

MASTER'S THESIS

Two essays on private and public housing markets in Hong Kong

Kwok, Tsz Chun

Date of Award:
2013

[Link to publication](#)

General rights

Copyright and intellectual property rights for the publications made accessible in HKBU Scholars are retained by the authors and/or other copyright owners. In addition to the restrictions prescribed by the Copyright Ordinance of Hong Kong, all users and readers must also observe the following terms of use:

- Users may download and print one copy of any publication from HKBU Scholars for the purpose of private study or research
- Users cannot further distribute the material or use it for any profit-making activity or commercial gain
- To share publications in HKBU Scholars with others, users are welcome to freely distribute the permanent URL assigned to the publication

**Two Essays on Private and Public Housing Markets in
Hong Kong**

KWOK Tsz Chun

A thesis submitted in partial fulfillment of the requirements
for the degree of
Master of Philosophy

Principal Supervisor: Dr. CHENG Yuk Shing

Hong Kong Baptist University

July 2013

Abstract

The thesis contains two papers focusing on different aspects of housing markets in Hong Kong. The first paper investigates the nexus between housing price index, exports, loans and housing rental index. Using the vector error-correction models, it provides empirical evidence on the links among housing price, rents, exports and private loans. Although some past studies have argued for the importance of exports on housing price growth in the long run, we observe a less dominating effect. Instead, we find that private loans and housing rental index are more important determinants of housing price index. The second paper studies the crowding out effect between public and private housing stocks. Our empirical results reject the hypothesis that public housing stock crowds out private housing stock. Instead, they confirm a strong positive long-run relationship between the private and public owner-occupied housing stocks. Our model also provides evidence for a positive relationship between private housing stock and household size, and a negative relationship between public housing stock and household size. These relations imply that the government should bring housing issues into the formulation of population policy.

Table of Contents

Declaration.....	i
Abstract.....	ii
Acknowledgements.....	iii
Table of Contents.....	iv
List of Tables and Figures	vi
<i>Essay One: Hong Kong Housing Price Dynamics and the Macroeconomy</i>	
1 Introduction	1
2 Background.....	3
3 Literature Review	9
3.1 Nexus between Exports and Housing Market.....	9
3.2 Nexus between Macroeconomy and the Housing Market	10
3.3 Nexus between Rents and Housing Prices.....	13
4 Methodology.....	14
5 Model and Data	16
5.1 Model Specification.....	16
5.2 Data Source and Description	17
6 Estimation.....	20
6.1 Unit Root Test.....	20
6.2 Empirical Results	22
6.2.1 Relationships between Exports and Housing Price (Model 1)	22
6.2.2 Relationships between Loans and Housing Price (Model 2).....	25
6.2.3 Relationships between Rents and Housing Price (Model 3).....	27
6.3 Discussion	29
6.4 Granger Causality Test	30
6.5 Variance Decomposition.....	31
7 Conclusion.....	34
Reference	35

Essay Two: Subsidized and Unsubsidized Housing Stocks in Hong Kong: A Test of the Crowding Out Effect

1	Introduction	38
2	Market Effects of Housing Policies.....	39
3	Background.....	43
3.1	The Land Supply System in Hong Kong.....	43
3.2	The Planning System in Hong Kong	46
3.3	History of Public Housing Programmes	47
4	Literature Review	51
5	Methodology.....	54
5.1	Research Questions.....	56
5.2	Model Specification	57
6	Estimation.....	58
6.1	Data Issues	58
6.2	Unit Root Test and Cointegration Test.....	62
6.3	Empirical Results.....	63
6.4	Discussion.....	65
6.4.1	Market Segmentation.....	65
6.4.2	Restricted Land Supply.....	66
7	Extended Model.....	71
7.1	Unit Root Test and Cointegration Test.....	72
7.2	Empirical Results.....	73
7.3	Discussion.....	74
7.3.1	Heterogeneous Effect of Public Housing Stocks.....	74
7.3.2	Fertility and Housing Stocks.....	75
8	Conclusion	76
	Reference	78
	CURRICULUM VITAE.....	81