The Factors Affecting Housing Price in Hangzhou: An Empirical Analysis

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Abstract: This paper explores the factors that affect housing price in the Chinese city, Hangzhou. Providing theoretical explanation of house price determinants from the demand and supply sides, the paper employs the Ordinary Least Square (OLS) method taking time series data of different variables for 20 years, 1990-2009. It is found that households' income, urbanization rate, lagged sum of annual real estate development investment and foreign direct investment in Hangzhou positively and significantly affect Hangzhou's housing price. The magnitude of the effects of these variables is different, and the effect of urbanisation rate is the strongest. The saving deposits of urban residents have significant negative effect on the housing price. These results are in line with the theoretical predictions. The paper also provides some policy recommendations.

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I.   Introduction

After the revolution on China's housing market in 1998, the Chinese housing market turns into

a monetization and commercialization directions. In other words, houses are mainly supplied

by the market rather than the government and state owned enterprises. Since both the

demand and supply are out of direct control of the government, the China's housing market is

developed in its current form. However, the Chinese housing market still has three significant

differences from the housing market in western countries. First, the housing market in western

countries is a matured market, which means that the second-hand houses occupy a large

proportion of the total transactions in the market. In China, the history of housing market is

really short. Therefore, the main purpose of the housing market is to supply the new houses to

improve the residents' living environment and to mitigate the housing problem. Second, in order

to promote the housing market, government allows housing companies to sell the houses in

advance (houses haven't been built) and receive the pre-paid money to support their

construction projects. Third, the government only grants the 70-year property usage right to the

buyers after purchasing the houses. The ownership of the land and the houses still belong to

the local government.

The past 10-year period is very remarkable for housing market development in the Chinese city

Hangzhou. The proportion of investment on housing market relative to local GDP increases from 5.6% in 1998 to nearly 20% in 2009, and the housing price in 2010 in Hangzhou approaches to 12000 RMB per square meter, which is more than 5 times of 1998 price in real term (after adjustment of inflation rate). The high increasing rate of housing price makes Hangzhou as one of the highest housing priced cities in China. Especially in 2005, the housing price rose sharply, 34% compared to the year before (2004). The pessimistic atmosphere in the share market leads people to transfer their investment into the housing industry to increase their assets via capital gain. During the period between 2005 and 2009, the average housing price increased by nearly 20% per annum, except in 2008 when the price increased 10.7% due to the financial crisis. Within the same period, the rates of increase of family income and GDP were only the half of the housing price increase (Yearbook 2000-2010). There is high possibility that Hangzhou's housing market is far away from the market equilibrium and stable state. Although the government is aware of this increased housing price and proclaims some regulations on demand and supply sides including charging high tax, higher interest rates on mortgage loan and restricting the land supply to control the Hangzhou's housing price, yet the housing price still goes opposite way of the government's expectation. Hence the current research- exploring the influencing factors of Hangzhou's housing price- is important. Our findings and recommendations would suggest the government to take appropriate policy in order to regulate the local housing market efficiently.

The rest of the paper is organized as follows. Section II analyses the historical growth trend of housing price along the line of economic growth and people's income; this section will also

highlight the demand-supply conditions and the investment on urban infrastructure and dwelling; section III briefly reviews the existing literature;   section IV presents the underlying economic theoretical explanation of house price determinants; section V highlights about the data, variables and methodology; section VI provides the estimated results and discussion; and finally section VII concludes the paper with some recommendations.

II. Growth trend of housing price, demand-supply and investment on urban infrastructure and real estate

It is worthwhile to note that data constraint is the main barrier for proper socio-economic analysis of undergoing transformation of housing sector in Hangzhou. From the available statistics, we are able to present the data for some variables only up to 2007 or 2008. Table1 below shows the trend of growth rate of housing price, average income, and GDP during 2002-2008.

Table 1: Growth rate of housing price, average income and GDP during 2002-2008

	2002	2003	2004	2005	2006	2007	2008
growth rate of housing price	3.6%	4.8%	17.8%	14.0%	6.5%	16.8%	7.0%
growth rate of urban people's disposal income	13.4%	9.0%	7.7%	9.6%	9.5%	12.2%	6.0%
GDP growth rate	9.1%	10.0%	10.1%	10.2%	10.5%	11.2%	9.5%

Source: China statistical year book, 2008.

Housing affordability can be realized with the comparison of the growth rates of housing price, people's disposable income and GDP. From the statistics noted above it is observed that

although growth rates of housing price were well below the growth rates of people's disposable income and GDP in 2002 and 2003, the growth rates of former were much higher than those of the latter in 2004 and 2005. The growth rates of housing price were 17.8% and 14.0%, respectively, in 2004 and 2005 compared to 7.7% and 9.6% growth rates of people's disposable income and 10.1% and 10.2% GDP growth rates for the same period. The higher growth rate of housing price (16.8%) was also observed in 2007 though its growth declines in 2008 due to global financial crisis.

China's urbanization intensifies the demand for dwelling in Hangzhou as well as other cities. Thus the demand brisk of real estate market leads to continuous undersupply of dwelling and increasing housing price.

Table 2 reveals that in 2007, the completely finished dwelling (supply) approached to 478 million square meters- supply increased by 10.5% comparing with 2006, but the sale of dwelling (demand) was 691 million square meters – demand increased by 24.7% comparing with 2006. The growth of demand is higher than the growth of supply every year except 2005. The average price of dwelling is much higher, almost double, than the economically affordable housing price each year.   In order to limit output and charge higher price, the land agencies use monopoly power. The government levies, higher taxes on land appreciation, business, etc., also contribute to the price climbing (Cai, 2008; Jiang, 2008).

Table 2: The supply and demand conditions of real estate market, 2003-2007

year	dwelling sales (demand of dwelling) (10 thousand square meter)		completely finished construction (supply of dwelling) (10 thousand square meter)		average price of dwelling ((RMB/average square meter)	Price of economically affordable house (RMB/average square meter)
	Total square	Growth rate	Total square	Growth rate		
2003	29779	25.6%	32200	12.9%	2359	1380
2004	33820	13.6%	34677	7.7%	2778	1482
2005	49588	10.6%	40004	15.4%	3168	1655
2006	55423	11.8%	43247	8.1%	3367	1729
2007	69104	24.7%	47767	10.5%	3885	1921

Source: China statistical year book, 2007.

Table 3 below compares investment growth rates on dwelling with those on urban infrastructure and land agency during 2002-2007. The growth rate of investment on dwelling is higher than the growth rate of investment on urban infrastructure during the recent 6 years. Especially in 2007, the difference approaches to nearly 7% (Gu, 2008). The contractionary monetary policy leads to a higher interest rate and increasing cost of construction, but the expectation of continuous high return still stimulates more and more money to flow into real estate market. However, the proportion of investment on economically affordable houses to the total investment on real estate dropped from 7.6% in 2002 to 3.3% in 2007 (Ding, 2007). It illustrates that the economically affordable market is still unattractive to land agencies due to the low profit.

Table 3: China's investment on urban infrastructure and real estate, 2002-2007

(100 million RMB)

Year	investment on urban infrastructure	investment of land agency	investment on dwelling	growth rate of investment on urban infrastructure	growth rate of investment of land agency	growth rate of investment on dwelling
2002	35489	7791	5228	18.3%	22.8%	24.0%
2003	45812	10154	6777	29.1%	29.7%	29.6%
2004	59028	13158	8837	28.8%	28.1%	30.4%
2005	75095	15909	10861	27.2%	20.9%	22.9%
2006	93369	19422	13638	24.3%	22.1%	25.3%
2007	117414	25280	18010	25.8%	30.2%	32.1%

Source: China statistical year book, 2007.

III.   Literature Review

Meen and Mark (1998) regard the housing price from two main perspectives: i)   correlating the

housing price with the macroeconomic and financial data, and ii) viewing the housing price from

residential location theory that forecasts the housing price based on the housing unique

characteristics.

Dipsaquale and Wheaton (1996) investigate the inner procedures of housing price. They divide

the housing market into lease market and capital market via a four quadrant model. The rent of

lease market is determined by the demand of lessee and the quality and quantity of houses in

the market, while the demand and supply on the capital market determine the housing price.

When the economic factor influences one quadrant, the remaining three quadrants are also

changed accordingly, and then form a new equilibrium on both lease and capital housing market.

In fact, housing price is the leading factor to the macroeconomic status. After investigating the 1990s British housing market, Meen and Mark (1998) conclude that the main factors influencing the housing market are: income, interest rates, credit availability, tax structure, housing supply and demographic structure.

Rahman (2010) analyzed the Australian housing market, and investigated the causes and effects of rising house price from socio-economic point of view. Referring Berry and Dalton (2004), Rahman (2010) mentioned the factors that are considered responsible for house price rise in Australia. These forces can be divided into three categories: short term/cyclical, institutional, and long term/ fundamental. The short term factors include lower interest rates, high investment demand and positive economic climate. The institutional factors include financial deregulation and innovation, land supply and the land-use planning system, and government taxes, levies and charges. The long term/fundamental factors are population growth, economic growth and increased wealth effect.

Jud and Winkler (1999) find that the population, real income real construction fee and real interest rate have significant effects on housing price after analyzing 130 American cities housing price from 1984 to1998. They also find that the housing price is also influenced by the restriction policy on the land management.

According to the economic theory, the long-term equilibrium housing price should just be determined by the supply and demand factors like all other commodities. However, Kenny (1999) finds out the market housing price is always against the long-term market clearing price. He thinks it is due to the time lag from high transaction fee and the slow adjustment on the housing supply. In the short run, the supply of houses is almost fixed while it is more flexible in the long run.

The research on China's housing market can normally be divided into two stages: Pre-2000 and post-2000. Before 2000, scholars emphasis on the contribution of housing industry to the country's GDP growth via input-output analysis. Since China is always facing the expiation on inflation after 2000, scholars turn to analyzing the effects on housing market from the point of view of fiscal and monetary policy, the housing price cycle and the economic cycle, and relationship between the housing industry and the financial support in the second stage.

Zhang and Li (2001) analyze the housing price of Beijing. They find that the real construction fee and real local GDP have the significant effects on housing price change. Shen and Liu (2003) opine that the increasing housing price will contribute to the economic development to some extent when the economy is continuously grows at a high level. When the GDP growth rate slows down, housing price needs to be under control.

Jin (2004) concludes that three factors lead to the high increasing rate on Nanjing's housing

price: i) the demand from residents to improve living standards, ii) the more people flowing into

Nanjing, and iii) the expectations of further increase of housing price.

Wang (2005) analyses the relationship between the housing price and the CPI. She finds that

the change of CPI has little effect on housing price, although the housing price moves

accompanying with the CPI. However, she thinks that the CPI will make significant effects on

housing price when the demand of houses becomes a core demand for residents with

continuous development on the housing industry revolution and increment on residents'

income.

Cui (2005) collect 30 cities' housing price and the figures of 6 variables: non-agriculture

population, local GDP, average income, housing sales revenue and per capita living area and

Engel's Coefficient, and reaches to 4 main conclusions. The city population and income are the

main factors to increase the housing price. The mortgage loan amount has significant influence

on the housing demand and housing price. The rent income has little effects on housing price

and the result of this relationship varies among cities.

From the above discussion, we find that recent analysis is mostly focusing on the relationship

between the housing price and several macroeconomic factors such as local GDP, money

supply, interest rate, disposal income and investment on local housing market. The analysis of

effect of urbanization rate and foreign direct investment on housing price is rare, and thus the

analysis of the housing price determinants from a broad perspective is lacking.

IV. **Theoretical explanation of house price determinants**

Like other commodity prices, house price is also mainly determined by demand and supply factors. According to standard economic theory, when demand exceeds supply, price rises (Rahman, 2010). As mentioned by Abelson et al. (2008), real house price changes can therefore be expressed by the following equation:

$$P_t - P_{t-1} = \alpha (D_t - S_t) \qquad\qquad (1)$$

Where P is the real price of housing, D is the estimated demand (consumption and investment demand) for housing, S is the supply of housing, α is the coefficient, and subscript t refers to the time period. If $D_t > S_t$, house price in the period t will increase.

Demand for housing

Based on the demand theory in economics, the demand for housing can be seen as a function of disposable income (Y_t), current housing price (P_t), the rate of interest (r), the expected future house price (P_e), easy access to finance (F_t), economic growth (G_t), taxes or subsidies (TS_t), and demographic factors (DEM) like population growth and or household formation. That is,

$$Dt = f (Y_{t,}, P_t, r, P_e, F_t, G_t, TS_t, DEM) \qquad\qquad (2)$$

Y_t, P_e, F_t, G_t and S positively, and P_t, r and T negatively affect housing demand. Demographic factors either positively or negatively affect housing demand depending on the pattern of changes of these factors. P_e represents capital gain which increases investment demand.

Maintenance expenditures do not vary to a great extent from year to year, and hence these are not included in the equation.

To reflect investment demand for housing all possible relative return on housing and other assets may also be incorporated in equation (2) in addition to expected capital gain (P_e) and borrowing rate of interest (r) mentioned above. Rents from housing, the return on other assets such as equities, and taxation effects may also be included in a full investment demand model for housing.

Taxation effects may be general taxes or specific housing taxes such as the exemption of owner-occupied homes from capital gain tax. If a person, with his/her own fund, buys a house, the after-tax interest he/she pays on the loan is one of the main determining factors oh housing demand. The lower is this interest rate, the higher will be the housing demand. If capital gain is not taxed, whereas nominal income is taxed, the demand for housing increases (Abelson et al. 2008).

Supply of housing

The supply of housing primarily depends on the stock of housing, and the stock does not change much from year to year. Therefore, housing supply is inelastic. Also estimation of the housing stock on a quarterly basis is difficult. Abelson et al. (2008) found that the housing stock in Australia had substantial long-run and short-run effects on housing prices.

Housing supply is also affected by the costs of building (Bourassa and Hendershott 1995; Bodman and Crosby 2003). The intention of the government, and its policies with regard to housing and land release may also significantly affect the housing supply, and housing price.

House price model

So house price depends on these demand and supply factors as stated above. Inclusion of all factors in the model for empirical works may not be possible.   For example, exchange rate of currency may also have an influence on house prices in an open economy and/or for an international city. Therefore, referring to the works of Hendry (1984), Meen (1990) and Muellbauer and Murphy (1997), Abelson et al. (2008) stated that the house price model would be an inverted demand equation as noted below:

$$P_t = f(Y, r, P_e, TS, DEM) \qquad\qquad (3)$$

The identification of all these variables has been stated earlier. With regard to interest rate, it is noted that real interest rate, rather than nominal interest rate, is more important to consider house prices. If the nominal interest rate is higher, and the inflationary pressure exists in the economy, the real cost of borrowing may still be lower which can stimulate the housing demand and housing prices.

V. Data, Variables and Methodology

Data

The data used in this paper have been collected from Hangzhou Statistical Bureau Website, Hangzhou House Information Website and Statistical Yearbook of Hangzhou. The collected time series data are for 20 years, 1990- 2009 on different variables. We are limited to this data period as no more data on the required variables are available. All observations are annual.

Selected Variables

Although house price may be affected by many factors as described above, we could not consider all of them due to data limitation in this empirical paper. For example, data on interest rate, which is an important variable, are not available for the required period. We cannot further shorten the data period for a time series study like this, as 20 years time period is not long enough.

The variables considered for this study are described below with their expected signs.

Income: Annual family income includes salaries, income via running business, property income like rent, dividends and interest income, and transferred payment from the government. Normally, the family disposal income will keep pace with the movement of housing price. The expected relationship between disposable income and house price is positive. But when the increasing rate of housing price is far beyond the rise of family income, there must be a capital bubble existed with this market (Xu 2007).

Population: The non-agriculture population, who live in the urban area of the city, reflect the stable population of the city. And the larger a city is, the more people from the outside of the city

will flow into the urban area. In 1975, Japan experienced more than 75% urbanization rate, while its housing price increased more than 10 times compared to 1960. The city with large population has high demand for housing and thus contributes to increase the housing price.

Foreign direct investment (FDI): Nowadays, with the loosening of regulations, foreign investment can easily flow into the China share market and housing market. Based on the statistical analysis of Chinese Academy of Social Sciences, the "Hot money" has already contributed around 10% increase of Shanghai housing price. If the foreign direct investment accumulates in housing industry in Hangzhou, there must be a positive relationship between these two variables.

Saving deposits of urban residents: If the urban residents keep their money in banks more as a secure investment rather than investing in housing market, this variable will affect housing price negatively as housing demand will be lower.

Construction fee: The effect of increasing construction fee on housing price is huge and positive. During the recent years, the prices of construction materials like steel, cement, timber and electricity have become nearly double in China. Thus the construction fee may be considered as one of the important variables for analysing housing price.

Housing supply: Housing price is also determined by the supply of houses in the market. According to economic theory, if housing supply is more than housing demand, other things

remaining the same, the housing price tends to drop.

Investment on fixed assets: If the investment on fixed assets including housing develops fast with suitable economic structure, this increasing money will attract more money to flow into the housing industry and build investors' confidence. The house price is expected to grow.

Long term loan: For housing, long term loan is required. The more long term loan is available, the more will be housing demand, and price is expected to increase.

Description of Variables

The description of variables used for the estimation is noted below:

Lnhp: the log of average annual housing price in Hangzhou (RMB/per square meter)

LnC: the log of construction fee per square meter (RMB/per square meter)

Lndeposit: the log of the saving deposits of urban residents (RMB)

LnI : the log of the average disposal income (RMB)

Lninvestemnt: the log of the annual real estate development investment in Hangzhou (RMB)

LnL: the log of the long-term loan (RMB)

LnS: the log of the floor space of completed building (square meter)-housing supply

UR: the urbanization rate (non-agriculture population/total population)

GRP: Hangzhou's urban population growth rate

Lninvestemntt: the log of the sum of annual real estate development investment in Hangzhou

and foreign direct investment in Hangzhou (RMB)

Lnlaginvestment: The log of lagged annual real estate development investment in Hangzhou

(RMB)

Lnlaginvestmentt: the log of lagged sum of annual real estate development investment in

Hangzhou and foreign direct investment in Hangzhou (RMB)

Lnlaghp: the log of lagged average annual Hangzhou housing price (RMB/per square meter)

ε = unexplained or error term.

Methodology

It is quite appropriate to use ordinary least square (OLS) in estimating equations of econometric

models in the case of small samples (Rahman, S.H and Shilpi, F.J. 1996). Accordingly, OLS is

used as the method of estimating the equations in this research. This method is simple, and

gives more accurate estimates for a small sample like ours where the number of observations is

20. Econometric software E-Views has been used for estimation purpose.

Selected Model

Taking all the variables described above, average annual housing price in Hangzhou has been

regressed on the 12 explanatory variables repeatedly. Out of the following 4 variables-

Lninvestemnt, Lninvestemntt, Laglninvestment and Laglninvestmentt- we have considered one

of these in any particular equation to avoid multicollinearity problem. Through the estimation

process, some variables were found either insignificant or some were giving wrong signs.

Dropping these variables from the model with a variable deletion test, finally, we have reached

to the following two alternative models (equations 4 and 5) which give us more or less satisfactory results.

Lnhp = β0 + β1 Lndeposit + β2 Lnlaghp + β3LnI +β4 UR+ β5 Lnlaginvestmentt + ε   (4)

Lnhp = β0 + β1 Lndeposit + β2 Lnlaghp + β3LnI +β4 UR+ β5 Lnlaginvestment + ε   (5)

VI. Results and Discussion

The estimated results of the above two models (equation 4 and 5) are very similar in terms of magnitude and directions. The results are noted in Table-1 and Table-2 (at the end of the paper).

As both the models are giving the similar results, we will limit our analysis based on the equation (4). Hence equation (4) is our preferred model.

From the Table -1, it is observed that households' income, urbanization rate, lagged sum of annual real estate development investment and foreign direct investment in Hangzhou have positive and significant effects on Hangzhou's housing price. The coefficients of the first two variables are significant at 5% level, and the coefficient of the last variable is significant at 1% level. The effect of urbanisation rate on the housing price is very strong indicating that 1% increase of urbanisation rate will increase the Hangzhou's housing price by 3164% [exp(8.059) = 3164]. The second highest influencing factor for the housing price is households' income. The coefficient of this variable is 1.163 which indicates that 1% increase of household income will

increase the Hangzhou's housing price by 3.20 percent [exp (1.163) = 3.20]. Lagged investment in real estate development and FDI in Hangzhou jointly affect the house price. A 1% increase in both investment increases house price by 0.27%. As expected, the saving deposits of urban residents influence house price in Hangzhou negatively. A 1% increase of saving deposit decreases the house price by 0.75%. This effect is significant at 1% level. However, surprisingly the coefficient of lagged house price is found negative, indicating the business cycle-type effect. This may be due to the case that our data period is limited to just 20 years. A longer time period of data, which we could not use here due to lack of data, may further improve these results. In general, demand side factors are influencing the Hangzhou's housing price more than the supply side factors. Therefore, increase of Hangzhou's housing price is mainly due to increase of housing demand.

Robustness test of the model

From the Table-1, it is observed that the fitness of the model is very good. R-squared is 0.978, Adjusted R-squared is 0.969 and F-statistic is 116.82. All variables are found significant at 1% and 5% significant levels based on the t-statistic. Darbin-Watson statistic is 2.12. Therefore, the model is free from autocorrelation problem. Multicollinearity of variables has been tested, and no significant problem is found. Heteroscedasticity is not an issue of concern since we are dealing with the time series data. Time series should be stationary, or linear combinations of all time series should be cointegrated. If time series are cointegrated, a long run or equilibrium relationship between the variables exists and the regression is real and not spurious. Under

such circumstances, the OLS estimation technique is consistent (Thomas 1997: 432). Our time-series are cointegrated.

VII. Conclusion and Recommendations

Hangzhou's housing market is not an efficient market. The growth rate of housing price is much higher than the growth rate of local GDP and family income. The demand-pull effects are so strong that housing price is not stable, and it is continuously increasing. Our study shows that the saving deposits of urban residents, household disposable income, urbanization rate and investment in housing industry and FDI are the main determinants of Hangzhou's housing price. All factors except the first variable affect housing price positively and significantly while the saving deposits of urban residents have significant negative effect on housing price.

The increase of Hangzhou's housing price should keep the pace with the increase of local GDP and households' income. An increase of housing supply for the residents can ensure it to a great extent. Therefore, the government should focus on this issue with a great care. Due to better life and good employment opportunities, people are moving to urban area at an increasing rate. Hangzhou's continuous economic growth, stable social atmosphere and improved life style attract millions of people to work and study here. To provide them with affordable housing should get priority in the government's agendas. Therefore, the government should investment money for affordable housing supply. Moreover, to avoid capital bubble in housing market, the government should appropriately monitor and adjust the amount of investment flow into the housing industry for the sake of long-term economic growth.

Since the family income plays an important role on the housing price change, the government can take initiatives to increase the people's affordability for housing by increasing the net salaries and helping businesses. In addition to the direct increase of the disposal income, the government should also concentrate on the income and wealth distribution issues. According to the statistics of the Chinese Academic and Social Science, the Gini Coefficient is nearly 0.5 indicating that the gap between the rich and poor is still high and increasing. Improving the income and wealth distribution and empowering the low income people financially will avoid the housing market to become a speculative market and ensure the housing as a shelter for the people who really need it.

It is worthwhile to mention the limitations of this current study. Due to lack of data, only 20 years of time series analysis has been considered here. We could not include some important variables in our model due to lack of data. These variables are interest rate, expected return on housing investment, housing tax and capital gain tax, land release data, etc. Therefore, future research is being recommended with the possibility of inclusion of these variables and with an extended time period, if possible, to obtain better research outcomes.

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Table 1: Estimated results of equation (4)

Dependent Variable: LNHP

Method: Least Squares

Sample: 1991 2009

Included observations: 19

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	10.32376	3.364943	3.068034	0.0090
Lndeposit	-0.745974	0.118514	-6.294380	0.0000
Lnlaghp	-0.550401	0.163211	-3.372337	0.0050
LnI	1.163060	0.662256	1.756209	0.1026
UR	8.059731	3.442918	2.340959	0.0358
Lnlaginvestmentt	0.270121	0.087229	3.096674	0.0085

R-squared	0.978228	Mean dependent var	7.398326
Adjusted R-squared	0.969855	S.D. dependent var	0.470329
S.E. of regression	0.081660	Akaike info criterion	-1.920404
Sum squared resid	0.086690	Schwarz criterion	-1.622160
Log likelihood	24.24384	F-statistic	116.8214
Durbin-Watson stat	2.123824	Prob(F-statistic)	0.000000

Table 2: Estimated results of equation (5)

Dependent Variable: LNHP

Method: Least Squares

Sample: 1991 2009

Included observations: 19

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	9.728349	4.160282	2.338387	0.0360
Lndeposit	-0.930930	0.194993	-4.774170	0.0004
Lnlaghp	-0.451006	0.172043	-2.621470	0.0211
LnI	1.802011	0.625229	2.882161	0.0128
UR	5.532989	3.505605	1.578326	0.1385
Lnlaginvestment	0.271408	0.118737	2.285792	0.0397

R-squared	0.973014	Mean dependent var	7.398326
Adjusted R-squared	0.962635	S.D. dependent var	0.470329
S.E. of regression	0.090914	Akaike info criterion	-1.705709
Sum squared resid	0.107450	Schwarz criterion	-1.407465
Log likelihood	22.20424	F-statistic	93.74771
Durbin-Watson stat	1.923747	Prob(F-statistic)	0.000000