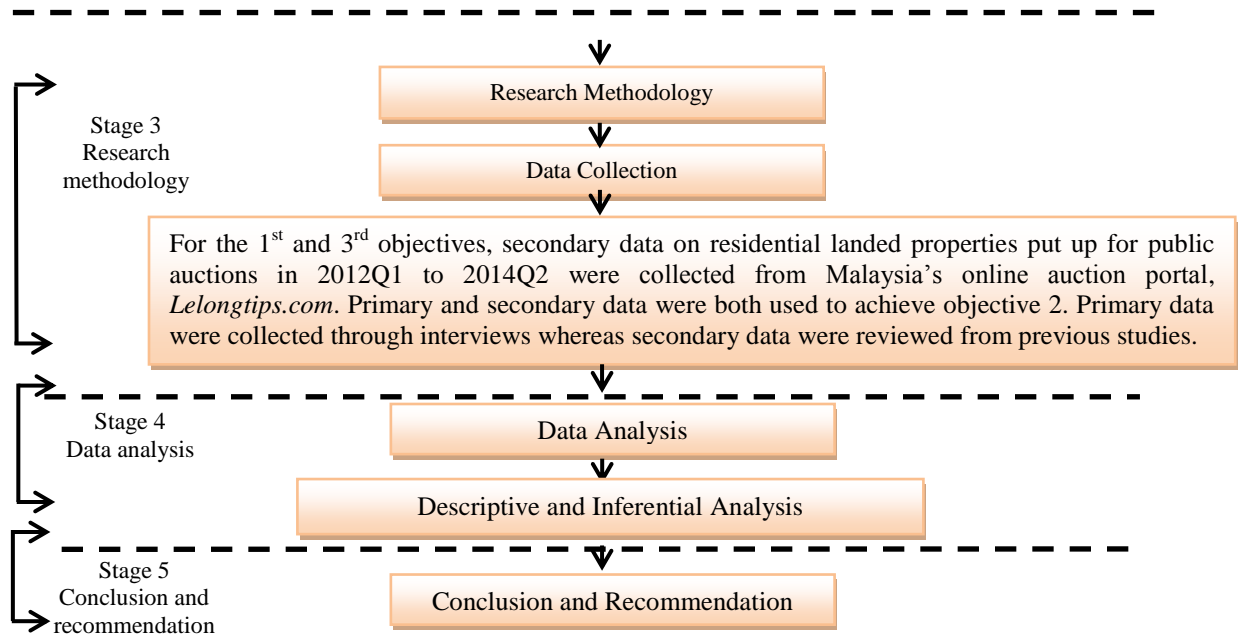


Figure 1.3: Research Flow Chart

1.7 Chapters Arrangement

The arrangement of the chapters for this study is shown as below:-

a) Chapter 1 : Introduction

The First chapter gives a general view about the auction market in Malaysia and the importance of studying it. This chapter also highlights the issues encountered and identifies the objectives to solve the issues above. It basically gives an idea on why and how to carry out this research and outline the analytical framework for the study consisting the background of study, problem statement, objectives of study, scope and limitation of study, significant of the study, as well as a brief explanation on the research methodology and research process.

b) Chapter 2 and 3 : Literature Review

The next chapter will disclose appropriate theoretical structure of the study and provide a background for understanding current knowledge on the topic by reviewing similar, relevant and previous studies. Various books, journals, articles, news and the latest research materials are reviewed to ensure the whole research is well supported in order to achieve the objectives of study. In this study, literature review will cover 2 chapters which are chapters 2 and 3. Chapter 2 will focus on the auction background and legislation which include the types of auctions in Malaysia, auction procedures, auction laws of Malaysia, advantages and disadvantages of auction. On the other hand, chapter 3 will discuss the auction market in Malaysia which comprises the profile and performance of auction in Malaysia, comparison between the auction market in Malaysia with matured markets, comparison between auction sales and private treaty sales, overview of residential property market in Malaysia and Johor Bahru, relationship between reserve prices and final auction sale prices, price effects of property sold by auction as well as a review of related literature and previous studies on factors influencing auction outcomes.

c) Chapter 4 : Research Methodology

This chapter explains the methodology employed in this research. The overall process that included data collection, research process and methodology used in this study are explained in detail under this chapter. For 1st and 3rd objectives, secondary data of residential landed properties put up for public auctions in 2012Q1 to 2014Q2 were collected from Malaysia's online auction portal, *Lelongtips.com*. Primary and secondary data were both used to achieve objective 2. Primary data were collected through interviews with parties involved in auction market whereas secondary data were reviewed from related previous studies. The data analysis used in this study including Descriptive Analysis, Content Analysis based on interview and literature review, Logistic Regression Analysis and Ordinary Least Squares will be explained in detail under this chapter.

d) Chapter 5 : Data Analysis and Findings

This chapter will describe the analysis and findings to achieve the objectives of this study. The sample data were examined by using Descriptive Analysis to analyze the auction market for residential landed property. In addition, data collected through interview and previous studies will be analyzed to identify the factors influencing auction outcomes. Lastly, the sample data that has been selected will be examined by using Logistic Regression Analysis and Ordinary Least Squares via Statistics Package Science Student (SPSS) respectively to identify the determinants of auction success sales and auction premium.

e) Chapter 6 : Conclusion and Recommendations

The final chapter will conclude the overall results and findings obtained in chapter 5. A few recommendations will also be suggested for further research based on the limitations of this study. Contributions of this study will be discussed in the last part of this chapter.

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