

PREFERENCES FOR THE NPAS: BUYERS' PERSPECTIVES

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ABSTRACT

According to Bank of Thailand report, non-performing assets or NPA held by Thai commercial banks and public financial institutions as of December 2010 value up to ฿138,534. These assets are foreclosed property whose owners used as their debt collateral and has been transferred to banks and/or financial institution due to the debtors' inability to pay debts. These organizations, thus, rushed to dispose of assets held for sale because the longer they hold these assets, the more deterioration and the lessen value they will get from them. Moreover, Thai people are inclined to purchase foreclosed estate. Based on reviewing research studies published within the last 10 years, the study of foreclosed estate's attributes that make potential customers decide to purchase has not been found. Conjoint analysis was used to determine how potential house buyers developed preferences for features of foreclosed houses in this study. The conjoint analysis estimates respondents' preferences in terms of utilities (or part-worth) for each level of location, price and renovation. Results indicate that the respondents do not prefer houses' price they receive higher utility for location of estate. Respondents pay considerable weight on low effort put on renovation. They prefer not to pay more than 5% of houses' price for renovation. Majority of samples are employees or government officers aged ranging from 30-35 years old with undergraduate education.

Field of study: Real Estate Business

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1. INTRODUCTION

Owing to the bad economic crisis since 1997, Thailand has lots of non-performing loans (NPLs) that do not generate income and accrued in financial system. According to the report from the central bank of Thailand called Bank of Thailand (BOT) in December, 2009, the amount of debt was 380,130 million baht or 4.83 percent of total loans. As a control measure, BOT tries to keep the amount of NPLs from all Thai commercial banks to be under 2 percent of total loans. The purposes of this measure are to strengthen the financial system and to establish credibility for foreign investors. The BOT then issued other policy that forces Thai commercial bank to have 100% of reserve on the NPLs due to the international accounting standard No. 39 (IAS 39). In order to comply with the Basel II and financial system section 2, increasing demand is encouraged to reduce cost of NPLs & NPAs. The joint venture between Thai commercial banks and private companies is set to make NPAs to be good enough for resale. The centralized database for NPAs is established together with the supporting system to cut the debt loss, for the debt classified as potential loss which has been totally reserved according to the accounting standard. These measures put pressure on Thai commercial banks to solve the NPLs problem which is an important cost to the bank (BOT, 2010). The financial drain makes banks and financial institution accelerate the sale of NPAs which are their estates that do not generate revenue.

2. LITERATURE REVIEW

After reviewing previous research studies and investigating market condition of residential property waiting for resale today, we found that buyers of second-hand houses, especially NPAs, consider many factors before making buying decision. Tansakul et. al, (2008) found out in their studies that unlike people who buy their new houses, buyers of residential property waiting for resale did not give the location as the first priority but ranked conditions of properties and price of the houses higher than the location (Thai Farmers Research Center, 2006). However, good locations or areas that are close to the shopping center, school, etc., along with the transportation convenience will reflect the price of land and the price of a house (Elder and Zumpano, 1991). Therefore, price is still an important factor in making purchasing decision. The research pointed out that the buyers gave the importance to price up to 19.8 percent. The buyers prioritized the first three ranges of price which are (1) between 1 million Baht and 2 million Baht, (2) not more than 1 million Baht, and (3) from 2 million Baht up to 3 million Baht (Thai Farmers Research Center, 2006). It is consistent with the research of Jearboon and Songpetnonkon, 2004, The researchers found out that the highest price that attracts the buyers is from 1 million Baht up to 3 million Baht. The price mentioned here was the real market prices (home and land prices), excluding other costs such as fees for transfer of ownership, business tax, income tax, etc. (Elder and Zumpano, 1991, Kirby, 1983, Dieleman, Clark and Deurloo, 1989, Chanpen, 2005, Jearboon and Songpetnonkon, 2004, Tunsakul, Kumchan and Chaiteng, 2008, Tremmarksak, 2004). Moreover, buyers expected to buy a house whose physical conditions are not too bad or cost too much for renovation. The house should be ready to move in with some decorations. This concludes that the buyers were interested in the house in good condition and ready to renovate which is consistent to the results from previous studies (Puri, 2003, Research Center for Thai Farmers, 2006, Tunsakul, Kumchan and Chaiteng, 2008, Chanpen, 2005, Rochanavutanun, 2006). Other important factors for buyers are size of land, number of rooms, number of floors and style of house (Ratchatakulpat, Miller and Marchant, 2009, Kauko, 2006). However, the size of land and size of usable area are normally not the same. In general, the size of land tract is bigger than utility space measured in square meters (Vitayapunpracha et al,

2005). Utility space is related to number of family member (Goodal, 1974). Big family or family with high usually need more utility space (Park et al., 1973). The surrounding environment around houses is another factor that influences housing selection (vitayapunpracha, Youtairumboon and Narapiruk, 2005). The buyers will look at environment that will not harm their health and safety. They will consider neighborhood and public services for the community. The mentioned factors influence the buyers' behavior (Kirby, 1983, Ratchatakulpat, Miller and Marchant, 2009). Buyers who live in the old house have more chance to redo, renovate the house than those who buy a new house (Wangkanvan, Jaichai and Kanvirot, 1995). Second hand house will deteriorate over time so it is not in a good condition as a new house. The study of the development in Asian real estate market also suggested that it was necessary to renovate the house before selling to prospects (Puri, 2003). According to Thai Farmer Bank Center (2006), the acceptable budget for renovation is under Baht 100,000. To improve the condition of the NPAs, the emphasis is on the structure of the building or the living condition. This will increase the value of the property (Chanpen, 2005) and finally it will yield a profit gained from NPAs (Hay, 2002)

3. RESEARCH METHODOLOGY

After reviewing the related literatures and interviewing with investors in NPAs, with consumers who are interested in buying NPAs as a residence, and with financial institution managers, we got 13 initial attributes that are important to the buyers of NPAs. These attributes are such as price, location and asset condition. Those attributes ranked according to the importance given by 10 potential buyers. The majority of the respondents ranked the location as the first priority, price as the second and renovation as the third. The 13 attributes were used to ask 20 more respondents to rate their importance by using the 10-point rating scale starting from 1 as the least importance to 10 as the most importance. The sum of total scores from 20 respondents was calculated to figure out the three highest scores. The study found that the most important attribute is the location within the real estate operated under private companies or developers. The next important attributes are price and renovation respectively. After that the levels of each attribute for these three attributes were identified by interviewing the people who are interested in buying housing from the NPAs. The respondents were asked to rank the importance of each level of these three attribute again. The results are shown in table 1.

Table 1: Attributes and levels used in this study

Attributes	Operated under developers	Price	Renovation (as a percentage of property's price)
Number of Level	2	2	4
Description	1. Yes 2. No	1. between 1-2 million Baht 2. more than 2 but no more than 3 million Baht	1. 0 2. no more than 5% 3. more than 5% but no more than 10% 4. more than 10% but no more than 15%
The relationship of the model	Discrete	Linear Less	Discrete

3.1 THE SAMPLE

The sample size of this study is 81 observations. The target population is the consumer interested in buying a foreclosed property (NPAs) classified as a dwelling house within Bangkok.

3.2 CONJOINT ANALYSIS.

The statistical technique used in analyzing the empirical data is conjoint analysis. The analysis begins with defining the characteristics of different features which influence the target group satisfaction. To study the influence of the attributes that are important to the purchasing decision of the prospects, conjoint analysis is employed. A set of possible features can be bound by the multiplication of levels in each attribute for all their attributes. The feature set is = $2 \times 2 \times 4 = 16$ series of possible combination. Respondents were required to do the rating from 1 to 10 points for all profile cards. The rating-point for each combination can be duplicated. This is a simple query which can be answered more easily. The results can be used to describe a quantitative and sensitivity of an example of a conjoint profile. For example (see Figure 1), card No. 4 shows three attributes with their level. The last part of this card is the statement asking respondents to evaluate these attributes (appeared in this card) according to his or her chance to buy the property.

Figure 1. An example of a conjoint profile

Card No. 4: Characteristics of the foreclosed houses

Operated under developers: Yes Price: >between 2,000,000 and 3,000,000 Baht Renovation: more than 5% but no more than 10%	
Your evaluation Least chance to buy 1 2 3 4 5 6 7 8 9 10 most chance to buy	

The questionnaire is divided into two parts. The first is the general information pertaining to demographic data. The second part is features of the NPAs.

4. RESEARCH RESULTS

4.1 DEMOGRAPHIC DATA

The samples who want to buy foreclosed property in a form of detached houses can be classified as career civil servants / employees of state enterprises accounted for 63% with 69.10% female, 28.4% with age between 30 and 35 years, 67.9% were single with 74.1% having family members having 3-5 persons, 56.8% of the sample has at least bachelor's degree where 49.4% living in a detached house.

4.2 CONJOINT ANALYSIS

Results from running conjoint analysis determining the level and characteristics of the property or foreclosed houses are displayed in Table 2.

Table 2: Results from the conjoint analysis.

Attributes	Levels	Relative importance	Relative Utility
Operated under developers	Yes	40.286	.770
	No		-.770
Price	Between 1,000,000 and 2,000,000 Baht	21.515	.003
	more than 2,000,000 Baht but no more than 3,000,000 Baht		.006
Renovate	No	38.199	.119
	No more than 5%		.248
	More than 5% but no more than 10%		-.295
	More than 10 but no more than 15%		-.073
(Constant)		5.160	

Notes: n = 81, Pearson's R = 0.995, Kendall's tau = 0.929, p = 0.000.

Conjoint analysis is done in order to identify factors that affect the preference of respondents in buying NPAs property. The utility equation can be written as the following equation.

The equation U (X) = 5.160 + 0.770 (Proj1) - 0.770 (Proj2) +

$$0.003 (\text{Pri1}) + 0.006 (\text{Pri2}) + 0.119 (\text{Ren1}) + 0.248 (\text{Ren2}) - 0.295 (\text{Ren3}) - 0.073 (\text{Ren4})$$

Where U (X) = total utility.

Proj1 = is operated under developers.

Proj2 = is not operated under developers.

Pri1 = cost more than 1 million but not more than 2 million baht.

Pri2 = cost more than 2 million but not more than 3 million baht.

Ren1 = do not want to renovate.

Ren2 = renovation expense no more than 5%.

Ren3 = renovation expense more than 5% but no more than 10%.
more than 10% but no more than 15%.

Ren4 = renovation expense

From the above utility equation, the NPAs operated under developers will increase the overall utility while the one not operated under developers will decrease the overall utility. Renovation no more than 5% (two levels) will also increase the overall utility while the expenses more than 5% but no more than 15% (both other two levels) will decrease the overall utility. However, the higher price of property will affect the overall utility more than the lower price of property.

Table 3 shows the relative importance values given by respondents who are government / state enterprise employees with both gender, 4 age levels, both single and married marital status, with five levels of household income, and with detached houses as style of current living. The results showed that all combinations gave the most importance to the project type (operated under developers), the second importance to improvement and the third importance to price.

Table3: The critical analysis of the characteristics of the sample with a government / state enterprise employees. By sex, age, status, income, and housing characteristics of the present.								
N = 51			Attributes					
			Operated under developers	Price			Renovation	
				Relative Importance (%)				
Sex								
	Male	14	47.92	1	14.85	3	37.23	2
	Female	37	37.50	1	26.22	3	36.28	2
Age								
	26 year - 30 year	15	35.87	1	25.57	3	36.56	2
	> 30 year - 35 year	15	44.52	1	22.37	3	33.12	2
	> 35 year - 40 year	7	47.43	1	24.95	3	27.62	2
	> 40 year - 45 year	9	43.06	1	15.49	3	41.46	2
Marital Status								
	Single	32	40.56	1	24.40	3	35.04	2
	Married	15	40.94	1	18.77	3	40.29	2
Household income								
	<= 30,000 Baht	9	39.52	1	26.98	3	33.50	2
	30,001 Baht - 45,000 Baht	8	49.09	1	19.89	3	31.02	2
	45,001 Baht - 60,000 Baht	11	42.13	1	15.96	3	41.91	2
	60,001 Baht - 75,000 Baht	10	37.48	1	27.27	3	35.24	2
	>75,000 Baht	13	38.50	1	25.22	3	36.28	2
Style of living								
	Detached houses	24	38.40	1	25.39	3	36.21	2

5. CONCLUSIONS AND RECOMMENDATIONS

Results from this study, namely "Preferences for the NPA: Buyers' Perspectives" shows that the most three important attributes influencing buying NPA property decision are project type (operated under developers), renovation expense and property price. The importance given to these attributes are 40.286, 38.199 and 21.515 respectively. In sum, the respondents prefer detached house operated under private companies or developers, are willing to spend no more than 5% of the price for renovate the purchased property and preferred price for this property is between 2-3 million Baht. The price attribute reflects that higher price results in higher preference which might be counter the common feeling. However, it might be because most respondents understand that detached houses with price lower than two million Baht will not have attributes acceptable for them.

Most of respondents are officers / employees of state enterprises and 63% earn more than 45,000. Baht per month and their current dwellings are detached houses.

The results of this study are different from those of Chanpen (2005). It indicates that price attribute gets the last priority among the three attributes. This might imply that the respondents might have the given budget for buying NPAs. Therefore, price attribute is given the least importance.

After realizing the satisfaction on the attributes of the foreclosed property or the detached houses, there should be in depth study on additional attributes or features including an improvement, maintenance and renovation. The specific types of improvements such as painting the outside wall or inside a house or changing toilet fixture, preferred by buyers are further study in the future. The results from this latter study will be useful for NPAs buyers to get foreclosed properties for residential detached houses to meet their demand and also help financial institutions sell the property faster.

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