

*Supplementary material*

**HOUSING MARKET DYNAMICS UNDER A PEGGED EXCHANGE RATE –  
A STUDY OF HONG KONG**

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**APPENDIX 1. VAR model results (Property price indices)**

	Class A	Class B	Class C	Classes D & E
<i>Previous property price index</i>				
$\Delta \text{LnPPIt-1}$	0.698405***	0.568698***	0.414504***	0.419123***
$\Delta \text{LnPPIt-2}$	-0.138621	-0.056111	-0.027479	0.004929
<i>Macroeconomic variables</i>				
$\Delta \text{LnGDpt-1}$	-0.014060	-0.020987	-0.096066	-0.131733*
$\Delta \text{LnGDpt-2}$	0.189008***	0.238817***	0.222858**	0.162552**
$\Delta \text{CPICt-1}$	0.001825	0.004729	0.004452	0.002231
$\Delta \text{CPICt-2}$	-0.002077	-0.003752	-0.003060	-0.003694
$\Delta \text{LnHHt-1}$	-0.225044	0.417548	-0.132242	-0.805073
$\Delta \text{LnHHt-2}$	1.161203**	1.026290*	1.917077**	2.022538**
<i>U.S. monetary policy</i>				
$\Delta \text{LnM1t-1}$	0.083138	0.112028	0.224539**	0.237773**
$\Delta \text{LnM1t-2}$	0.022865	-0.024177	0.067725	-0.002542
<i>Stock market variables</i>				
$\Delta \text{LnHSIt-1}$	0.119400***	0.159895***	0.161676***	0.193185***
$\Delta \text{LnHSIt-2}$	-0.072933**	-0.089705*	-0.036190	-0.046352
$\Delta \text{RISKt-1}$	-0.000467	-0.001218	-0.002331**	-0.002363**
$\Delta \text{RISKt-2}$	0.000267	-0.000347	-0.000632	-0.001025
<i>Housing-related variables</i>				
$\Delta \text{LnHSt-1}$	0.001997	0.003033	0.003615	0.005264
$\Delta \text{LnHSt-2}$	0.005377	-0.001014	0.001823	-0.000531
$\Delta \text{HOSSt-1}$	-7.19E-07	-1.03E-06	-1.37E-06	
$\Delta \text{HOSSt-2}$	-2.05E-06**	-1.96E-06**	-1.17E-06	
<i>Exogenous variables</i>				
Constant	0.001721	0.000262	-0.004694	-0.000512
AFC	-0.042147**	-0.044052**	-0.047239**	-0.046147**
SARS	-0.032167	-0.041822	-0.051694*	-0.058635*
N	123			
Adjusted R-square	0.596	0.556	0.511	0.548
F-statistic	9.990	8.644	7.381	9.231
Log likelihood	248.665	235.168	216.899	218.098
AIC	-3.702	-3.482	-3.185	-3.237
SC	-3.222	-3.002	-2.705	-2.803

Note: \*\*\* denotes statistical significance at 1% level; \*\* at 5% level; \* at 10% level.

**APPENDIX 2. VAR model results (Property rental indices)**

	Class A	Class B	Class C	Classes D & E
<i>Property price/rental indices</i>				
$\Delta\text{PRIt-1}$	0.393529***	0.520171***	0.321192***	0.512163***
$\Delta\text{PPIt-2}$	0.098753	-0.203180**	-0.021958	-0.118284
<i>Macroeconomic variables</i>				
$\Delta\text{LnGDpt-1}$	-0.164862***	-0.203219***	-0.183538***	-0.152054***
$\Delta\text{LnGDpt-2}$	-0.003129	0.007685	-0.033723	-0.028104
$\Delta\text{CPIct-1}$	0.005797**	0.006637***	0.008663***	0.005198*
$\Delta\text{CPIct-2}$	0.003537	0.005897**	0.005284*	0.006610**
$\Delta\text{LnHHt-1}$	-0.053529	0.089740	0.203446	0.439883
$\Delta\text{LnHHt-2}$	0.203942	0.374401	0.883225*	1.231374**
<i>U.S. monetary policy</i>				
$\Delta\text{LnM1t-1}$	0.117844**	0.110212**	0.110668*	0.074036
$\Delta\text{LnM1t-2}$	0.006801	-0.002290	0.066860	0.071846
<i>Stock market variables</i>				
$\Delta\text{LnHSIt-1}$	0.079286***	0.103280***	0.125426***	0.106037***
$\Delta\text{LnHSIt-2}$	0.034507	0.030832	0.078627***	0.060410**
$\Delta\text{RISKt-1}$	-0.001694**	-0.002166***	-0.001720**	-0.001024
$\Delta\text{RISKt-2}$	-0.000992*	-0.000569	-0.000722	-0.000959
<i>Housing-related variables</i>				
$\Delta\text{LnHSt-1}$	-0.001963	-0.002905	-0.006133	-0.007210*
$\Delta\text{LnHSt-2}$	8.43E-05	0.002006	-0.003083	-0.001398
$\Delta\text{HOSSt-1}$	-8.87E-08	1.53E-06*	-2.02E-07	
$\Delta\text{HOSSt-2}$	5.27E-07	5.50E-07	-1.44E-07	
<i>Exogenous variables</i>				
Constant	0.001757	0.003192	-0.003653	-0.006129
AFC	-0.011203	-0.017059	-0.018473	-0.013720
SARS	-0.030585*	-0.043636**	-0.039557*	-0.040108*
N	123			
Adjusted R-square	0.545	0.542	0.556	0.554
F-statistic	8.300	8.217	8.638	9.431
Log likelihood	306.837	285.400	275.570	271.160
AIC	-4.648	-4.299	-4.139	-4.100
SC	-4.168	-3.819	-3.659	-3.666

Note: \*\*\* denotes statistical significance at 1% level; \*\* at 5% level; \* at 10% level.

**APPENDIX 3. Variance decompositions of property price indices (Levels)**

	Period	Class A	Class B	Class C	Classes D & E
Property price	4	82.43	79.21	76.14	71.90
	8	75.76	73.47	68.56	63.58
	12	68.64	67.82	62.61	57.77
Real GDP	4	3.23	4.49	3.59	1.73
	8	3.69	4.57	3.95	1.92
	12	4.75	5.43	4.75	2.57
CPI	4	0.60	0.24	0.62	2.14
	8	0.29	0.19	0.34	1.56
	12	0.28	0.31	0.25	1.20

End of APPENDIX 3

	Period	Class A	Class B	Class C	Classes D & E
Amount of households	4	0.01	0.08	0.09	0.95
	8	0.04	0.09	0.10	0.87
	12	0.29	0.13	0.25	0.95
Housing supply	4	2.28	1.81	2.82	2.48
	8	4.04	2.94	4.09	4.10
	12	4.64	3.50	4.51	4.54
Money supply (M1)	4	2.27	1.83	3.59	4.55
	8	5.69	4.11	6.35	6.86
	12	11.57	8.37	10.30	9.89
Hang Seng Index	4	6.44	8.46	9.15	13.73
	8	6.17	8.51	10.85	17.30
	12	5.00	7.67	11.02	18.89
Stock market risk	4	0.96	2.25	2.69	2.52
	8	1.85	3.95	3.97	3.82
	12	2.03	4.35	4.27	4.19
Amount of new HOS flats sold	4	1.78	1.62	1.31	
	8	2.48	2.15	1.80	
	12	2.79	2.42	2.04	

**APPENDIX 4. Variance decompositions of property rental indices (Levels)**

	Period	Class A	Class B	Class C	Classes D & E
Property rental	4	77.52	76.82	64.36	58.94
	8	58.19	60.99	40.50	29.29
	12	45.21	51.22	31.99	22.37
Real GDP	4	1.48	0.37	1.33	0.96
	8	3.06	0.87	2.90	2.56
	12	4.39	1.57	3.55	3.01
CPI	4	0.48	1.68	1.53	2.86
	8	0.86	3.08	4.10	6.14
	12	1.10	3.46	5.29	7.17
Amount of households	4	1.59	0.19	0.32	0.28
	8	3.38	0.97	1.00	0.86
	12	5.16	2.18	1.97	1.47
Housing supply	4	0.08	0.11	0.14	0.15
	8	0.11	0.14	0.08	0.11
	12	0.11	0.13	0.06	0.10
Money supply (M1)	4	5.94	4.96	5.30	3.98
	8	16.56	13.12	12.65	10.28
	12	27.81	21.85	19.38	15.28
Hang Seng Index	4	9.22	12.74	24.45	32.05
	8	13.44	17.36	35.68	49.31
	12	11.97	16.19	34.70	48.94
Stock market risk	4	3.46	2.83	1.95	0.77
	8	3.80	2.96	2.10	1.43
	12	3.39	2.74	2.00	1.65
Amount of new HOS flats sold	4	0.23	0.28	0.62	
	8	0.60	0.50	0.98	
	12	0.85	0.66	1.05	