National Chengchi University
Graduate School of Land Economics

(7)

Housing Market and Housing Policy
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HOUSING FINANCE

I. Introduction

    1. Context of Housing Finance

    2. Need of Housing Finance

    3. Characteristics of Housing Finance

    4. Functions of Housing Finance

    5. Problems of Housing Finance

II. Types of Housing Finance System

    1. The Direct Route

    2. The Contractual System

    3. The Deposit Taking System

    4. The Mortgage Bank System

    5. Housing Finance Institutions

III. Requirements of Mortgage

    1. Sources of Funds

    2. Terms and Conditions of Mortgage

    3. Mortgage-Loan Repayment Methods

    4. Mortgage Insurance

    5. Secondary Mortgage Market

IV. The Interest Factor in Financing

    1. Present Value

    2. Four Variables: Beginning Value, Ending Value,
                   Time Period, and Interest Rate

    3. Compound Interest Table

    4. Exercise

V. Housing Finance Issues

1. Stabilization and Inflation
2. Saving, Taxation, and Interest Rate
3. Housing Finance for the Poor
4. First-time Homebuyer
5. Efficiency and Equity: Liquidity and Redlining
6. Government Role

VI. Housing Finance in Taiwan

1. Housing Finance Condition
2. Cooperative Construction
3. Pre-sale System
4. Problems and Policies

QUESTIONS

1. Could you interview two families (one rental and one owner-occupant) to analyze their housing finance conditions?

2. According to your understanding, what are problems of the pre-sale system and what is your suggestion?

3. Why housing finance is so important to household, real estate sector, financial institution, and national economy?

4. You deposit $5,000 in a savings account paying 6% interest compounded annually. How much are you repaid at the end of twelve years.

5. Someone offers to pay you $30,000 in five years if you will loan her/him a sum of money now. Assuming the person is a very good risk and that you could earn 10% compounded in a saving account for the same period of time, what is the maximum loan you should make?

6. You are a homeowner, 65 years old. You no longer want the responsibilities of ownership, yet you also do not wan to move. So you sell your home to an insurance company and rent it back. Instead of paying you a lump sum for the house, the insurance company agrees to pay you /or your heirs $5,000 a year for 15 years. Assuming that the insurance company can earn 10% on investments of similar risk, what value has it placed on your house?

7. What is the annual level payment required to amortize a 10%, 25year mortgage loan for which the principle is $50,000?

8. Suppose a house costs $1,000,000. Inflation is 5%, the mortgagee rate is 7%, and property taxes are 2%. Depreciation and maintenance are 1% each. There are no expected capital gains. What rent must the owner of this house charge to cover expenses? If inflation remains at 5% and the mortgage rate rises to 9%, what changes would you expect in rent and house value?

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	（一）複利 未來值率	（二）複利年金 未來值率	（三）複利年金 償還基金率	（四）複利償還 現值率	（五）複利年金 累加現值率	（六）本利均等 償還率
年利率：	6.00%	（以年率複利計算）				
年						
1	1.060000	1.000000	1.000000	0.943396	0.943396	1.060000
2	1.123600	2.060000	0.485437	0.889996	1.833393	0.545437
3	1.191016	3.183600	0.314110	0.839619	2.673012	0.374110
4	1.262477	4.374616	0.228591	0.792094	3.465106	0.288591
5	1.338226	5.637093	0.177396	0.747258	4.212364	0.237396
6	1.418519	6.975319	0.143363	0.704961	4.917324	0.203363
7	1.503630	8.393838	0.119135	0.665057	5.582381	0.179135
8	1.593848	9.897468	0.101036	0.627412	6.209794	0.161036
9	1.689479	11.491316	0.087022	0.591898	6.801692	0.147022
10	1.790848	13.180795	0.075868	0.558395	7.360087	0.135868
11	1.898299	14.971643	0.066793	0.526788	7.886875	0.126793
12	2.012196	16.869941	0.059277	0.496969	8.383844	0.119277
13	2.132928	18.882138	0.052960	0.468839	8.852683	0.112960
14	2.260904	21.015066	0.047585	0.442301	9.294984	0.107585
15	2.396558	23.275970	0.042963	0.417265	9.712249	0.102963
16	2.540352	25.672528	0.038952	0.393646	10.105895	0.098952
17	2.692773	28.212880	0.035445	0.371364	10.477260	0.095445
18	2.854339	30.905653	0.032357	0.350344	10.827603	0.092357
19	3.025600	33.759992	0.029621	0.330513	11.158116	0.089621
20	3.207135	36.785591	0.027185	0.311805	11.469921	0.087185
21	3.399564	39.992727	0.025005	0.294155	11.764077	0.085005
22	3.603537	43.392290	0.023046	0.277505	12.041582	0.083046
23	3.819750	46.995828	0.021278	0.261797	12.303379	0.081278
24	4.048935	50.815577	0.019679	0.246979	12.550358	0.079679
25	4.291871	54.864512	0.018227	0.232999	12.783356	0.078227
26	4.549383	59.156383	0.016904	0.219810	13.003166	0.076904
27	4.822346	63.705766	0.015697	0.207368	13.210534	0.075697
28	5.111687	68.528112	0.014593	0.195630	13.406164	0.074593
29	5.418388	73.639798	0.013580	0.184557	13.590721	0.073580
30	5.743491	79.058186	0.012649	0.174110	13.764831	0.072649
31	6.088101	84.801677	0.011792	0.164255	13.929086	0.071792
32	6.453387	90.889778	0.011002	0.154957	14.084043	0.071002
33	6.840590	97.343165	0.010273	0.146186	14.230230	0.070273
34	7.251025	104.183755	0.009598	0.137912	14.368141	0.069598
35	7.686087	111.434780	0.008974	0.130105	14.498246	0.068974
36	8.147252	119.120867	0.008395	0.122741	14.620987	0.068395
37	8.636087	127.268119	0.007857	0.115793	14.736780	0.067857
38	9.154252	135.904206	0.007358	0.109239	14.846019	0.067358
39	9.703507	145.058458	0.006894	0.103056	14.949075	0.066894
40	10.285718	154.761966	0.006462	0.097222	15.046297	0.066462
41	10.902861	165.047684	0.006059	0.091719	15.138016	0.066059
42	11.557033	175.950545	0.005683	0.086527	15.224543	0.065683
43	12.250455	187.507577	0.005333	0.081630	15.306173	0.065333
44	12.985482	199.758032	0.005006	0.077009	15.383182	0.065006
45	13.764611	212.743514	0.004700	0.072650	15.455832	0.064700
46	14.590487	226.508125	0.004415	0.068538	15.524370	0.064415
47	15.465917	241.098612	0.004148	0.064658	15.589028	0.064148
48	16.393872	256.564529	0.003898	0.060998	15.650027	0.063898
49	17.377504	272.958401	0.003664	0.057546	15.707572	0.063664
50	18.420154	290.335905	0.003444	0.054288	15.761861	0.063444

	（一）複利 未來值率	（二）複利年金 未來值率	（三）複利年金 償還基金率	（四）複利償還 現值率	（五）複利年金 累加現值率	（六）本利均等 償還率
年利率：	10.00%	（以年率複利計算）				

年	複利 未來值率	複利年金 未來值率	複利年金 償還基金率	複利償還 現值率	複利年金 累加現值率	本利均等 償還率
1	1.100000	1.000000	1.000000	0.909091	0.909091	1.100000
2	1.210000	2.100000	0.476190	0.826446	1.735537	0.576190
3	1.331000	3.310000	0.302115	0.751315	2.486852	0.402115
4	1.464100	4.641000	0.215471	0.683013	3.169865	0.315471
5	1.610510	6.105100	0.163797	0.620921	3.790787	0.263797
6	1.771561	7.715610	0.129607	0.564474	4.355261	0.229607
7	1.948717	9.487171	0.105405	0.513158	4.868419	0.205405
8	2.143589	11.435888	0.087444	0.466507	5.334926	0.187444
9	2.357948	13.579477	0.073641	0.424098	5.759024	0.173641
10	2.593742	15.937425	0.062745	0.385543	6.144567	0.162745
11	2.853117	18.531167	0.053963	0.350494	6.495061	0.153963
12	3.138428	21.384284	0.046763	0.318631	6.813692	0.146763
13	3.452271	24.522712	0.040779	0.289664	7.103356	0.140779
14	3.797498	27.974983	0.035746	0.263331	7.366687	0.135746
15	4.177248	31.772482	0.031474	0.239392	7.606080	0.131474
16	4.594973	35.949730	0.027817	0.217629	7.823709	0.127817
17	5.054470	40.544703	0.024664	0.197845	8.021553	0.124664
18	5.559917	45.599173	0.021930	0.179859	8.201412	0.121930
19	6.115909	51.159090	0.019547	0.163508	8.364920	0.119547
20	6.727500	57.274999	0.017460	0.148644	8.513564	0.117460
21	7.400250	64.002499	0.015624	0.135131	8.648694	0.115624
22	8.140275	71.402749	0.014005	0.122846	8.771540	0.114005
23	8.954302	79.543024	0.012572	0.111678	8.883218	0.112572
24	9.849733	88.497327	0.011300	0.101526	8.984744	0.111300
25	10.834706	98.347059	0.010168	0.092296	9.077040	0.110168
26	11.918177	109.181765	0.009159	0.083905	9.160945	0.109159
27	13.109994	121.099942	0.008258	0.076278	9.237223	0.108258
28	14.420994	134.209936	0.007451	0.069343	9.306567	0.107451
29	15.863093	148.630930	0.006728	0.063039	9.369606	0.106728
30	17.449402	164.494023	0.006079	0.057309	9.426914	0.106079
31	19.194342	181.943425	0.005496	0.052099	9.479013	0.105496
32	21.113777	201.137767	0.004972	0.047362	9.526376	0.104972
33	23.225154	222.251544	0.004499	0.043057	9.569432	0.104499
34	25.547670	245.476699	0.004074	0.039143	9.608575	0.104074
35	28.102437	271.024368	0.003690	0.035584	9.644159	0.103690
36	30.912681	299.126805	0.003343	0.032349	9.676508	0.103343
37	34.003949	330.039486	0.003030	0.029408	9.705917	0.103030
38	37.404343	364.043434	0.002747	0.026735	9.732651	0.102747
39	41.144778	401.447778	0.002491	0.024304	9.756956	0.102491
40	45.259256	442.592556	0.002259	0.022095	9.779051	0.102259
41	49.785181	487.851811	0.002050	0.020086	9.799137	0.102050
42	54.763699	537.636992	0.001860	0.018260	9.817397	0.101860
43	60.240069	592.400692	0.001688	0.016600	9.833998	0.101688
44	66.264076	652.640761	0.001532	0.015091	9.849089	0.101532
45	72.890484	718.904837	0.001391	0.013719	9.862808	0.101391
46	80.179532	791.795321	0.001263	0.012472	9.875280	0.101263
47	88.197485	871.974853	0.001147	0.011338	9.886618	0.101147
48	97.017234	960.172338	0.001041	0.010307	9.896926	0.101041
49	106.718957	1057.189572	0.000946	0.009370	9.906296	0.100946
50	117.390853	1163.908529	0.000859	0.008519	9.914814	0.100859

房地產投資與市場分析

/張金鶚

姓名：_____

系級：_____

日期：_____

實驗一：

假設你目前月薪收入是$56,000，而你的支出為$40,000 元。

假設現在：

情況一：你的收入維持不變，而你的支出減少到$33,600 元；

情況二：你的收入增加到$66,666 元，而你的支出則維持不變；

情況三：你的收入增加到$73,333 元，而你的支出也增加到$44,000 元。

請列出最佳至最差的選擇：(以"1"表示最佳選擇，"3"表示最差選擇)

情況一：_____

情況二：_____

情況三：_____

實驗二：

張三、李四、王五各以$1,200 萬元買下一戶高級公寓大廈，並在一年後出售該住宅。假設：

張三在擁有住宅那一年，物價產生 通貨緊縮 ，各樣物品與服務收費 皆降價 25% ，一年後，張三以 924 萬元出售該住宅(即較他買時 少了 23%)。

李四在擁有住宅那一年，物價產生 通貨膨漲 ，各樣物品與服務收費 皆上漲 25% ，一年後，李四以 1,476 萬元出售該住宅(即較他買時 多了 23%)。

王五在擁有住宅那一年，物價平穩 ，各樣物品與服務收皆無漲跌，一年後，王五以 1,176 萬元出售該住宅(即較他買時 少了 2%)。

請評估張三、李四、王五三人房地產投資結果的優劣：

(以"1"表示最佳選擇，"3"表示最差選擇)

張三：_____

李四：_____

王五：_____