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STATEMENT FROM THE MANAGING EDITOR

We are now in our fourth year of publication of the Au Journal of Management. Part of the challenge of editing this Journal is to work together across program areas with an interdisciplinary perspective to make a difference on issues of wide public concern. The Au Journal of Management will continue to play its part in meeting that challenge by publishing articles that build on our knowledge base and are relevant to business educators, students, practitioners, and the general public.

You will find research on management, international business, and marketing, in this issue, with a special contribution from two of our authors on the real estate sector in Thailand.

I am proud of the accomplishments of the editorial board, the contributors, the layout and circulation staff, and especially the ABAC School of Management for their initiative in starting up and giving impetus to this Journal. A word of thanks to all the authors who sent in articles for publication. I encourage both new and long-time readers to write for the Journal. I also urge you to read and become familiar with all sections of the journal. Make the next issues of the Journal the one in which your own article appears, thereby making it personally historic for you as you contribute to the knowledge base of business.

Happy New Year!

Patricia Arttachariya, Ph.D.
Managing Editor

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AN EVALUATION OF A COMPETENCY MODEL DEVELOPED AND IMPLEMENTED FOR EXECUTIVES AT A THAI SERVICE BUSINESS STATE ENTERPRISE

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ABSTRACT

This study was aimed at evaluating the competency model implemented by a Thai service business state enterprise. There were 688 respondents who participated in answering the questionnaire. The demographic factors of all respondents were classified into genders, educational levels, numbers of years of service, employee code level 8 to 10, and salary increments. The 14 research questions and their hypotheses were examined to compare the differences between self assessment and the standard requirement of competencies, and the correlation between each demographic factor to the average gap of all 14 items of Basic and Core Competencies from the Competency Profile set forth by the organization. The tools for testing 14 hypotheses were comparison of means (t-test), one way ANOVA (F-test), Scheffe, Tamhane, and Pearson's correlation coefficient.

INTRODUCTION

It is undeniable that one of the most challenging tasks that helps every organization to reach its goal is putting the right person on the right job. In other words, a wrong move on this part can mean loss of productivity in that particular organization, and respectively, higher turnover, lower worker morale, and most often, troublesome lawsuits are ultimately brought by disgruntled employees. To improve performance, the company should use the behavioral characteristics of superior performers as their "template," or "blueprint," for employee selection and development. Failure to do so is essentially to select and train to an organization's average level of performance (Spensor & Spensor, 1993). To help find an appropriate answer in upgrading employees' performance in reaching all the outstanding goals, the organization needs to develop a competency model and apply it. To be effective in competency modeling, the human resource management needs to understand thoroughly the concept of competency.

As stated by Spensor & Spensor (1993), competency is an underlying characteristic of an individual that is causally related to criterion - referenced effective and/or superior performance in a job or situation.

The competencies of individuals could be related to their performance in a particular job. A person could be assessed on the basis of his/her ability to carry out the functions required in a specific role. Such an assessment would be of assistance in evaluating a person's performance, and in determining a future career path (McClelland, 1973). Competency-based selection predicts superior job performance and retention - both with significant economic value to organizations - without race, age, gender, or demographic bias. The competency approach provides a human resource method broadly applicable to selection, career path, performance appraisal, and development in the challenging years ahead.

The word competency is used in very different ways by Human Resource experts and business strategists. The literature in relation to the term "competency" certainly appears confusing and contradictory, the term being over defined rather than ill defined. Historically, competency has been used to refer to individual characteristics. But Harvey (1991) prefers using the word skills over competencies when referring to individual characteristics used to do a job. However, Parry (1996, p.50) stated that competency refers to a "cluster of related knowledge, skills and attitudes that affects a major part of one's job (a role

or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development". Whereas psychologist William James said that the first rule for scientists should be that "A difference which makes no difference is no difference". That is why a characteristic or credential that makes no difference in performance is not a competency and should not be used to evaluate people. Human resource practitioners often think of competency as describing the characteristics of a person.

It has become evident over the past few years that the quality of a company's work force is its most important competitive advantage (Jones, 1996, p.22). Workforce development refers to the process of responding to the education and training needs of employees by adapting traditional schedules, content or delivery formats. If the proposition that people are the organization's most valuable asset is sustainable, then we have to understand how these assets are acquired, retained and improved. Especially in the service business industry, the company believes its personnel will become "true professionals, capable of providing polite and pleasant service and keeping their clients' satisfaction in mind at all times". Within any private or state enterprise, working on competency is a competitive tool to upgrade the organization to reach its stated goals.

Purpose of the study

This study is aimed at evaluating a competency model developed and implemented for executives at a Thai service business state enterprise, so as to find an appropriate answer to implementing a career succession plan for the organization. Other objectives of the study are to see how the competency model developed and implemented by the organization can be fitted to Thai culture, and to test whether there are any gaps between the self assessment competency and the required competency standard set forth by the organization.

LITERATURE REVIEW

Literature relevant to the competency assessment method exists in abundance in organizational management. The McClelland/McBer job competence assessment methodology developed by David

McClelland, pioneer in the area of competency research and testing, and by the McBer/Hay Group, the widely respected international consulting firm that specializes in this fast growing field, is an accurate and unbiased approach in predicting job performance and success. Data collection methods vary according to which style of competency model is being used. While using Behavioral Event Interview (BEI), superior and average performers are interviewed using the in-depth "Behavioral Event Interview" technique developed by McClelland and his colleagues. The BEI method is the heart of the Job Competency Assessment process. This method includes "thematic appreciation test (TAT)" probes that yield data about the interviewee's personality and "cognitive style" and is said to be the most difficult and creative part of the competency analysis process.

In 1981, Richard Boyatzis reanalyzed the original data - transcripts of behavioral event interviews, from a number of competency studies of managers and found a set of competencies that consistently distinguished superior managers across organizations and functions. He and his colleagues at McBer made an attempt to scale competencies on a conceptual rather than empirical basis in a generic form which is called The Competency Dictionary. The dictionary presents competencies in scales designed to cover behavior in a wide range of jobs, and to be adapted for many applications.

The evolution of McClelland's studies led to the Job Competence Assessment (JCA), that briefly stated, is based on the assumption that the best way to identify knowledge, skills, and abilities, or other characteristics of the effective performer is to identify effective performers, study their behaviors on the job, determine what distinguished them from less effective performers, and then identify the knowledge, skills, and abilities implied by those behaviors.

RESEARCH METHODOLOGY

Developing the Competency Model

The Job Competence process in the Cullen et al., (1981) study involved six steps; these steps will be used in developing a competency model in our study and will be defined explicitly in our research methodology as follows:

1. The identification of the top performing

management consultants through a variety of techniques such as peer or supervisions nomination or evaluation. For our study, 1,434 top executives level 8-9-10 were requested to join 23 seminars for developing strategic competencies.

2. The identification of performance characteristics by a panel of experts. At this stage, about 150 top executives formed a summative committee. A list of key tasks from the Competency Dictionary was developed along with a list of characteristics of the persons who did the job in an exceptional manner.

3. The involvement of the behavioral event interview, in depth interviews with average and outstanding management consultants.

4. Subjecting the data to thematic analysis in which themes were extracted that differentiated the average from the above average.

5. The validation of the model.

6. The application of the model.

The competencies listed in the modified model were comprised of 2 types of Competencies which were 3 items of Basic Competencies and 11 items of Core Competencies. Functional Competencies that are directly related to the complexity and each scope of work performed were excluded.

Research Questions

Three research questions used to measure the overall differences in the gap between standard Basic and Core Competency levels and self assessment Basic and Core Competency levels between genders, educational levels, years of service, employee code level 8-9-10, and salary increments of the top management executives of a service business state enterprise were listed below:

1. What are the differences in the gap between each standard core competency level and self assessment core competency level between genders?

2. What are the differences in the gap between standard competency level and self assessment competency level between females with different employee code levels?

3. What is the correlation between average annual numbers of salary increment and the average competency gap for males with different employee code levels?

Justification of the study

The questionnaire used for this study was based on 14 items of Basic and Core competencies. There were 688 top executives management level 8-9-10 responded. They were classified according to genders, educational levels, years of service, and salary increments. Each executive was asked to fill in the questionnaire. Each response was then compared to the standard capability requirement to find gaps.

Data analysis method

There were 3 data analysis methods used to test the hypotheses.

1. T-test for significance was used to test hypothesis 1.

2. One-way ANOVA, F-test for overall significance was used to test hypothesis 2.

3. Pearson's correlation coefficient was used for hypothesis 3 to measure the relationship between 2 variables.

All evaluation used a significance level of $\alpha = 0.05$ as an entrance for rejection of the null hypotheses.

ANALYSIS AND PRESENTATION OF FINDINGS

Test of Validity and Reliability

Since the modified competency model was developed by the research unit of the organization, the questionnaire was then tested to find its reliability and the validity. Reliability analysis test for all 14 items of Basic (3 items) and Core (11 items) Competencies used the technique of Cronbach's Alpha Coefficient. The result of the total 14 items alpha coefficient equaled 0.890 as shown in Table 1.

Table 1: Reliability Test for All Items of Competencies

	Alpha Coefficient
Basic Competency (3 items)	0.423
Core Competency (11 items)	0.893
Total (14 items)	0.890

Validity test was done by using factor analysis to find out the rotated component matrix as shown in Table 2.

Table 2: Two Factors Rotated Component Matrix

Competency	Component	
	1	2
b1 English & Thai language skills	0.545	
b2 Personal Computer skills		0.457
b3 Interpersonal Understanding	0.829	
c1 Team Work		0.720
c2 Strategic Agility	0.778	
c3 Customer Service Orientation	0.547	
c4 Ethics, Integrity & Trust		0.798
c5 Leadership	0.657	
c6 Perspective	0.723	
c7 Achievement Oriented	0.572	
c8 Business Acumen	0.695	
c9 Directing Others	0.647	
c10 Career Ambition		0.715
Cc11 Leading Change	0.761	

The two tests showed that the questionnaire was reliable and valid.

Hypotheses Testing

Hypothesis 1 (H1)

Hypothesis 1 was a comparison of gaps between each standard core competency level and self assessment core competency level between males and females. The null and research hypotheses were stated as follow:

H_{01} : There is no difference in the gap between each standard core competency level and self assessment core competency level between genders.

H_{a1} : There are differences in the gap between each standard core competency level and self assessment core competency level between genders.

A t-test for independent samples was conducted to determine the significance of the difference in the gap. As shown in Table 3, significant differences in the gap between each standard core competency level and self assessment core competency level between genders were found. Therefore, the null hypothesis 1 was rejected.

Table 3: Difference in the gap between each standard core competency level and self assessment core competency level between genders

	gender	N	Mean	Std.Deviation	t	Sig.
c1	male	341	-.1466	.65230	-0.527	0.599
	Female	347	-.1182	.76058		
c2	male	341	-.3314	.71033	3.479	0.001*
	Female	347	-.5476	.90593		
c3	male	341	-.2287	1.03207	1.254	0.210
	Female	347	-.3343	1.16948		
c4	male	341	.1906	.67434	-0.537	0.591
	Female	347	.2190	.71190		
c5	male	341	-.0850	.63832	1.880	0.061
	Female	347	-.1873	.78059		
c6	male	341	-.1584	.65854	2.392	0.017*
	Female	347	-.2853	.73074		
c7	male	341	.0880	.62629	0.871	0.384
	Female	347	.0432	.71796		
c8	male	341	-.5865	.83789	1.032	0.302
	Female	347	-.6571	.94989		
c9	male	341	-.0762	.62783	1.182	0.238
	Female	347	-.1383	.74368		
c10	male	341	-.1026	.75811	0.879	0.380
	Female	347	-.1556	.82167		
c11	male	341	-.2727	.80373	1.892	0.059
	Female	347	-.3977	.92355		

Hypothesis 2 (H2)

Hypothesis 2 was a comparison of gaps between each standard competency level and the self assessment competency level between females with different employee code levels. The null and research hypotheses were stated as follows:

H_{02} : There is no difference in the gap between standard competency level and self assessment competency level in females with different employee code levels.

H_{a2} : There are differences in the gap between standard competency level and self assessment competency level in females with different employee code levels.

As shown in Table 4, significant differences in the gap between each standard competency level and self assessment competency level in females with different employee code levels were found. Therefore, the null hypothesis 2 was rejected.

Table 4 Difference in the gap between the standard competency level and the self assessment competency level between females with different employee code levels

competency	employee code levels	N	Mean	Std. Deviation	F	Sig.
b1	level 8	268	-0.2537	0.66689	18.967	0.000*
	level 9	71	-0.7887	0.65281		
	level 10	8	-0.6250	0.51755		
b2	level 8	268	-0.5933	0.93750	0.853	0.427
	level 9	71	-0.4507			
	level 10	8	-0.3750			
b3	level 8	268	0.1604	0.69266	17.363	0.000*
	level 9	71	-0.3521			
	level 10	8	0.0000			
c1	level 8	268	-0.0149	0.72912	11.917	0.000*
	level 9	71	-0.4930			
	level 10	8	-0.2500			
c2	level 8	268	-0.6381	0.89921	6.436	0.002*
	level 9	71	-0.2113			
	level 10	8	-0.5000			
c3	level 8	268	-0.3806	1.18855	0.931	0.395
	level 9	71	-0.1831			
	level 10	8	-0.1250			
c4	level 8	268	-0.3358	0.73890	17.673	0.000*
	level 9	71	-0.1972			
	level 10	8	-0.0000			
c5	level 8	268	-0.2127	0.78104	0.624	0.536
	level 9	71	-0.0986			
	level 10	8	-0.1250			
c6	level 8	268	-0.3060	0.72129	0.682	0.506
	level 9	71	-0.1972			
	level 10	8	-0.3750			
c7	level 8	268	0.0336	0.73106	0.155	0.856
	level 9	71	0.0845			
	level 10	8	0.0000			
c8	level 8	268	-0.7164	0.94502	2.349	0.097
	level 9	71	-0.4648			
	level 10	8	-0.3750			
c9	level 8	268	-0.1642	0.73636	1.563	0.211
	level 9	71	-0.0141			
	level 10	8	-0.3750			
c10	level 8	268	-0.0597	0.82799	10.045	0.000*
	level 9	71	-0.5352			
	level 10	8	0.0000			
c11	level 8	268	-0.4739	0.93780	4.143	0.017*
	level 9	71	-0.1268			
	level 10	8	-0.2500			

Hypothesis 3 (H3)

Hypothesis 3 was used to find a correlation between average annual numbers of salary increment and the average competency gap for males with different code levels. The null and research hypotheses were stated as follows:

H_{0_3} : There is a negative or no correlation between average annual numbers of salary increment and the average competency gap for males with different employee code levels.

H_{a_3} : There is a positive correlation between average annual numbers of salary increment and the average competency gap for males with different employee code levels.

Pearson's correlation coefficient was used to measure the relationship between 2 variables. As shown in Table 5-7, correlation between average annual numbers of salary increment and the average of all 14 items of competency gap for males in all 3 code levels had significant values higher than $\alpha = 0.05$. Therefore, the null hypothesis 3 was not rejected.

Table 5 Correlation between salary increment and competency of employee code level 8 of male executives

	Basic competency			Core competency										
	b1	b2	b3	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11
Salary Increment	-0.110 (0.257)	-0.034 (0.729)	-0.205* (0.033)	-0.104 (0.282)	-0.017 (0.864)	-0.136 (0.159)	-0.107 (0.270)	0.041 (0.672)	-0.017 (0.864)	0.002 (0.984)	-0.036 (0.714)	0.032 (0.745)	-0.059 (0.542)	0.063 (0.520)

Table 6 Correlation between salary increment and competency of employee code level 9 of male executives

	Basic competency			Core competency										
	b1	b2	b3	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11
Salary Increment	-0.224 (0.196)	-0.116 (0.507)	-0.114 (0.514)	-0.015 (0.934)	-0.033 (0.853)	-0.111 (0.526)	-0.415* (0.013)	-0.203 (0.242)	-0.042 (0.809)	-0.132 (0.448)	-0.159 (0.360)	-0.109 (0.533)	-0.131 (0.454)	-0.102 (0.562)

Table 7 Correlation between salary increment and competency of employee code level 10 of male executives

	Basic competency			Core competency										
	b1	b2	b3	c1	c2	c3	c4	c5	c6	c7	c8	c9	c10	c11
Salary Increment	-0.500 (0.391)	0.000 (1.000)	-0.645 (0.239)	-0.645 (0.239)	0.000 (1.000)	0.000 (1.000)	-0.791 (0.111)	-0.645 (0.239)	-0.423 (0.478)	0.271 (0.659)	-0.699 (0.189)	0.000 (1.000)	-0.791 (0.111)	0.000 (1.000)

CONCLUSIONS AND IMPLICATIONS

Conclusion

The results from testing 3 hypotheses could be enumerated according to the variables as follows:

Gender: Male executives have better Strategic Agility (c2) and Perspective/Vision (c6) than females.

Employee code level: Executives level 8 have higher Thai & English language skills (b1) than executives level 9.

Executives level 8 have the highest Interpersonal Understanding skills (b3) followed by executives at levels 10 and 9, respectively.

Executives level 8 have higher Teamwork/Team leadership (c1) than executives level 9.

Executives level 8 have lower Strategic Agility (c2) than executive level 9.

Executives level 8 have the highest Ethics Integrity & Trust (c4) followed by executives level 10 and 9, respectively.

Executives level 8 and 10 are more competent in Career Ambition (c10) than executives level 9.

And executives level 8 have lower competency in Leading Change/Change Agent (c11) than executives level 9.

Salary Increment: There is a negative correlation between salary increment and Interpersonal Understanding (b3) gap for male executives level 8.

There is also a negative correlation between salary increment and Ethics, Integrity & Trust (c4) gap for male executives level 9.

Lastly, there is no correlation between salary increments and the average competency gap for male executives level 10.

Implications for Management

The results from the study showed that jobs with different attributes need different kinds of executives. Assigning tasks that are appropriate to the ability of each executive will be a good rule in matching the right person to the right job. Improving and maintaining executives within the organization through an appropriate motivational plan are also important to Human Resource Management. This study can be used to improve human resources management of a service business state enterprise or other enterprises in related fields. It studies executives' competency and provides guidelines for a more efficient competency system development within the organization. From the

study, salary increment has an inverse relationship with competency. In order to promote the employees in this situation, salary will be less effective. Therefore, a proper reward system should then be implemented.

A Competency Assessment program in an organization requires most employees' contributions and managerial budget, a successful program should be done under close supervision of specialists, whether hiring an outside consultant or using personnel within the organization itself. The modified model in this study is set under a true theoretical base that other organizations can bring into use as a new knowledge or application for their own competency system development.

Limitations

The Basic and Core Competencies characterized in the study might not be operative in certain situations since the study was done under a huge service business state enterprise and it covered top executives only. There is a possibility for the respondent to over or underrate him/herself. The researcher must note that competency modeling requires substantial budgets and cooperation.

Implications for Future Research

For any researcher who is interested in a competency modeling study, there are numerous suggestions. For instance, a dyad of peer's or boss's rating and a comparative study of competency gap for teachers and students or others might be interesting. At least, a replication of this research study by using another competency model can be beneficial.

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INFLATION HEDGING CHARACTERISTICS OF HOUSING MARKETS IN THAILAND

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ABSTRACT

Property has been traditionally perceived as a good hedge against inflation. Extensive empirical researches have been undertaken to prove whether properties hedge against inflation in different countries. This paper explores the relationship between inflation and returns in the housing markets in Thailand. Only the appreciation component, not income, of housing market returns is taken into account due to the limitations of data. Inflation is decomposed into expected and unexpected inflation. As expected inflation is not directly observable, a proxy of expected inflation is required. This paper uses Treasury Bill rates and regression-generated time series, Autoregressive (AR) and Autoregressive Integrated Moving Average (ARIMA) modelling, to estimate expected inflation.

INTRODUCTION

Traditionally, property markets are widely believed to be a good hedge against inflation, in addition to their diversification benefits while having them in the investment portfolio. Irving Fisher (1930) who was the pioneer of inflation hedging concept proposed that the expected real rate of returns should be independent of the rate of inflation. Fisher hypothesized that expected nominal interest rates should move on the basis of one-for-one relationship with expected inflation. Fama and Schwert (1977) adapted the Fisher hypothesis to test whether assets had provided a hedge against inflation. This empirical study was based on a static regression model.

Consequently, many empirical studies have been undertaken to examine whether property effectively hedges against inflation adopting traditional static regression methodology and other more robust and vigorous methodologies. This relationship between property markets and inflation has been carried out in many countries; however, no paper has yet studied the hedging characteristics of property markets in Thailand. The continued concern about inflation in Thailand has led this paper to investigate and test if Thai property markets can protect investors from inflation.

LITERATURE REVIEW

One of the classic works on a hedge against inflation of an asset is Fama and Schwertis (1977) study. Fama and Schwert's examined a wide range of assets, US Treasury bills, Government bonds, common stocks, human capital, and residential real estate. The data of each asset class from 1953 - 1971 were analysed. The returns of three-month US Treasury Bills were used as a proxy for expected inflation because Fama (1975) had exhibited that they were a good proxy for expected inflation. Fama used the Ordinary Least Squares (OLS) model to investigate the issue. Fama and Schwert analysed the monthly, quarterly, and half-yearly returns of each asset class. The findings showed that the only asset that hedged against both expected and unexpected inflation was residential real estate.

Rubens, Bond, and Webb (1989) examined the inflation-hedging effectiveness of varieties of asset returns, both financial and real assets in US from 1960 - 1986. They argued that the measure of unexpected inflation suggested by Fama and Schwert (1977), the difference between actual inflation and the Treasury Bills rate, were *ex post*. In order to use as much *ex-ante* data as possible, they adopted the Livingston price expectations (LPE) series as a measure of expected inflation. The LPE series is a semiannual

forecast by business economists that has been conducted since 1946 and is now handled by the Federal Reserve Bank of Philadelphia. Regression equations were estimated using the Cochran-Orcutt method to control for autoregressive disturbances. The findings showed that only residential real estate was a complete positive hedge against actual inflation whereas all other financial and real assets had standard errors so large that their hedging effectiveness was indeterminant. With regard to the expected inflation, Ruben *et al.* found that the results varied across asset types. However, only Treasury Bills and business real estate provided a complete positive hedge against expected inflation. Findings concerning the unexpected inflation showed that only farmland and residential estate provided complete positive hedges. As real estate was normally only a portion of an investor's portfolio, Ruben *et al.* also considered mixed-asset portfolios by using a Markowitz variance/covariance model to create four mean/variance efficient portfolios. The findings illustrated that the portfolio with business real estate was a complete positive hedge against expected inflation whereas the portfolio with residential real estate was only a partial positive hedge against actual inflation and a complete positive hedge against expected inflation. Nevertheless, none of the portfolios provided statistically significant protection against unexpected inflation.

Hoesli (1994) employed Swiss real estate mutual funds as a proxy to determine if real estate provides an effective hedge against inflation. However, Hamelink and Hoesli (1996) argued that the data used in the study of Hoesli (1994) pertained to Swiss real estate mutual funds and not to real estate. Hence, the conclusion might hold only for securitised real estate, not all types of real estate. Hoesli (1994) argued that the results of many studies, for instance, Fama and Schwert (1977), Brueggeman *et al.* (1984), Hartzell *et al.* (1987), on the inflation hedging ability of real estate were flawed. Fama and Schwert measured the return on real estate as the rate of inflation of the Home Purchase Price component of the CPI. When part of the CPI was regressed on the CPI, the results would necessarily be positive. Following Fama (1975), Hoesli used the nominal interest rate on a risk-free asset as a proxy for anticipated inflation when assuming constant real interest rates. In the case that real interest rates were hypothesised to follow a random walk, non-constant over time, Hoesli proposed to

derive the expected real interest rates by using the ARIMA model. No significant relationship between the return on the mutual funds and the actual inflation was found when monthly, quarterly, and annual data were tested. Nevertheless, real estate seemed to provide a positive hedge against inflation in the long run as the coefficient was positive and marginally significant when five-year data were investigated. However, the tests for a hedge against expected and unexpected inflation assuming constant real interest rates as well as assuming that real interest rates follow a random walk were somewhat inconclusive.

Hamelink and Hoesli (1996) argued that the two types of indices, appraisal-base indices and indices of securitised real estate, which were frequently used as the price appreciation of the real estate markets, had serious limitations. Thus, they constructed a hedonic price index for apartment buildings in Geneva for the 1978 - 1992 period to examine the inflation hedging effectiveness of Swiss real estate. Four approaches were employed to estimate expected inflation. Following Gültekin (1983), the contemporaneous inflation rates were used as proxies in the first approach. This implied that expectations were perfect; therefore, there would be no unexpected inflation. The second model specified the inflation rate at time t as a linear function of the inflation rate at time $t-1$. The third and fourth models employed QTARCH model and ARCH-M respectively. The results of AR(1) model revealed that this year's inflation was a good indicator for next year's inflation while the QTARCH was found to be the most highly correlated with the observed inflation rate. Real estate did not appear to enhance the ability of portfolio to hedge against inflation when *ex post* inflation rates were used as estimators of inflation. Hamelink and Hoesli concluded that Swiss stocks, bonds, real estate, and real estate mutual funds were usually positively related to expected inflation and negatively related to unexpected inflation.

Sing and Low (2000) tested the inflation hedging characteristics of real estate and financial assets in Singapore. A wide range of real estate, all-property, shop, office, residential, and industrial real estate were examined over a twenty-one-year period from 1978 to 1998. They also divided sample periods into four five-yearly subperiods to explore the inter-temporal changes of the inflation hedging characteristics of the assets. They further sorted the sample periods into

low and high inflation regimes to test the inflation effectiveness of assets in the period of high and low inflation. The periods of high and low inflation were divided at the median of the inflation rates from 1978 to 1998. The high inflation group were the sample periods with inflation above the median while the low inflation group were the sample periods with inflation below the median. Sing and Low used the CPI as a proxy of the inflation rate. A one-period lagged three-month Treasury Bill rate was adopted as the expected inflation in this paper. The unexpected inflation was determined by the approach of Fama and Schwert (1977), the difference between the actual inflation and expected inflation. Since the presence of auto-correlations in the model was indicated by the Durbin-Watson statistics, Sing and Low corrected the auto-correlations in the error terms by including k-lagged autoregressive error terms. The number of lag used for the autoregressive error terms was three. The regression results rejected the inflation-hedging hypothesis for all assets except for shop and industrial property in the case of hedging against actual inflation. Additionally, shop and industrial property were the only two assets that hedged against expected inflation. The only coefficient that was significant, at 10% level, concerning the unexpected inflation was industrial property. Furthermore, the findings of five-yearly subperiod analysis showed that industrial property was the only asset that offered consistent positive hedges against both expected and unexpected inflation. Finally yet importantly, the empirical studies revealed that industrial property was the best choice for investors during the high inflation period.

Chu and Sing (2004) undertook an examination on the inflation hedging characteristics of the Chinese real estate market. Chu and Sing tested the short-term inflation hedging characteristics, using the conventional ordinary least squares (OLS) methodology, in four major cities in China, Beijing, Chengdu, Shanghai, and Shenzhen. They represent the northern, southern, eastern, and western parts of China. Residential, commercial, and office buildings were examined for each city. Chu and Sing added a lagged dependent variable in the regression equation to correct the auto-correlated residuals, as they argued that Fama and Schwert (1977) failed to take into account the stationarity problem in time series data. Following Gatzlaff (1994) and Barkham, Ward, and Henry (1996), ARIMA was used to estimate the

expected inflation rates. Since the Chinese Treasury Bill rate was highly regulated and illiquid, it did not appear to be a good proxy of the expected inflation. The findings of the serial correlation adjusted OLS model revealed that real estate of all types in the four Chinese cities were poor hedges against both expected and unexpected inflation with the exception of Chengdu. Real estate in Chengdu was a significant negative hedge against expected inflation. In addition, Chu and Sing examined the long-term relationship between real estate returns and inflation using cointegration analysis. With regard to the cointegration tests, the country-level data were used. The findings showed no significant positive long-term relationship between real estate returns and inflation in Chinese real estate markets.

The last and the most recent study to be discussed in this paper is Hoesli, Lizieri, and MacGregor (2006). They explored the relationship between commercial real estate returns and economic, fiscal, and monetary factors, including inflation, for US and UK markets. Hoesli *et al.* used four-quarter moving averages of inflation rates as the measure for expected inflation. They employed error correction models (ECM) to examine long run integration and dynamic adjustments between asset returns, and real and monetary variables, including inflation. Four asset classes, stocks, small cap stocks, securitised real estate, and real estate, were examined. A wide range of explanatory variables were tested for each country. The findings of Hoesli *et al.* (2006) revealed that expected inflation was a significant variable with a positive coefficient for all asset classes in the case of US long-run model. With regard to direct property, its coefficient was significantly less than 1.0 whereas in the case of REIT it was not significantly different. This implied that direct property is a partial hedge against expected inflation and a complete hedge in the case of securitised real estate. The coefficient on unexpected inflation was always negative and significantly greater than unity. Conversely, there was very limited evidence of inflation hedging for US short-run models, although the results suggested real estate was better than other asset classes at hedging against expected inflation. The UK long-run models showed that all asset classes partially hedged against expected inflation although the coefficient of direct property was significantly less than unity and others were significantly higher. The coefficient on unexpected inflation

was significantly positive for private real estate. With regard to UK short-run models, only direct real estate exhibited inflation, both expected and unexpected hedging characteristics, although the coefficients were significantly less than unity. This implied that real estate was only a partial hedge against inflation.

EMPIRICAL METHODOLOGIES

Theoretical Framework

This paper attempts to examine the inflation-hedging characteristics of Housing Markets in Thailand. Therefore a clear definition of inflation and inflation hedging needs to be addressed. Fisher (1930) defined inflation as a phenomenon whereby there is a sustained and inordinate increase in the general price level. The observed inflation can be decomposed into two components, expected inflation and unexpected inflation. Adopting Fisher interest rate theorem, Fama and Schwert (1977) proposed the most widely used definition in the empirical studies that an asset is considered to be a complete hedge against inflation, if and only if the nominal return of the asset varies in a one-to-one relationship with both expected and unexpected inflation. Barkham, Ward, and Henry (1996) provided analogous definition that the property of an efficient hedge against inflation is to provide investors with compensation, not only for expected inflation, but also for the inflation that is not foreseen at the time at which prices are set. Following Fisher (1930), Fama and Schwert (1977) formalized the regression model to investigate relationship between asset returns and inflation as follows:

$$r_{jt} = \alpha_j + \beta_j E(\Delta_t) + \gamma_j [\Delta_t - E(\Delta_t)] + \mu_{jt}$$

where

- r_{jt} = expected nominal rate of return of asset j at period t
- α_j = expected real rate of return of asset j
- β_j, γ_j = regression coefficients
- $E(\Delta_t)$ = expected inflation rate at period t
- (Δ_t) = actual inflation or observed inflation rate at period t
- μ_{jt} = random error term

According to the above regression model, since the observed inflation can be split into expected and unexpected inflation, $[\Delta_t - E(\Delta_t)]$ represents unexpected inflation. An asset is said to be a perfect

hedge against expected inflation when $\beta_j = 1$, and to be a perfect hedge against unexpected inflation when $\gamma_j = 1$. When $\beta_j = \gamma_j = 1$ the asset is considered to offer a complete hedge against inflation. The signs of the regression coefficient indicate whether an asset is a positive hedge or a negative hedge against inflation. In addition, it suggests that an asset provides a partial hedge against the respective inflation if the coefficient, in absolute term, is less than unity but statistically distinguishable from zero.

Measures of Inflation Rates

The percentage change of the Consumer Price Index (CPI) is the most commonly used by a number of empirical studies as a measure of actual, *ex post*, inflation. On the other hand, as the expected inflation rate is not directly observable, there is yet no consensus on the best method to estimate expected inflation. The proxy utilised by previous empirical studies to create an expected inflation time series can be classified into three categories.

- Firstly, the use of an economic variable, namely Treasury Bill rates, employed by, for example, Fama and Schwert (1977); Brown (1991); Hoesli (1994); Barkman, Ward, and Henry (1996). This proxy is subject to the *ex-ante* argument of Rebens et al. (1989).
- Secondly, survey-based inflation forecasts by business economists, such as Livingston price expectation series in US, Westpac inflationary expectations series in Australia, and Money Markets International (MMI) in UK, see for example; Rubens, Bond, and Webb (1989); Newell (1996); Barkman, Ward, and Henry (1996).
- Finally yet importantly, regression-generated time series, such as, Autoregressive Integrated Moving Average (ARIMA) model, Vector Autoregression (VAR) model, Autoregressive (AR) model, Autoregressive Conditional Heteroskedasticity (ARCH) model. This robust regression approach has been extensively used by recent empirical researches, see for example; Hoesli, Lizieri, and MacGregor (2006); Goetzmann (2006); Chu and Sing (2004).

Owing to the unavailability of survey-based inflation forecasts in Thailand, the expected inflation rate will be proxied by only two approaches in this em-

pirical study. First, implementing the approach proposed by Fama and Schwert (1977), the expected inflation will be represented by a one-period lagged three-month Treasury Bill rates. In addition, a regression model, AR(1), will be employed to create an expected inflation time series, see Hamelink and Hoesli (1996). The AR(1) model is formalised as follows:

$$\pi_t = \alpha + \beta\pi_{t-1} + \varepsilon_{jt}$$

Having estimated expected inflation, Fama and Schwert (1977) proposed that unexpected inflation or inflation shock is the difference between actual (ex post) inflation and expected inflation, $[\Delta_t - E(\Delta_t)]$.

Data Description

All time series data employed in this study are obtained from CEIC database. The sample period under examination spans from April 1998 - December 2004 on quarterly, half-yearly and annual basis. The Consumer Price Index is obtained and transformed to natural logarithmic value, as suggested by Fama and Schwert (1977), to attain continuous compounding. The actual (*ex post*) rate of inflation, Δ_t , is then computed as the first difference, i.e. $\Delta_t = \ln(\text{CPI}/\text{CPI}_{t-1})$. Unfortunately, the indices that represent the entire Housing markets in Thailand are not available. Thus, two House Price indices and one Land Price index which comprises Bangkok and its vicinity, Nonthaburi, Samutprakarn and Patumthani, are obtained as the surrogate time series for Thai Housing Markets. The two House Price indices are the Single-Detached House Price (excluding land) and Town House Price index (excluding land). Furthermore, they do not take account of income but they only present price appreciation. The Bank of Thailand, to construct these indices, uses a hedonic methodology. Thus, they do not possess the same serious limitations that are inherent in most of the appraisal-based indices. The main problem with appraisal-based series is that they are smoothed, leading to downwards biased standard deviations, see Hamelink and Hoesli (1996), Barkham, Ward and Henry (1996). The last time series obtained is one-period lagged values of three-month Treasury Bill rates, to proxy expected inflation. The first difference of the log-returns of Treasury Bill is then computed to transform nominal returns into continuous returns.

Model Specifications

To test the hedging ability of Housing Markets against actual (*ex post*) inflation, the market returns

are regressed on the actual inflation without decomposing it into expected and unexpected components by the following regression equation.

$$r_{jt} = \alpha_j + \delta_j \Delta_t + \varepsilon_{jt}$$

If the regression coefficient, δ_j , is (statistically) significantly different from zero and indistinguishable from unity, it suggests that the Housing Markets completely hedge against *ex post* inflation. However, if it is statistically significant but distinguishable from unity, it implies that the housing markets provide only a partial hedge against *ex post* inflation.

Subsequently, the conventional OLS model, proposed by Fama and Schwert (1977), in the following equation is applied to test the efficiency of Housing Markets in hedging against expected and unexpected inflation.

$$r_{jt} = \alpha_j + \beta_j E(\Delta_t) + \gamma_j [\Delta_t - E(\Delta_t)] + \mu_{jt}$$

The hypothesis testing is the Housing Markets are not a perfect hedge against both expected and unexpected inflation. The null hypothesis cannot be rejected if, and only if, both coefficients are statistically indistinguishable from one. However, many recent empirical studies argued that crucial limitations are inherent in the Fama and Schwert (1977) methodology. It failed to take into account the stationarity problem in time series data. Failure to correct the stationarity in the dataset could result in spurious regression, see Tarbert (1996), Matysiak *et al.* (1996), Sing and Low (2000), Chu and Sing (2004). The Durbin-Watson statistic tests show no presence of positive and negative serial correlation, as indicated by figures relatively close to two, in the residual errors from the preliminary estimation regression. The serial correlation may affect the robustness of the models. Sing and Low (2000) corrected the serial correlation in the error terms by including 3-lagged autoregressive error term in the regression model. The third order autoregressive process then reduced the error term to a white-noise process, uncorrelated random error term with zero mean and constant variance (Gujarati 2003). However, this process is not required in this study. Finally, the issue of cointegration, approach employed to investigate any long-run equilibrium relationship of time series, is not addressed in this study. The cointegration tests require long length of time series under examination (Talbert 1996, Chu and Sing 2004), which is not the case of current house price indices available in Thailand at the present time.

ANALYSIS OF EMPIRICAL EVIDENCES

Correlation

Prior to other statistical tests, simple correlation statistics between actual (*ex post*) inflation and returns of housing market, are computed to investigate any connection inflation and housing market returns. In addition, the correlation of Treasury Bills rates and contemporaneous inflation is presented in Table I as well. The results of correlations between actual inflation and returns of housing market, as indicated by Table I, are somewhat inconsistent. Quarterly and half-yearly series show low, some are negative, correlations. However, annual series indicate a moderate correlation between inflation and housing market returns. Further statistical tests need to be carried out to examine the relationship between them. Equally importantly, correlations reveal that relationship between actual (*ex post*) inflation and Treasury Bill rates, a proxy for expected inflation, are mixed. Half-yearly and annual series indicate negatively moderate correlations; conversely, quarterly series show a low but positive correlation. Hence, assessment of Treasury Bill rates as a proxy of expected inflation is required before proceeding to econometric modelling.

Table I: Correlations between actual inflation and returns of housing markets

	Detached House	Town House	Land	Treasury Bills
Quarterly	-0.24	0.24	0.21	0.23
Half-Yearly	-0.13	0.11	0.43	-0.54
Annual	0.63	0.64	0.62	-0.65

Sample period is from 1998 - 2004

Assessing proxies for expected inflation

The Treasury Bill rates were extensively used as the proxy of expected inflation rate in several studies. Nonetheless, the use of Treasury Bills as a proxy for expected inflation was subject to critique by numerous successive empirical evidences. Following Fama (1975), this paper tests whether Treasury Bills is a good proxy for expected inflation rate in Thailand by running the following regression:

$$\Delta_t = \alpha + \beta r_{bt} + e_t$$

If β is statistically indistinguishable from one then Treasury Bill rates can be used as a good proxy for expected inflation. The intercept term, α , represents the real rate of return. The results obtained from the regression estimation are shown in Table II.

Table II: Treasury Bill rates as proxies for expected inflation, 1998 - 2004

	Sample size	α	β	Adjusted R^2	DW	Serial correlation in residual for following lags	
						1	2
Quarterly	25	1.121 (0.3156)	-0.358 (0.1326)	0.1527	2.083	-0.206	-0.016
Half-yearly	11	1.312 (0.7507)	-0.216 (0.3609)	0.1638	1.915	-0.637	-0.180
Annual	6	3.145 (0.9861)	-0.798 (0.4620)	0.2839	1.731	N/A	N/A

DW is the Durbin-Watson statistic for serial correlation
Standard errors are shown in the brackets.
N/A indicates that the length of sample period is not sufficient for lagging of residual

Only slope coefficient of quarterly series that are statistically different from zero and statistically indistinguishable from one. The serial correlation coefficients are not statistically different from zero. Furthermore, the Durbin-Watson statistical test of quarterly series reveals no presence of serial correlation in the residual errors from the regression estimation. These findings imply that Treasury Bill rates act as an efficient proxy of expected inflation rate. However, the slope coefficients of half-yearly and annual series are not significantly different from zero. This means that Treasury Bill rates do not act as a good proxy of expected inflation in the case of half-yearly and annual series. The inconsistent findings suggest that the use of Treasury Bill rates as a proxy of expected inflation is inconclusive and still open to debate.

The second proxy of expected inflation rate used in this study is a regression-generated time series. The expected inflation rate will be proxied by first-order autoregressive, AR(1). The AR(1) is a dynamic econometric model. In sharp contrast to the model proposed by Fama where real interest rates are assumed to be constant, the real interest rates are hypothesised as being non-constant over time in AR(1), see Hamelink and Hoesli (1996). The AR(1) includes one-period lagged value of the observed inflation as the explanatory variable and allows real interest rates to vary over time. The regression model of AR(1) used in this paper is formalised as follows:

$$\pi_t = \alpha + \beta\pi_{t-1} + \varepsilon_{jt}$$

Table III: AR(1) as proxies for expected inflation, 1998 - 2004

	Sample size	α	β	Adjusted R^2	DW
Quarterly	26	0.3545 (0.1429)	-0.0712 (0.1883)	-0.0354	1.988
Half-yearly	12	0.8341 (0.3150)	-0.1202 (0.2844)	-0.0806	2.217
Annual	5	0.6027 (1.0091)	0.8637 (0.7696)	0.0609	2.373

DW denotes the Durbin-Watson statistic for serial correlation

Standard errors are shown in the brackets.

All intercept terms are insignificant and none of the slope coefficients is statistically different from zero. In addition, the adjusted R^2 values are extremely low. This implies that the expected inflation rate should not be proxied by the AR(1) modelling because one period lagged value of the observed inflation is not an explanatory variable of the contemporaneous inflation.

Since the AR(1) model is invalid, a new regression-generated time series is required in order to compare the inflation hedging between Treasury Bill rates and econometric modelling as proxies for expected inflation. The visual inspection of the autocorrelations and partial autocorrelations of the series of the observed inflation using the correlograms indicate ARIMA(1,2,0) modelling only for quarterly series, not half-yearly and annual series. The results of the regression estimation are shown in table IV.

Table IV: ARIMA(1,2,0) as proxies for expected inflation, 1998 - 2004

	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0.760750	0.205162	3.708038	0.0012
$\Delta_t - 1$	-2.129213	0.299473	-7.109865	0.0000*
Adjusted R^2	0.673692			
Durbin-Watson	2.180911			

* indicates that the coefficient is very significant

Both constant and slope coefficients are highly significant. In addition, the slope coefficient is statistically indistinguishable from one. This suggests that ARIMA(1, 2, 0) acts as a good proxy for expected inflation. The goodness of fit of the regression model as indicated by R^2 value, over 60 per cent, is relatively high. According to the assessment of proxies for expected inflation, the expected inflation rate will be proxied by Treasury Bill and ARIMA(1, 2, 0) on a quarterly basis only.

Hedging Against Actual Inflation

None of the regression coefficients is statistically indistinguishable from zero. The regression coefficients

of town house and land are positive but that of detached house is negative. The goodness of fit of the regression models is extremely low. These findings suggest that the regression results reject inflation-hedging hypothesis for all housing markets. In other words, housing markets are not good hedges against actual inflation. This result contradicts the findings of many earlier studies in other countries, which revealed that real estate hedges against inflation. Interestingly, none of the regression coefficients of constant, which represent real rate of interest, is significant. This implies that housing markets do not appear to provide a positive real rate of interest.

Table V: Inflation-hedging of Housing market against actual inflation, 1998 - 2004

	α_j	β_j	Adjusted R^2	Durbin-Watson Statistics
Detached House	1.1074 (0.9071)	-1.5426 (1.2125)	0.0232	1.829
Town House	-0.1262 (0.7790)	1.3365 (1.0413)	0.0242	2.799
Land	-1.5925 (2.0663)	3.0254 (2.7619)	0.0076	2.791

Standard errors are shown in the brackets.

Hedging Against Expected and Unexpected Inflation

The examinations of inflation hedging against expected and unexpected inflation are conducted by the conventional OLS model, proposed by Fama and Schwert (1977). The results of the regressions with the application of three-month Treasury Bill rates to proxy the expected inflation rate are summarised in Table VI. The results are in marked contrast to most previous empirical studies in other countries. Housing markets do not appear to provide any hedging rela-

tionship against expected inflation and unexpected inflation. The β_j and γ_j coefficients of detached house are negative while those of town house and land are positive but all of the regression coefficients are insignificantly different from zero. Moreover, the findings imply that housing markets do not appear to offer positive real rate of return since the constant coefficients, which represent real rate of return, are all not significantly different from zero. These empirical evidences are unfavourable to real estate, particularly housing sectors, in Thailand.

Table VI: Hedging against expected and unexpected inflation, T-Bill as a proxy

	α_j	β_j	γ_j	Adjusted R^2	Durbin-Watson Statistics
Detached House	1.9379 (1.1499)	-1.5276 (1.2041)	-1.1988 (1.2399)	0.0367	1.942
Town House	-0.0713 (1.0148)	1.3374 (1.0626)	1.3592 (1.0942)	-0.0160	2.801
Land	0.4521 (2.6069)	3.0623 (2.7299)	3.8717 (2.8109)	0.0306	2.863

Standard errors are shown in the brackets.

Table VII: Hedging against expected and unexpected inflation, ARIMA as a proxy

	α_j	β_j	γ_j	Adjusted R^2	Durbin-Watson Statistics
Detached House	0.7357 (0.9374)	-0.3547 (1.4496)	-1.5187 (1.3734)	0.0304	1.620
Town House	-0.3855 (0.8159)	1.7844 (1.2617)	0.8415 (1.1954)	0.0306	2.559
Land	-1.4083 (1.9773)	3.6023 (3.0574)	6.4852* (2.8968)	0.1609	3.007

Standard errors are shown in the brackets.

* Statistically significant at a 5% level

Table VII shows the regression results of inflation hedging performance against expected and unexpected inflation of housing markets using ARIMA modelling as proxies of expected inflation. The results are closely aligned with the regression estimation using Treasury Bill rates as a proxy of expected inflation except in the case of land. None of the regression coefficients of detached house and town house is statistically significant. These empirical evidences indicate that detached houses and town house do not appear to hedge against both expected and unexpected inflation. Furthermore, they do not offer positive real rate of return since their constant coefficients, α_j , are indistinguishable from zero. However, the regression results do not reject the hypothesis that land is a good hedge against unexpected inflation. The γ_j coefficient of land, 6.4852, is significantly different from zero. Land provides more than a one-to-one hedging characteristic against the variation in the unexpected inflation. On the contrary, it does not provide an efficient hedge against expected inflation as its β_j is not significant. The goodness of fit of the land model using ARIMA as a proxy of expected inflation is somewhat higher than those of detached house and town house. However, the Adjusted R^2 of 16.09% indicates that there are other independent variables explaining the variation of the land price.

It should be pointed out that the period under examination is the period after a bust of property markets and economic crisis in Thailand. It is the period when one would logically expect a sharp slump in income and price of property. Hence, the available data set limit the study of inflation hedging characteristics of housing markets at other stages of property

markets and economy. Additionally, the results of this study are yet inconclusive as to whether Thai property markets hedge against inflation due to the short timeframe of the period under study.

IMPLICATIONS AND CONCLUSION

This paper provides empirical evidences to verify conventional beliefs regarding proxies of expected inflation and inflation hedging characteristics of housing markets in Thailand. Treasury Bill rates and regression-generated time series are tested whether they constitute good proxies of expected inflation. The results of the analyses of different frequency time series are conflicting. Treasury Bill rates only act as a good proxy of expected inflation for the quarterly time series but not for half-yearly and annual data set. When the ARIMA modelling, which is the more robust approach that allow real rate of return to vary over-time, is employed, the results completely coincide with the Treasury Bill rates. Thus, the assumption, which hypothesizes that the real rate of returns are constant, yet requires further careful scrutiny and critique. The appropriate approach to estimate the expected inflation rate is inconclusive and the debate on the subject remains open.

The regression results of hedging against actual (*ex post*) inflation reject the inflation-hedging hypothesis of Thai housing markets. This finding is not in line with empirical evidence found in extensive number of literatures in other countries. Interestingly, there is no strong evidence to indicate that housing markets provide positive real rate of return. However, the state of the property markets under the examination period

must be taken into account. The sample period is the period following a big crash in property markets and economic slump in Thailand. The extreme state of property markets may have distorted the inflation hedging characteristics. When the availability of data allows, further investigation on other market scenarios should be carried out.

The regression results of hedging against expected and unexpected inflation using Treasury Bill rates and ARIMA modelling as proxies of expected inflation closely coincide with the exception of land segment. In the case of land segment, when the ARIMA model is used as a proxy of expected inflation, the regression coefficient of unexpected inflation is statistically significant. This finding implies that land segment hedges against inflation shock or unexpected inflation. Moreover, the evidence reveals that the relationship between returns of land segment and unexpected inflation is more than a one-to-one relationship, returns increase at a rate that is faster than the increase in unexpected inflation. Therefore, the implication is that the inclusion of land in an investor's portfolio would provide a hedge against inflation risks of other assets in the portfolio, in addition to its own inflation risks. Nonetheless, its adjusted R^2 value of the ARIMA modelling is only 16.09 per cent. This suggests that inflation, expected and unexpected, is not the only factor contributing to returns on land segment.

Lastly yet importantly, Tarbert (1996) argued that the property markets are extremely unlikely to adjust instantaneously to changes in inflation and it would seem unlikely that a static regressions method would capture adequately any responses from inflation to property markets. Consequently, the static regressions employed in this study may be inappropriate because it is unable to differentiate between adjustments to a long-run equilibrium and short-run dynamic movement. Nevertheless, the limitations of data availability, only from 1998 to 2004, prohibit the use of cointegration approach in this paper to obtain an estimate of any long-run equilibrium relationship. Thus, the findings of this paper regarding proxies of expected inflation and inflation hedging characteristics of housing markets in Thailand is yet far from definitive and remain open to further investigation.

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RELATIONSHIPS BETWEEN LOCATIONS VS BUILDING CHARACTERISTICS ON SERVICED APARTMENT RENT: BANGKOK CBD CASE STUDIES

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ABSTRACT

This research investigates and compares relationships between both locations and building characteristics on rent of apartments and serviced apartments. The 3 case studies investigated are in Bangkok CBD (Central Business Districts). Instead of using focused analysis on either location or buildings with mass data analysis, the study applies case studies which allow the benefit of cross investigation of both factors. The results show that to judge for rents, one cannot use either location or number of amenity types alone. Moreover, there is a need to consider maintenance, conditions, buildings, and atmosphere of buildings at different price level as factors that can have influence on rent.

INTRODUCTION

Apartments and serviced apartments are two types of popular property developments in the real estate business. In Bangkok, there are still rooms available for both businesses, as the city is part of the global business development. Investments in new and existing types of projects are widespread throughout the city. Each project is built at different locations, with different mix of amenities and services, and with different levels of luxury and rent.

Past researches analyzed the determinants of market rent through various approaches, one of which is by using property-specific factors. Many research studies focused mainly on amenities, services, and physical characteristics, while others focused mainly on location and distance from township centers.

Rationale

As each apartment or serviced apartment is built differently in terms of both location and other physical characteristics, amenities that are normal at one location might not be needed at the other location. Location is an important determinant of rent. City development in one part of the town has a different character and surrounding from other parts.

Analysis of mass data collected in numerous projects located from different areas can benefit, for

example in increasing investor's confidence. However, this mass data analysis can overpass insight as to location specific differences.

Objective

The aim of this research is to investigate the relationships of location on rents by comparing the relationships of location versus building characteristics on rents. The investigation uses Bangkok cases to study both factors.

LITERATURE REVIEW

Location Variables

Many researches have been conducted on location variables to determine rents. Related studies explored relevant approaches including: proximity variables (Guntermann and Norrbin, 1987; Sirmans et al, 1990; Asabere and Huffman, 1996; and Frew and Wilson, 2002), market segmentation techniques (Smith and Kroll, 1989; and Des Rosiers and Thériault, 1996), and spatial autogressive (Pace et al, 1998).

These various modeling approaches use specific location data for research analysis. Valente et al (2005) used a spatial process to explore data collected from Atlanta by special association between pairs of

locations as a function of distance between them.

Analysis of relationship between rents on different locations in Bangkok CBD has been explored by Vanichvatana et al (2003). This research surveyed 271 luxury apartments and serviced apartments in 3 main zones in Bangkok CBD: Zone A (Sukhumvit areas): Vadhana and Khlong Toei districts; Zone B: Bangrak, Yanawa, and Sathon Districts, and Zone C: Pathumwan, Ratchatawee, and Phaya Thai Districts. Analysis results of rent from projects in each 3 zones are dissimilar in range and average values. The highest rent values are from newly developed Zone C, which are supported by convenient mass transportation, especially sky train. Zone B rental rate is lower because of less popular business locations, although they contain projects with similar ages. While, the earliest developed Zone A with many grades of projects has the lowest rent values.

Building Characteristics

Many past researches on the topic of apartments cover many other issues: demand and supply, vacancy rates and market equilibrium, rent control, demographic determinants of apartment demand, the rent or buy decision, apartments and business cycles, using hedonic approach to analyze determinant for apartment rents, and other important factors on rent (Jud et al, 1996).

Recent research analysis on determinants for apartment and serviced apartment rent in Bangkok CBD found that there are differences between types of amenities provided in luxury apartments and in serviced apartments (Vanichvatana, 2006). Basically, there are seven types of amenities that are normally provided in both types of business: parking, security guard, swimming pool, satellite/cable, fitness, sauna, and laundry. Hence, amenities provided in apartments are aimed to accommodate long stay life style: sporting amenities, on-air entertainment amenities, and entertainment and leisure amenities. Amenities provided in serviced apartments are aimed to accommodate busy life styles: house keeping amenities, food supply, beauty amenities, and business support amenities.

RESEARCH METHODOLOGY

The study focused on apartments and serviced apartments in 3 Case Studies in Bangkok CBD. Each

case is from Zone A (Sukhumvit areas): Vadhana and Khlong Toei districts; Zone B: Bangrak, Yanawa, and Sathon Districts, and Zone C: Pathumwan, Ratchatawee, and Phaya Thai Districts, sequentially. Comparative analysis has been applied on each of the three cases.

Data

The 3 Case Studies explained in the analysis part are selected from the prior primary data surveys. The surveys consist of 45 apartment and serviced apartments in Bangkok CBD. The name lists of these projects are selected from the 271 projects survey from previous research (Vanichvatana et al, 2003).

Analysis

This section analyzes and describes 3 case studies. Each of the three cases is located in Zone A, B, and C, respectively. The case studies further describe relationship among location, amenity and building conditions, and rent factors:

3 CASE STUDIES

Case Study 1: Zone A - Sukhumvit 24

Case Study 2: Zone B - Sathupradit 15 and 19

Case Study 3: Zone C - Langsuan Road

A. Case Study 1

Case Study 1 analyzes four projects located in the same soi (sub-street), district, Zone as follows:

Zone: A

District: Klongte

Sub-street: Soi Sukhumvit 24

Soi Sukhumvit 24 is a prime area for mixed uses of residential and commercial buildings in the upper grade residential zone on Sukhumvit Road.

Exhibit 1 shows the location of the four projects and picture of Project#A1, Project#A2, Project#A3, and Project#A4, respectively.

The analysis of Case Study 1 is done in two pairs, First Pair:

Case Study 1.1: Apartment Pair

Project #A1 and Project #A2

Second Pair:

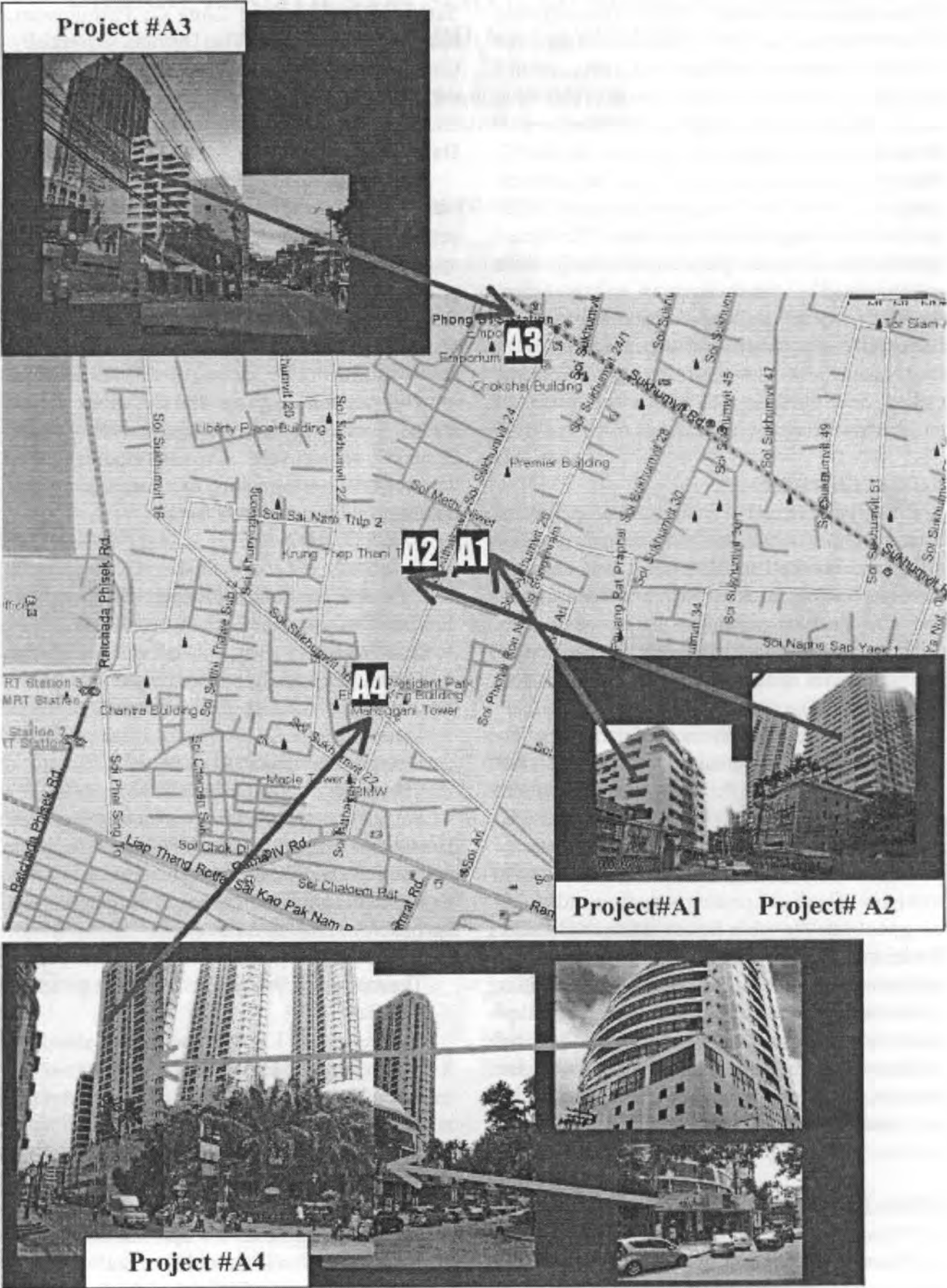
Case Study 1.2: Serviced Apartment Pair

Project#A3 and Project#A4

Case Study 1.1 - First Pair: Apartment Pair

These two projects are apartments located opposite to each other in the middle of Soi Sukhumvit 24. The comparisons of details of both Project#A1

Exhibit 1: Cast Study 1, Maps and Pictures of the Four Projects



and Project#A2 are shown below in Exhibit 1.

From Exhibit 2, we can conclude the following:

- Both projects are apartments only (not condominiums)
- Both projects were built in the same year
- Both have same room type and similar room size
- Both project decorations are similar
- The differences in both projects are in:
 - ⇒ Project#A2 Building size has more storeys and total units
 - ⇒ Project#A2 has more amenities
 - ⇒ And, Project#A2 charges higher rental rate

Case Study 1.1 Summary

- Project#A1 charges rental rate about one third of Project#A2. The question is which of the above differences constitute the ability of Project#A2 to charge higher rents than Project#A1.

- Project#A1 appears to provide a lot less amenity types that Project#A2. Also that, Fitness in this project has been added on later.

- It is interesting to raise the question on whether permanent amenities like tennis court and/or Driving Range have any impact on rental rates.

- This case shows that the two projects with similarity in location, project type, room type, room size, year built, building decorations, but have differences in amenity types have quite different rental rates.

Exhibit 2: Comparison of the Projects in Case Study 1.1, Project #A1 and #A2

Factors	Project #A1	Project #A2	Comparison
Type	Apartment	Apartment	Same
Year Built	1989	1989	Same
Story	8	27	#A1<#A2 by 9
# of Total Units	20	72	#A1<#A2 by 52
Room Size	1-bed: 150 sq.m. 1-bed: 190 sq.m.	2-bed: 240 sq.m. 2-bed: 230 sq.m.	Similar
Bedroom & Living	Wooden & Wooden	Wooden & Wooden	Similar
Furniture	Satisfactory Condition	Satisfactory Condition	Similar
Lobby	Granite, ok deco	Granite, ok deco	Similar
# of Amenity	5	11	#A1<#A2 by 6
Amenity Types	Carpark, 24-hrs guard, Satellite/Cable, Swimming Pool, Fitness (add on later).	Carpark, 24-hrs guard, Satellite/Cable, Swimming Pool, CCTV/CNN, NHK, Sauna, Child Playground, Tennis, Driving Range, Library, Fitness.	#A1<#A2 In: CCTV/CNN, NHK, Sauna, Child Playground, Tennis, Driving Range, Library. #A1>#A2 In:
Rental Rate (baht/sq.m./month)	265.00	366.93	#A1<#A2 by 100

(Note: * 38 baht equal to US\$ 1)

Case Study 1.2 - Second Pair

Both projects are serviced apartments located each on both ends of Soi Sukhumvit 24. The comparisons of details of Project#3 and Project#4 are shown below in Exhibit 3.

From Exhibit 3, we can conclude the following:

- Both projects are serviced apartments only. But Project#A3 is not a condominium and Project#A4 has some separate buildings as condominiums.
- Both project decorations are similar

- The differences in both projects are:
 - ⇒ Project#A3 is newer than Project#A4
 - ⇒ Project#A3 offers rooms with several bedroom types
 - ⇒ Project#A3 Building is higher, because this is a complex building, consisting of luxury department store and retail mall
 - ⇒ Project#A4 has a greater number of amenities
 - ⇒ And, Project#A4 charges higher Rental rate

Exhibit 3: Comparison of the Projects in Case Study A.2, Project #3 and #4

Factors	Project #A3	Project #A4	Comparison
Type	Serviced Apartment	Serviced Apartment	Same
Year Built	2000	1994	Same
Story	42	18	#3>#4 by 24
# of Total Units	367	228	#3>#4 by 139
Room Size	1-bed: 95 sq.m. 2-bed: 160 sq.m. 3-bed: 200 sq.m.	studio: 43 sq.m. 1-bed: 80 sq.m.	Different room types
Bedroom & Living	Wooden & Wooden	Wooden & Wooden	Same
Furniture	Very good condition	Very good condition	Same
Lobby	Hotel style	Hotel style	Same
# of Amenity	20	23	#3<#4 by 3
Amenity Types	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, NHK, Swimming Pool, Jacuzzi, Fitness, Sauna, Child Playground, Mini-Mart, Business Center, Conference Room, Internet, Restaurant, Coffee-shop, House Keeping, Laundry, Shuttle, Travel Agency.	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, NHK, Swimming Pool, Jacuzzi, Fitness, Sauna, Child Playground. Tennis, Squash, Salon, Mini-Mart, Business Center, Conference Room, Internet, Restaurant, Coffee-shop, House Keeping, Laundry, Shuttle, Travel Agency.	Tennis, Squash, Salon #3<#4 In:
Rental Rate (baht/sq.m./month)*	928.29	1,093.00 #1<#2 by 165	

(Note: * 38 baht equal to US\$ 1)

Case Study 1.2 Summary

- In this case, it is obvious that Project#A3 is superior to Project#A4 in location (although in the same sub-street, but closer to the Bangkok Mass Transit System), newly built, and more storeys.
- The only factor that makes Project#A3 has less advantage than Project#A4 is the three types of amenity: Tennis, Squash, and Salon.
- It is interesting to raise question whether permanent amenity like tennis court and/or Squash have any impact on rental rates.
- This case also shows that Project#A3 (that has better location, newer and higher building, but has less amenity types) charges 18% less rental rates than Project#A4.

B. Case Study 2

Case Study 2 analyzes three projects located in two Sois (sub-streets) which are located in the adjacent area as follows:

Zone: B
District: Yannawa
Sub-street: Soi Sathupradit 15 and Soi Sathupradit 19

Surroundings of the Sub-Streets

Both Soi Sathupradit 15 and 19 are two sub-streets which are located in proximity to each other on Sathupradit Road and Narathiwatranakarin Road within Yannawa District. Although both sub-streets have the same 2 traffic lanes, the surroundings of these two Sois are quite different.

Soi Sathupradit 15 has two traffic lanes, however appears quite narrow. Buildings in this Soi are mostly shop houses which are set back, by law, from the public line by about 2 meters. The surroundings of this Soi are mundane but pleasant.

On the contrary, Soi Sathupradit 19, which also has two traffic lanes, appears to be a wider road than Soi Sathupradit 15. This is because there are many big building development projects in this Soi. These buildings are mandated by law, to have far set back from the public line. This street setbacks from projects on both sides of the two lanes creating a much more pleasant atmosphere in the Soi.

Characteristics of the Three Case Projects

Beside the differences in atmospheres of the two sub-streets that are located in proximity, rental residences that are located on these two Sois also have quite different atmospheres.

The descriptions of the three projects studied in these two Sois are summarized in the Exhibit 5 below.

From Exhibit 5, we can conclude as follows:

- Among the three projects, Project#B2 has 3 out of 4 towers sold as condominiums. For the last tower, the owner has kept and operated the whole building as apartments with shared amenities with the other 3 condominium towers.
- Project#B1 on Soi 15 appears to be in different grade than Project#B2 and #3. Although Project#B1 is an apartment, same as Project#B2, the two are different in building size, room decorations, and amenities provided.
- Project#B2 and #B3 appear to be in a similar grade, although one is an apartment and the other is a serviced apartment. The two projects are similar in building height, year of building, and decorations in room flooring. The number of amenities provided in Project#B2 is lesser than in Project#B3, mostly in types related to business supporting functions (NHK, Steam, Business Center, Conference Room, Internet, and Restaurant).

Case Study 2 Summary

- In this case, Location alone cannot be used to identify rental rate or grade of the business. We need to use Environment or Atmosphere of location as one factor to support the identification.
- The number of amenities also has a relationship with rental rates.

It is quite interesting to raise the question if Project#B2 and/or Project#B3 were located on Soi Sathupradit 15, would either or all projects be able to charge rental rate as is.

Exhibit 4: shows the location of the three projects and picture of Project#B1, Project#B2, and Project#B3, respectively.

Exhibit 4: Case Study 2, Maps and Pictures of the Three Projects

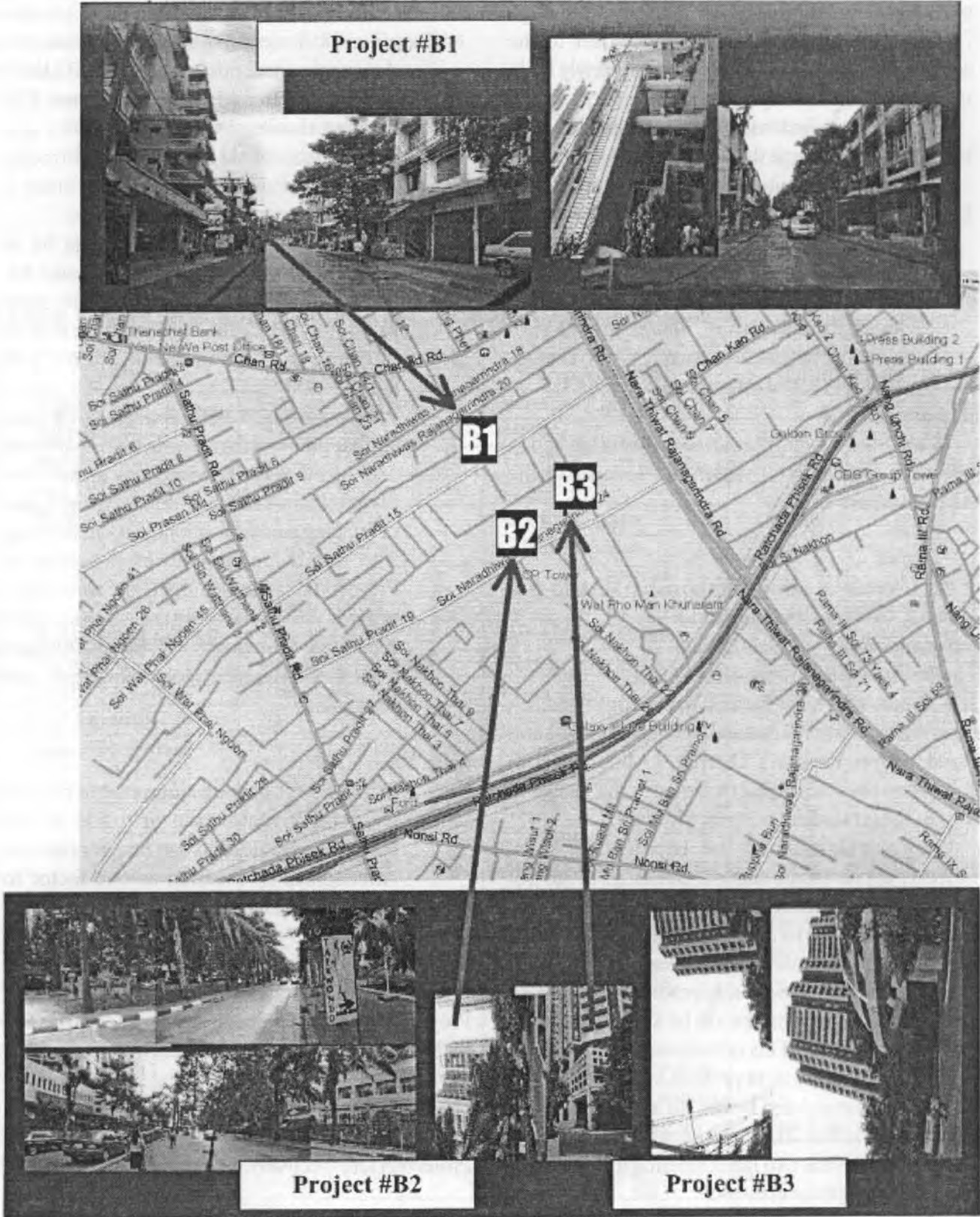


Exhibit 5: Comparison of the Projects in Case Study 2

Factors	Project #B1	Project #B2	Project #B3	Comparison
Location	Soi Sathupradit15	Soi Sathupradit19	Soi Sathupradit19	
Type	Apartment	Apartment	Serviced Apartment	Same in #B1& #B2
Condominium	No	Yes	No	Different
Managed by	Owner Managed	Company Limited	Company Limited	
Year Built	Approx. 1998	1997	1998	Similar
Story	10	18	18	Same in#B2&#B3
# of Total Units	154	360	560	Different
Room Size (sq.m.)	Studio: 391-bed: 63	2-bed: 113 3-bed: 120 Penth: 240	Studio: 45 1-bed: 70 2-bed: 140 3-bed: 175 Penth: 280	Differences in: Room type and Room Size
Bedroom&Living	Ceramic 8"x8"	Wooden	Wooden	Same
Furniture	Plain & old	Fully furnished, nice	Fully furnished, nice	
# of Amenity	12	16	22	Different
Amenity Types	Carpark, 24-hrs guard, Satelite/Cable, Fitness, Sauna, Steam, Table Tennis, Salon, Mini-Mart, Coffee-shop, Laundry, Travel Agency.	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, Swimming Pool, Jacuzzi, Fitness, Sauna, Child Playground, Table Tennis, Salon, Mini-Mart, Coffee-shop, House Keeping, Laundry, Shuttle.	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, Swimming Pool, Jacuzzi, Fitness, Sauna, Steam, Child Playground, Snooker, Mini-Mart, Driving Range, Business Center Conference Room, Internet, Restaurant, Coffee-shop, House Keeping, Lakundry, Shuttle.	#B1 < #B2 in: CCTV/CNN, Swimming Pool, Jacuzzi, Child Playground, House Keeping, #B2 < #B1 in: Steam, #B2 < #B3 in: NHK, Steam, Business Center, Conference Room, Internet, Restaurant, #B2 < #B3 in: Table Tennis, Salon.
Rental Rate (baht/sq.m./month)*	187.67	415.68	590.29	#B1<#B2 by 228.67 #B2<#B3 by 174.61
(Note: * 38 baht equal to US\$ 1)				

C. Case Study 3

Case 3 analyzes four projects located on Soi Langsuan which is located in the adjacent area as follows:

Zone: C
District: Pathumwan
Sub-street: Soi Langsuan

Exhibit 6 shows the location of the three projects and picture of Project#C1, Project#C2, Project#C3, and Project#C4, respectively.

The descriptions of the four projects studied in this Case Study are compared in the Exhibit 7.

Characteristics of the Four Projects

- All four projects are serviced apartments
- However, from the primary observation, the four projects are in different grades:
 - ⇒ The lowest grade - Project#C1
 - ⇒ The second grade - Project#C2
 - ⇒ The highest grade - Project#C3 and Project#C4
- Project#C3 and Project#C4 are newly built. These two projects present lobby and surroundings of very high quality.

Case Study 3 Summary

- Project#C2 provides the most number of amenities. However, the higher number of amenity types in Project#C2 do not reflect relationship with rental rate when compared with those of Project#C3 and Project#C4.
- In this case study, the number of amenity types does not reflect relationship with rental rates.

CONCLUSION

This analysis compares three case studies in three location Zones. The research analysis found that: (i) In Case Study 1: Projects located in the similar periphery, the one with more number of amenity type charges more rent. (ii) In Case Study 2: Locations alone cannot be used to identify rental rate or grade of the business. Environment or atmosphere of specific project location is an important factor to support the identification. (iii) In Case Study 3: the number of amenity types provided does not have relationship with rents. We need to consider class or grade of business of each apartment project as well.

From the three Case Studies, we cannot conclude that the number of amenity types alone has relationship with rent. Furthermore, we cannot conclude that location alone has relationship with rents. Projects that are located next to one another with different building characteristics can have quite different rents. There still needs to be further research to study relationships among location, amenity and building conditions, and rents.

In addition, there is the need to consider additional factors that can have influence on rent: (1) maintenance and conditions of buildings and (2) atmosphere of buildings at different price levels.

Exhibit 6: Case Study 3, Maps and Pictures of the Four Projects

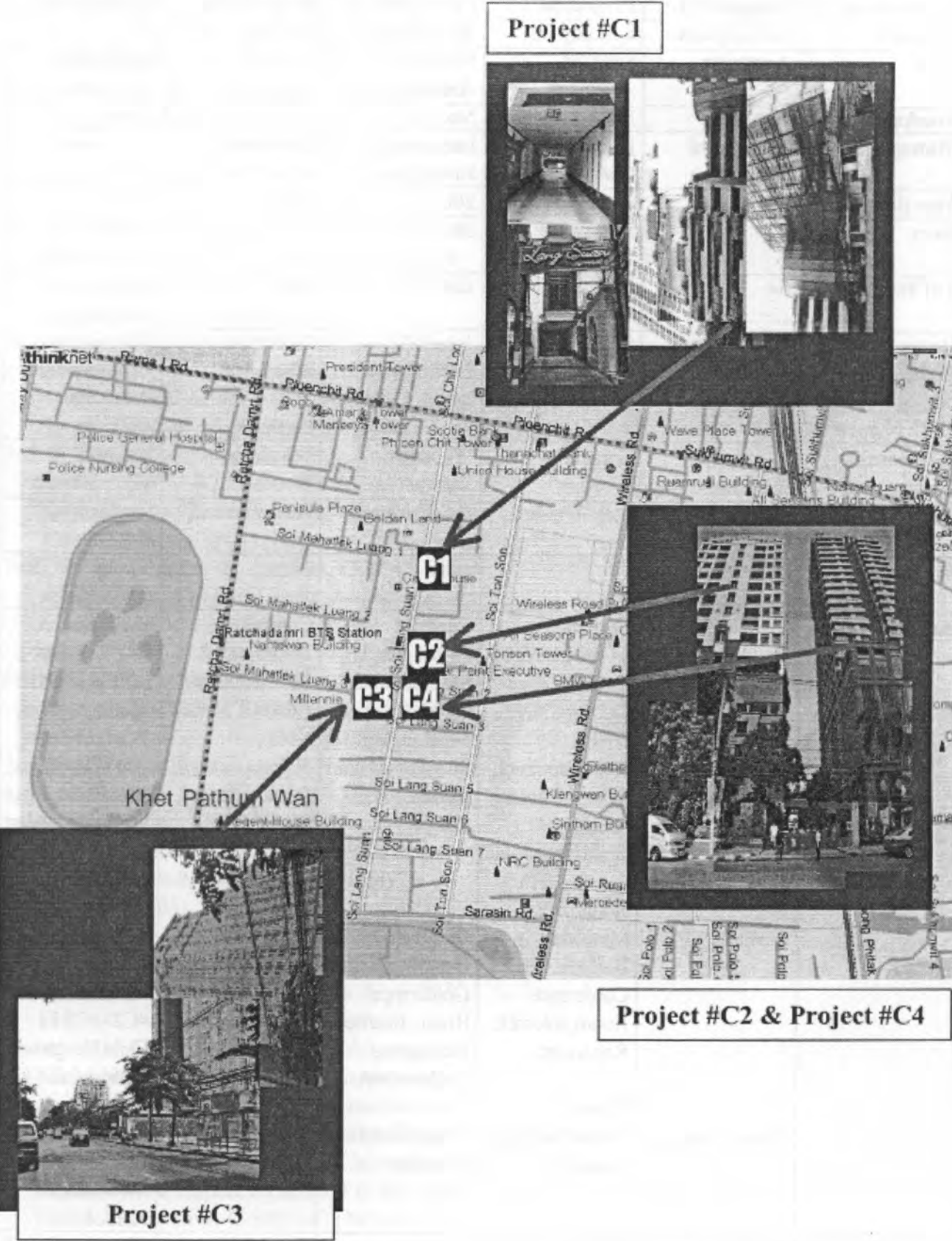


Exhibit 7: Comparison of the Projects in Case Study 3

Factors	Project #C1	Project #C2	Project #C3	Project #C4	Comparison
Location	Soi Langsuan	Soi Langsuan	Soi Langsuan	Soi Langsuan	
Type	Apartment	Serviced Apartment	Serviced Apartment	Serviced Apartment	Same in #C2 & #C3 & #C4
Condominium	No	No	No	No	Same
Managed by	International Mgmt. Firm	Local Public Company Firm	International Hotel Chain	International Mgmt Firm	
Year Built	1987	1996	2003	2004	Similar
Story	4	26	26	28	Similar in #C2 & #C3 & #C4
# of Total Units	34	178	164	150	Similar in #C2 & #C3 & #C4
Room Size (sq.m.)	Studio: 50 1-bed: 69 2-bed: 92	Studio: 40 1-bed: 85 2-bed: 96	1-bed: 97 2-bed: 115 3-bed: 131	1-bed: 62 2-bed: 100 Penth:146	Differences in: Room type and Room Size
Bedroom & Living	Wooden & Wooden	Carpet & Wooden	Wooden & Wooden	Wooden & Wooden	Similar in Material Used
Furniture	Ok Condition	Fully furnished, nice	Fully furnished, nice	Fully furnished, nice	Similar in #C2 & #C3 & #C4
# of Amenity	5	19	16	17	Similar in #C2 & #C3 & #C4
Amenity Types	Carpark, 24-hrs guard, Satelite/Cable, Fitness, House Keeping.	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, NHK, Swimming Pool, Jacuzzi, Fitness, Sauna, Child Playground, Salon, Mini-Mart, Business Center, Conference Room, Internet, Restaurant, Library, House Keeping, Laundry.	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, NHK, Swimming Pool, Jacuzzi, Fitness, Sauna, Business Center, Conference Room, Internet, Restaurant, Coffee-shop, House Keeping, Laundry.	Carpark, 24-hrs guard, Satelite/Cable, CCTV/CNN, NHK, Swimming Pool, Jacuzzi, Fitness, Sauna, Business Center, Conference Room, Internet, Restaurant, Coffee-shop, House Keeping, Laundry.	Differences #C1 < #C2 in: CCTV/CNN, Swimming Pool, Jacuzzi, Fitness, Child Playground House Keeping, Salon, Mini-Mart Business Center, Conference Room, Internet Restaurant Library, Laundry #C2>#C3 in: Child Playground Salon, Mini-Mart #C2<#C3 in: Coffee-shop #4>#2 in: Karaoke
Rental Rate (baht/sq.m./month)*	377.29	1,009.90	1,398.00	1,467.40	#C1<#C2 by 228.67 #C2<#C3 by 174.61

(Note: * 38 baht equal to US\$ 1)

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THE EFFECT OF RESTAURANT ATTRIBUTES ON CUSTOMERS' OVERALL PERCEPTION AND RETURN PATRONAGE: A CASE STUDY ON EBONY RESTAURANT, BANGALORE, INDIA

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ABSTRACT

The purpose of this article is to determine the effect of restaurant attributes on customers' overall perception and return patronage, and whether dining occasions affect return patronage in Ebony Restaurant, Bangalore (India). A sample survey method was used, with a structured questionnaire as the research instrument, at Ebony restaurant Bangalore, (India). Data from 400 guests, as respondents, was used for statistical analysis.

Findings showed that there is a correlation between restaurant attributes and customers' overall perception. Results also indicated that there is a relationship between return patronage and restaurant attributes and dining occasions. Managerial implications are addressed and discussed.

INTRODUCTION

Dining out in restaurants is a ubiquitous, significant and growing international phenomenon. Everywhere one travels, people from all ethnic backgrounds, nationalities, ages, socioeconomic groups and both genders can be observed eating and drinking out in independent, locally owned and operated establishments or in strongly branded multiunit chain outlets (Powers & Barrows, 2003). Restaurants serve both our social and biological needs. Restaurants can be divided into two categories: those serving predominantly our social needs- the dining market, and those serving our biological needs- the eating market. Because dining is predominantly a social event, service is important. The servers are expected to be friendly, as signified by a warm smile. In relatively expensive restaurants serving the dining market, the operation that falls short on significant measures of service is likely to lose customers quickly (Dittmer, 2002).

There is a movement towards trying out new and exotic foods, increasing interest in vegetarian items, as well as a growing use of spices, herbs, and hot peppers. Asian foods are getting more popular with cuisines from China, Thailand, and Japan in the lead

(Bharath and Prema, 2004). Indian cuisine is hot, spicy, flavored with herbs, and offers many vegetarian options. Eating has long been central to the culture of India, as diet is linked to notions of purity and self-control. The cosmopolitan Indian is now eager to explore new tastes and absorb global trends and is no longer limited by geographical or cultural boundaries. India has several thousand multi-cuisine eateries that dot the cities. (<http://www.bangalorebest.com/cityresource>).

For the last few years, the restaurant industry has experienced changes in Bangalore, a fast developing metropolitan city of India, such as heightened competitive pressures from the new upcoming upscale restaurants and increased consumer expectations, there is a growing need for the management of Ebony Restaurant to better understand to develop and maintain customer satisfaction and loyalty. Moreover, competition is arising from new restaurants that offer food and services, of a similar nature to Ebony. Consequently, the existing customers of Ebony may find a number of alternate options and switch to other restaurants. Therefore, the management of Ebony has to be aware of the customers' overall perception of the restaurant and work on its weak spots to boost the

customers' return patronage. Attributes of Ebony Restaurant along with the occasions for dining, play an important role in the decision making process of the customers. Hence it has to be determined, "What are the factors that influence the consumers' overall perception and return patronage to the restaurant; and whether dining occasions affect return patronage intentions?"

LITERATURE REVIEW

Consumers are becoming increasingly interested in cuisine and visiting destinations for culinary experiences (Faulkner et al., 1999). In light of emerging trends, various tourism and industry bodies have become progressively more aware of the need to market, develop and promote the restaurant industry as part of the tourism product.

Sparks et al. (2000) aimed to develop a better understanding of the contribution of the restaurant sector to tourist destination attractiveness. Besides serving excellent food, good service, the location of the restaurant, its décor and intangible aspects such as the ambience and atmosphere were reported to be important factors essential to enhance patrons' culinary experiences.

The SERVQUAL model has received a great deal of interest since it offers a practical instrument; the SERVQUAL scale and, it is claimed, the five empirical factors in the model (tangibles, reliability, responsiveness, assurance, empathy) are generic and are therefore valid and reliable for any service organization (Parasuraman et al., 1988). Despite being refined over a period of years (Parasuraman, Berry and Zeithaml 1991; Parasuraman, Zeithaml and Berry 1994), SERVQUAL continues to display a lack of consistency in replicating these dimensions in different service environments (Babakus and Mongold, 1992).

In the restaurant context there is a lack of survey instrument development, with the exception of guest comment cards. Equally, service quality models such as SERVQUAL and DINQUAL have not been able to identify the salient attributes that are particular to restaurant operations (Kivela et al., 1999). In addition, due to high levels of fragmentation and diversification in both the range of products, i.e. menus and menu items and market segmentation, it is difficult to gener-

alize restaurant customer satisfaction results. This is because the restaurant industry has a distinct product structure that is differentiated by price, location, theme/ambience, service level, cuisine and style, which at the same time demand a wide variety of market segments for the same products.

Of the numerous studies that have applied modified SERVQUAL models, few have been specifically for foodservice. One of them is TANGSERV (Raajpoot, 2002), which focused on measuring only the tangible dimension. The TANGSERV instrument included a three-factor structure for Tangibles: layout/design, product/service, and ambience/social.

Recently, a number of researchers have applied customer satisfaction theories, developed by consumer behaviorists, to food service (Almanza et al., 1994; Johns and Tyas, 1996). Auty (1992) studied restaurant customers' expectation and satisfaction perceptions in various restaurants and to investigate the way they select an eating place. It showed that food type and food quality are the most frequently-cited choice variables, while Dube et al. (1994), Lee and Hing (1995) and Qu (1997) have investigated customer satisfaction in more traditional restaurants, which prompted Oh and Jeong (1996) to lament the paucity of studies into dining satisfaction and return patronage.

There is an agreement among consumer researchers that loyal customers are essential for long-term business success, and that repeat patronage is a fundamental marketing objective of any business (Lowenstein, 1995; Spreng and Mackoy, 1996). Return patronage is the act or condition of going back to be a regular customer or client of a commercial establishment. Kivela (2000) argued that the customer's post-dining decision whether or not to return to the restaurant, is the moment of final truth for the restaurateur, as opposed to simply a customer's decision to go to the restaurant. The decision to return to the restaurant signifies whether or not the restaurant's performance met or exceeded customer expectations. For the restaurant marketer, this may also confirm whether the restaurant's marketing strategy has lived up to its expectations and effectiveness, or whether it was ill-conceived. Restaurant customers are more likely to return if they are satisfied with their dining experience.

Finkelstein (1989) in particular, has emphasized that the customer's dining needs are often linked with

the restaurant's attributes. Restaurants' attributes are most likely to be perceived and evaluated within the context in which they are experienced (Finkelstein, 1989). Furthermore, both Finkelstein (1989) and Wood (1995) have argued that these attributes, collectively, gave the restaurant its particular identity and character, which directly or indirectly intervene in the act of dining and post-purchase behavior, i.e. return or non-return.

In the present study, willingness to return (or not to return) to a restaurant served as the behavioral measure (dependent variable) and was compared with the responses relating to restaurant attributes, namely food, service, ambience and convenience factors (Kivela et al., 1999) which were considered (independent variables).

Each of these variables was further subdivided as shown below:

People eat out for a variety of reasons: social needs, business needs, ego and self-fulfillment and such. Kivela (1997) studied selection and segmentation of restaurants. The study gave due prominence to the dining out occasions in order to establish if the restaurant choice varied by this factor. The dining out occasions that arose from the pilot interviews were a place to meet someone, for fun, for enjoyment, a social occasion, for a business necessity, family outing and for a celebration (birthday, anniversary and such). These were then collapsed into a social occasion, business necessity and celebration.

METHODS

The methodology used in this research was sample survey. Convenience sampling was used as the sur-

Table 1.1: Restaurant Attributes (Sub Variables)

Atmosphere	Convenience	Service	Food
<ul style="list-style-type: none"> ● Level of comfort ● Level of noise ● View from the restaurant ● Overall cleanliness ● Restaurant's appearance 	<ul style="list-style-type: none"> ● Handling of telephone reservations ● Location/ accessibility ● Parking facility ● Opening/closing hours 	<ul style="list-style-type: none"> ● Speed/efficiency of service ● Friendly/polite, helpful staff ● Attentiveness of staff ● Food/beverage knowledge of staff 	<ul style="list-style-type: none"> ● Presentation of food ● Menu item variety ● Nutritious food ● Tastiness of food ● Freshness of food ● Temperature of food

vey technique, with the target respondents comprising customers dining at Ebony Restaurant, Bangalore. The survey was conducted while the subjects were about to exit after dining at the restaurant. All potential subjects were approached by the researcher and sought their approval for participation, before finally handing over the questionnaire. The sample size for this study was 400. Approximately 70 questionnaires were distributed each day from April 27 to May 2nd 2005, until a total of 400 were obtained.

QUESTIONNAIRE

The research instrument used was the structured questionnaire. The questionnaire was written in English. It contained four sections. The first section evaluated the customers' dining experience based on the restaurant attributes, the second section measured the overall perception of the customers, the third section explored the occasions that the customers had visited Ebony Restaurant for and the last section asked "Will you return to this restaurant?" Anchored to the scale 1 = I will definitely not return and 2 = I will definitely return, reveals the customers' post-purchase behavioural intentions.

HYPOTHESES

The hypotheses were divided into three groups. In Group A, each of the four categories of restaurant attributes, consisting of atmosphere, convenience, service and food, was hypothesized to be related to all the facets of customers' overall perception. Group B hypothesized a relationship between each of the four restaurant attributes and return patronage intention. The return patronage intention was also hypothesized to be related to dining out occasions, which comprised a celebration, a social need and a business need, in Group C.

RELIABILITY

Several researches have studied the reliability of selected multi-item scales: Oh and Jeong (1996) and Qu (1997) for the Likert scale. A reliability analysis (Cronbach's 1951) was performed to test the reli-

ability and internal consistency of most of attributes measured were high, ranging from Atmosphere 0.63, Convenience .80, Service .88, Food .67 and overall perception .84. These were well above the minimum value of 0.5, which is considered acceptable as an indicator of reliability (Hair et al., 1995).

METHOD OF ANALYSIS

Spearman's rank-order correlation was used to determine the relationship between the restaurant attributes and customers' overall perception of the restaurant. The variables for this were measured using the five-point likert scale. The Chi-square statistic was used to investigate the association between the restaurant attributes and customers' return patronage intention to the restaurant. The Chi-square statistic was also used to examine the association between dining out occasions and return patronage intentions of the customers.

DESCRIPTIVE

A descriptive statistical procedure was required to develop profiles of the total sample. Frequencies were tabulated to identify the distribution of respondents' dining occasion and return patronage. Respondents dined for special event 51.3%, business 28.5% and social reasons 20.3%. The majority of respondents 98% said that they would definitely return to the restaurant.

The top two mean responses in customers' dining experience with regard to the restaurant attributes were atmosphere (4.0335) and service (4.0331) (see Table 1 in appendix). The sub-variable in 'atmosphere' with the highest mean was 'view from the restaurant' (4.41). 'Level of noise in the restaurant' (3.5175) had the least mean in 'atmosphere' (see Table 2). The sub-variable in 'service' with the highest mean was 'friendly/polite and helpful staff' (4.1125). 'Speed/efficiency of service' (3.9375) had the least mean in 'service' (see Table 2).

The bottom two mean responses in customers' dining experience with regard to the restaurant attributes were food (3.9404) and convenience (3.7869). The sub-variable in 'food' with the highest mean was 'tastiness of food' (4.1375). 'Menu item

variety' (3.8075) had the least mean in 'food' (see Table 2). The sub-variable in 'convenience' with the highest mean was 'location/accessibility of the restaurant' (4.125). 'Parking facility' (3.455) had the lowest mean in 'convenience' (see Table 2).

ANALYSIS OF FINDINGS

Group A: Restaurant's Attributes Vs. Customers' Overall Perception.

The relationship between the restaurant attribute 'Atmosphere' and customers' overall perception of the restaurant, which was tested, using Spearman's rank order correlation, showed that there was a weak positive relationship between the two variables (see Table 4). An Oklahoma State University foodservice survey in 2004, showed that customers' perception has as much to do with the look and feel of a foodservice facility as the food itself. Another study conducted by Auty (1992) to determine consumers' perceptions of restaurants, affirmed that atmosphere or style were attributes that affected the perception and choice of restaurants.

The relationships between the restaurant attributes 'Convenience' and 'Service' and customers' overall perception of the restaurant, which were tested, using Spearman's rank order correlation, showed that there were weak positive relationships between the two variables (.253 and .298) (see Table 4). Elan (2004) postulated that the public's perception of a restaurant is not just about the food; it's also about the look, the service and the location. According to the result of the study of Narasimhan and Sen (1992), there is a relationship between a product's attributes and the perception of the respondents.

The relationship between the restaurant attribute 'Food' and customers' overall perception of the restaurant, which was tested, using Spearman's rank order correlation, showed that there was a weak positive relationship between the two variables (see Table 4). Auty (1992), in the study conducted on consumers' perceptions of restaurants and to investigate the way they select an eating place, insists that food type and food quality are the most frequently-cited choice variables regardless of occasions.

Group B: Restaurant's Attributes vs. Customers Return Patronage Intention to the restaurant

The relationship between the restaurant attribute 'Atmosphere' and customers' return patronage intention to the restaurant, which was tested using Chi-square, showed that there was a positive relationship between the two variables (see Table 5). Dube (1994) studied the connection between specific attributes and return patronage in a small, independently owned up-scale restaurant. The study found that atmosphere was one of the restaurant attributes that lead to the final decision of the customers to repeat a purchase in a pleasure situation and in a business situation.

The relationship between the restaurant attribute 'Convenience' and customers' return patronage intention to the restaurant, which was tested using Chi-square, showed that there was a positive relationship between the two variables (see Table 5). A similar research conducted by Wood in 1995 concluded that location (convenience) was one among the features of the restaurant that gives the restaurant its particular identity and character, which directly or indirectly intervene, in the act of dining and post-purchase behaviour, i.e. return or non-return.

The relationship between the restaurant attribute 'Service' and customers' return patronage intention to the restaurant, which was tested using Chi-square showed that there was a positive relationship between the two variables (see Table 5). According to a study conducted by Brumback in 1998, customers need reasons to return to a restaurant. The study confirmed 'service' to be one of the most important attributes of return patronage and restaurant success.

The relationship between the restaurant attribute 'Food' and customers' return patronage intention to the restaurant, which was tested, using Chi-square showed that there was a positive relationship between the two variables (see Table 5). The findings of studies on return patronage conducted by Brumback (1998), Wood (1995) and Dube (1994) in the restaurant environment showed that the most important reason for customers to return to the restaurant was the type and quality of food.

Group C: Dining out occasion Vs. Customers' return patronage intention to the restaurant.

The relationship between dining out occasion and customers' return patronage intention to the restaurant, which was tested using Chi-square showed that there was a positive relationship between the two variables (see Table 3). Kivela, Inbakaran and Reece

(2000) studied the relationship between dining-out occasion and return patronage in their research "Consumer research in the restaurant environment: A conceptual model of dining satisfaction and return patronage". The relationship between dining-out occasions and customers' intention to return was found significant. It implied that the dining occasion does have a significant effect on return patronage.

CONCLUSION AND RECOMMENDATIONS

The results of this study show that there is a relationship between restaurant attributes and customers' overall perception of the restaurant and return patronage. It is therefore very important for the management of Ebony Restaurant to ensure that the attributes of the restaurant lead to a favourable perception of the restaurant and ensure return patronage of the customers.

It is to be noted that the weak positive relationship between the restaurant attributes atmosphere, service and convenience and customers' overall perception of the restaurant; and the moderate positive relationship between food and customers' overall perception of the restaurant, does not mean that the customers' overall perception is not good. It merely shows that the correlation that exists between the two variables (restaurant attributes and customers' overall perception of the restaurant) is not strong, though they have high scores when taken individually.

The following are the main restaurant attributes that the management of Ebony Restaurant should pay particular attention to. The atmosphere in Ebony can be enhanced by reducing the level of noise in the restaurant. To execute this, soft music can be played in the background and the staff must ensure that the food and beverages are served as noiselessly as possible; without the clatter of plates, cutlery and movement of chairs. Making things convenient for the customers, adds to their comfort. The management can make the experience of dining at Ebony more convenient, by providing adequate parking space for its guests. The initial contact the customers make with the restaurant's employees is when they make the reservations by telephone. To create a favourable impression on the guests, telephone courtesies should be strictly followed.

The staff must be extremely competent. The

service at Ebony can be made better by retraining the staff, so that they may become faster and more efficient and have good knowledge about the food and beverages that they serve. The menu item variety can be augmented to improve the 'food' served in the restaurant. The restaurant could therefore offer more vegetarian and fish items, especially during buffets. Consumers are becoming increasingly concerned about their diets and are health conscious nowadays. Therefore it is important to make nutritious food available for the diners. A commendable feature to be noted is that the majority of the customers have stated that they will 'definitely return to the restaurant'. Therefore the management of Ebony must continuously monitor the restaurant attributes to ensure that it not only maintains, but also enhances its quality of service and food; keeps up the pleasant ambience and keeps their guests comfortable through the conveniences it offers.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The main limitations of this study are: Firstly, the number of attributes selected for this study was limited to four - atmosphere, convenience, service and food.

Secondly, the design of the study allowed the results of the sample to be drawn exclusively from respondents who dined in the restaurant at a specific time only. Therefore, findings cannot be generalized for other time periods. Thirdly, since this study was conducted in India, where the geographical and socio-economic setting is not identical to that of other countries, the findings of this study may not be generalized to restaurants in other countries.

There is a vast scope for further research in this field. A demographic study of the customers (taking into account their gender, level of income and age) can be conducted to give the management of Ebony Restaurant an accurate idea of the type of guests it caters to. This will help the management to advertise and position Ebony better.

A detailed study can be conducted taking into consideration each of the restaurant's attributes, comprising atmosphere, convenience, service and food. A detailed study in this field will help the management to detect even the minute elements that leave the guests dissatisfied. In order to understand

the food habits and preferences of the customers better, a study of the customers' preference and estimation for each of the four cuisines (Tandoori, Provencal French, Parsee and Thai) served in Ebony Restaurant, can be carried out.

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Online Sources

http://www.bangalorebest.com/cityresources/Food_and_Dining/platter.asplast accessed on 17.01.2005

Appendix

Table 1: Customers' Dining Experience and Overall Perception

Variables	Mean	Std. Deviation
Atmosphere	4.0335	.53450
Convenience	3.7869	.58010
Service	4.0331	.59208
Food	3.9404	.53867
Customers' overall perception	3.8120	.68865

Table 2: Restaurant attributes - Sub variables.

Atmosphere	Level of comfort	Level of noise	View from restaurant	Cleaniness of restaurant	Restaurant's appearance	
Mean	4.1150	3.5175	4.41	4.0875	4.0375	
Std. dev.	.744	1.064	.790	.7114	.759	
Convenience	Telephone reservations	Location/ accessibility	Parking facility	Opening/ closing hours		
Mean	3.785	4.125	3.4551	3.7825		
Std. dev.	.718	.791	.086	.819		
Service	Speed/ Efficiency	Friendly/ polite	Attentiveness of staff	Food/ beverage knowledge		
Mean	3.94	4.112	4.06	4.0225		
Std. dev.	.762	.718	.720	.747		
Food	Presentation of food	Menu item variety	Nutritious food	Tastiness of food	Freshness of food	Temperature of food
Mean	3.8625	3.8075	3.865	4.1375	4.0525	3.9175
Std. dev.	.920	.931	.845	.797	.791	.805

Table 3: Dining out occasion Vs. Customers' return patronage intention to the restaurant.

Variables	Type of statistic	Sig. (2 tailed)
Dining out occasion - Customers' return patronage intention to the restaurant.	Chi-Square statistic	.023

Table 4: Restaurant's Attributes Vs. Customers' Overall Perception.

Variables	Statistic value (Spearman's rho correlation coefficient)	Sig. (2 tailed)
Atmosphere - Customers' overall perception of the restaurant	.203**	.000
Convenience - Customers' overall perception of the restaurant	.253**	.000
Service - Customers' overall perception of the restaurant	.298**	.000
Food - Customers' overall perception of the restaurant	.384**	.000
**Values statistically significant at 1%		

Table 5: Restaurant's Attributes Vs. Customers Return Patronage to the Restaurant

Variables	Type of statistic	Sig. (2 tailed)
Atmosphere - Customers' return patronage intention to the restaurant	Chi-Square statistic	.000
Convenience - Customers' return patronage intention to the restaurant	Chi-Square statistic	.005
Service - Customers' return patronage intention to the restaurant	Chi-Square statistic	.000
Food - Customers' return patronage intention to the restaurant	Chi-Square statistic	.000

REACHING THE DECISION TO PURCHASE A FRANCHISE IN THAILAND

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Abstract

This study used Fishbein and Ajzen's Theory of Reasoned Action (TRA) as its framework for explaining prospective franchisees' purchase intention. Furthermore, the correlations between attitude toward purchasing a franchise based on perceived advantages of franchising from the franchisees' perspectives, subjective norms with respect to purchase, personality traits (the Big Five model of personality dimensions), demographics and prospective franchisees' purchase intention were also explored. Participants in this study were potential franchisees in Thailand who were considering a possible purchase. Data were collected at the national franchise exposition in Bangkok during 23-26 June, 2005. Questionnaires were given to 520 potential franchisees; however, the number of valid questionnaires was 390. A descriptive correlational design was employed. Data were analyzed using T-tests, ANOVA, and correlation analyses.

INTRODUCTION

The trend toward franchising has been evident throughout the world in the last decade (Preble 2003; Shea 2005). Moreover, franchising is expected to be the leading method of doing business in the new century (Preble 2003). This enormous trend towards franchising stimulated the Thai government to promote this kind of business throughout Thailand. Numerous activities exist to promote franchising in the country and the government has recently launched training courses for potential franchisees. The franchise industry in Thailand is expected to continue to grow by an average of 30 percent over the next few years (The Franchise and Thai SMEs Business Association (FSA) 2005). Future growth in franchising in Thailand is expected because the Thai government has started to promote SME development through franchising, and Thailand has evidenced significant improvements in the economy's overall health and robust economic growth (Tyler 2003, 2004). Franchised businesses are still rapidly growing in Thailand (FSA 2005). Moreover, the U.S. Commercial Service has identified it to be one of the best Thai sectors for U.S. trade expansion (Tyler 2003). The growth in franchising is a result not only of the increasing number of homegrown systems, but also of the influx of foreign franchise systems.

Much attention has been devoted to research with interest in consumer behavior such as why they buy a particular product, who buys such a product, etc. (Bemmar 1995). It is useful for Thai franchisers, government policy makers and academia to better understand why franchisees make a particular purchase of a franchise, and their characteristics. Research into the area of Thailand's franchisee behavior underlying the creation of a franchise relationship is necessary in order to manage the early relationship between franchisers and future franchisees in order to succeed in developing and sustaining franchisee-franchiser relationships and add value to franchising knowledge. In fact, a limited number of researchers have adopted the viewpoint of franchisees (Hing 1995; Stanworth 1995; Stanworth and Kaufmann 1996; Micheal 2003, Dubost 2004). Therefore, the study of franchisee behavior is quite timely and useful to both practitioners and academics. This is of particular importance since Thai franchisees' behavior has never been examined in previous literature.

Moreover, this is particularly relevant since many people assume that franchisers are selling a formula for success due to their access to a proven way of operating the business developed over the years by franchisers (Zafiris 1998). Nevertheless, recent research suggests that franchise survival rates and

profitability are not as favorable as previously thought when compared to independent small businesses (Stanworth et al. 2001; Shane and Spell 1998; Zafiris 1998; Bates 1995).

To understand more fully the franchisees' purchase behavior, the Fishbein and Ajzen theory of reasoned behavior (TRA) was adopted to explore the important variables of Thailand's potential franchisees. Moreover, the relationship between attitude toward purchasing a franchise based on perceived advantages of franchising, subjective norms with respect to purchase, personality traits (the Big Five model of personality dimensions), demographics and prospective franchisees' purchase intention were also explored. This research then addressed the questions: Why do Thai people choose a franchise rather than other forms of business? What are the relationships between perceived advantages of franchising, subjective norms, personality traits, demographics and intention to become a franchisee?

LITERATURE REVIEW

To understand the motivation of potential franchisees it is necessary to consider the plethora of theories that underpin marketing decisions- both from the viewpoint of the consumer (in this case the potential franchisee) and that of the vendor (the franchiser). Why would a consumer purchase a franchise?

In purchasing, the most heavily researched variable in the field of consumer behavior is the attitude concept (Lutz 1981). Multiple theories have been proposed to explain attitude and consumer behavior. Among them, the most widely adopted has been the Fishbein and Ajzen theory of reasoned action (Robertson, Zielinski and Ward 1984; Engel, Blackwell, and Miniard 1986; Green and Lee 1991; Bagozzi, Baumgartner and Yi 1992; Taylor and Todd 1995). The Fishbein and Ajzen theory of reasoned action (TRA) has gained attention from a number of researchers due to its simplicity, its straightforward operationalization, and its general applicability (Ajzen, 1991). The Fishbein and Ajzen (1975; 1980) model was explicitly constructed to explain consumer behavior. For an application of TRA for explanation of franchisees' behavioral intention (how a franchisee leads to a certain buying behavior), in addition to the four major constructs (attitudes, subjective norms,

intention, and behavior) of the theory of reasoned action, personality traits and demographics are included in the study's model.

Attitude toward franchising is measured indirectly (Ajzen 1991) by perceived advantages of franchising from the franchisee perspective. Subjective norms in this case are expert referents. For potential franchisees in Thailand, these significant others, who tend to have more (franchise) product knowledge, may have an influence on their purchase decision. The fact that these referent others influence purchase decisions has been demonstrated in a number of studies (Block and Roering 1979). These expert referents are existing franchisees, management consultants, franchise consultants, Thai Franchise Association, Department of Business Development, Thai Chamber of Commerce, franchise fairs, and bankers. Given the unique conditions in a franchise relationship (Guilloux, Dubost, Guazente, and Kalika 1999; Morrison 1997), personality traits other than the usually examined entrepreneurial personality traits may also be important to successful management (Hing 1995; Morrison 1997; Jambulingam 1999; Guazente, Dubost, Guilloux, & Kalika 2000; Hyrsky 2001). The personality traits for the study are as per the Big-Five model which consists of Extraversion, Agreeableness (people centered individual), Conscientiousness, Neuroticism (or, positively, emotional stability), and Openness to Experience (intellect) (Kinicki 2004). Researchers have noted that demographics have an influence on consumer behavior and contribute to the overall demand for various products and services (Hawkins, Best, and Coney 1998). There are also different ways of looking at the same individual consumer, because our identification will be relevant to different products at different times (Satt 1997). Therefore demographic variables including age, gender, education, occupation, a history of self-employment, are included as research parameters.

Conceptual Framework

Based on the Fishbein and Ajzen (1975, 1980) theory of reasoned action, this study proposed that attitude toward franchising and perception of social pressure placed on a potential franchisee regarding his/her purchasing a franchise, referenced as subjective norm, are the two most important determinants of intention to become a franchisee (potential franchisees' intention to buy a franchise). In addition, poten-

tial franchisees' personality traits and demographics were also proposed as having influence on their purchase intention towards a franchise. It should be noted that samples in this study were potential franchisees so this study only focused on behavior intention. Therefore, based on TRA model and personality theory, the conceptual model of the research is presented as below:

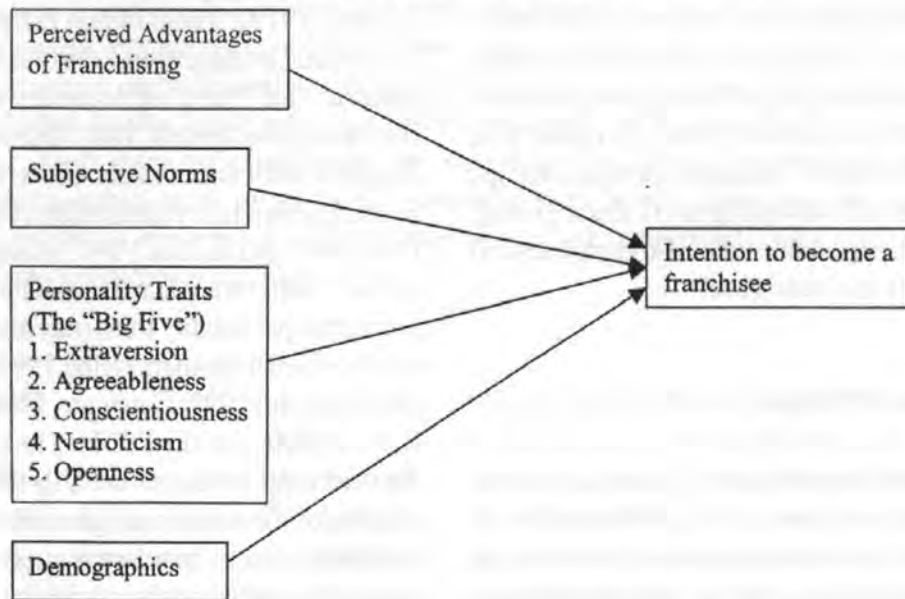
H5: There is no difference between prior-self employment experience and intention to become a franchisee.

H6: There is no difference between age and intention to become a franchisee.

H7: There is no difference between educational level and intention to become a franchisee.

H8: There is no difference between occupation and intention to become a franchisee.

Figure 1: The conceptual model: A model of franchisee buying behavior



The relationships between attitude toward franchising, subjective norms, personality traits, and demographics regarded as independent variables and potential franchisees' behavioral intention (intention to become a franchisee) regarded as dependent variable were examined using Fishbein-Ajzen's Theory of Reasoned Action.

Research Hypotheses

The following hypotheses were tested in the study:

H1: There is no relationship between perceived advantages of franchising and intention to become a franchisee.

H2: There is no relationship between subjective norms and intention to become a franchisee.

H3: There is no relationship between overall personality factors and intention to become a franchisee.

H4: There is no difference between gender and intention to become a franchisee.

Research Design

The cross-sectional survey method was used to collect information from respondents. A total of 520 questionnaires were administered to potential franchisees at the "THAILAND FRANCHISE & BUSINESS OPPORTUNITIES 2005" exposition during 23-26 June, 2005.

Different parts of the questionnaire were linked to the TRA and conceptual model (figure 1). The questionnaire comprises 5 sections. The first section includes the items dealing with intention to become a franchisee or potential franchisees' purchase intention. The second one assesses franchisees' perceived advantages of franchising. The third section covers subjective norms. The fourth part covers the items geared towards potential franchisees' personalities. The final part covers demographic variables. The questions were asked in prearranged order and the respondent was the one who filled in the information asked.

One hundred and thirty incomplete questionnaires were excluded. Thus the number of valid questionnaires was 390, which is slightly more than the recommended number of sample size (377). Two kinds of data analysis techniques were used: descriptive analysis and correlation analysis.

Descriptive statistics (frequencies, means, standard deviations, and distributions) were calculated to describe the demographic characteristics of the participants and to answer the first research question, "Why do Thai people choose a franchise rather than other forms of business?" Inferential statistics (F-Test ANOVA and T-Test) were used to determine the relationship between independent variables and dependent variables. In order to answer the second

research question, "What are the relationships between demographics and intention to become a franchisee?" T-Test and ANOVA were consequently used to test the differences between or among means of two or more independent samples.

The Pearson correlation coefficient was used to identify correlations between perceived advantages, subjective norms, personality traits and behavioral intention. Pearson correlations were also calculated to answer the second research question, "What are the relationships between perceived advantages of franchising, subjective norm, personality, and intention to become a franchisee?"

Results

Table 1: Demographic Characteristics of Thailand's Potential Franchisees

		Frequency	Percent
Gender	Male	179	46.1%
	Female	209	53.9%
Total		388	100%
Age	26-30 years	99	26.5%
	31-35 years	72	19.3%
	36-40 years	68	18.2%
	20-25 years	50	13.4%
	41-45 years	44	11.8%
	46-50 years	24	6.4%
	51 and above	16	4.3%
Total		373	100%
Education	Bachelor's degree	219	56.3%
	Master's degree and above	96	24.7%
	Diploma	42	10.8%
	Senior High School and Junior High School	32	8.2%
Total		389	100.0%
Occupation	Self-employed, merchants, business, owners	172	44.7%
	Mid-level occupations	111	28.8%
	Management, professionals	39	10.1%
	Not employed	25	6.5%
	Employees	17	4.4%
	Retirees	9	2.3%
	Labor	6	1.6%
	Housewife	6	1.6%
Total		385	100.0%
Self-employment history	Yes	207	53.9%
	No	177	46.1%
Total		384	100.0%

Table 2: The Arbitrary Level used in rating respondents' agreement

Arbitrary Level	Descriptive Rating
6.16 - 7.00	Strongly Agree (SA)
5.30 - 6.15	Moderately Agree (MA)
4.44 - 5.29	Agree (A)
3.58 - 4.43	Neutral / Undecided (UND)
2.72 - 3.57	Disagree (D)
1.86 - 2.71	Moderately Disagree (MD)
1.00 - 1.85	Strongly Disagree (DA)

Table 3: Summary of Mean and Standard Deviation

Variables	Mean	SD
Franchisees' purchase Intention	4.54	1.00
Perceived Advantages of Franchising	5.37	.80
Subjective Norms	4.24	.39
Intellect	4.50	.72
Conscientiousness	4.94	.84
Extraversion	4.76	.93
Agreeableness	4.86	.79
Neuroticism	4.61	.78

Table 4: Perceived Advantages of Franchising

Fourteen items of Perceived Advantages of Franchising	Mean	SD	Rating
Training provided by the franchisor	5.65	1.16	MA
Well known name	5.64	1.16	MA
Start-up support	5.56	1.16	MA
Ongoing support	5.56	1.08	MA
Job satisfaction	5.51	1.20	MA
Rapid retraining (unemployment)	5.44	1.16	MA
Opportunities for rapid growth	5.43	1.12	MA
Franchisor's advertising	5.42	1.23	MA
Security of the franchise concept	5.41	1.22	MA
Limited risks	5.27	1.26	A
Better profitability	5.21	1.30	A
Being independent as well as supported	5.12	1.18	A
Opportunity to work with the family	5.02	1.40	A
Small investment	4.92	1.34	A
Perceived Advantages of Franchising	5.37	.80	MA

Table 5: Franchisees' Subjective Norms

	Mean	SD	Rating
Franchise Consultant	4.39	0.87	UND
Franchise Fair	4.36	0.82	UND
Existing Franchisees	4.36	0.85	UND
Thai Franchise Association	4.28	0.75	UND
Department of Business Development	4.19	0.63	UND
Chamber of Commerce	4.12	0.48	UND
Management Consultant	4.09	0.49	UND
Banker	4.08	0.37	UND
Subjective Norms	4.24	0.39	UND

Table 6: Summary of Hypotheses Test Results

Hypothesis	Result
Ho1: There is no relationship between perceived advantages of franchising and intention to become a franchisee.	Reject Ho
Ho2: There is no relationship between subjective norms and intention to become a franchisee.	Reject Ho
Ho3: There is no relationship between overall personality factors and intention to become a franchisee.	Reject Ho
Ho4: There is no difference between gender and intention to become a franchisee.	Failed to reject Ho
Ho5: There is no difference between prior-self employment experience and intention to become a franchisee.	Failed to reject Ho
Ho6: There is no difference between age and intention to become a franchisee.	Reject Ho
Ho7: There is no difference between educational level and intention to become a franchisee.	Failed to reject Ho
Ho8: There is no difference between occupation and intention to become a franchisee.	Reject Ho

Pearson Correlation with the level of significance of 0.05

Conclusion

In conclusion, the Fishbein and Ajzen theory of reasoned action was effective in explaining intention to become a franchisee in Thailand. Despite the rapid adoption of the franchising concept, little research on franchising in Thailand has been done so far. The main factors motivating potential franchisees in Thailand to join a franchise system instead of independent small business ownership were identified, demographic characteristics of potential franchisees were examined, and the relationships between perceived advantages of franchising, subjective norms, personality traits,

demographics and intention to become a franchisee, were explored. The results of this study thus provide better insights into Thailand's potential franchisees' purchase intention. They have some implications for practice. The study revealed that many respondents choose to join franchises over starting independent businesses in order to take advantage of the training provided by the franchiser, well known name, and start-up and on-going support system. Enticing packages comprised of these elements, offered by established franchisers, should be instrumental in expanding franchises and promoting franchise operations.

For recommendations as to the recruitment of franchisees, a positive intention to become a franchisee is associated with personality factors of Conscientiousness, Intellect, Extraversion, and Agreeableness. These four items that make up intention to purchase a franchise show positive correlations, thus prospective franchisees who score higher in these four dimensions may be more inclined to become franchisees than individuals scoring lower in these four dimensions. Existing franchisees were found to be one of the most influential expert referents of potential franchisees' purchase intention. Franchisers should pay attention to increase existing franchisees' recommendations by word of mouth to others. Franchisers can benefit from identifying and understanding reference groups of the potential franchisee and incorporating appeals to the identified groups in advertisements.

The results suggest another practice that may enhance franchising in Thailand. An intervention for motivating franchising in Thailand should take age and occupation into account. Potential franchisees with the age range of 51 years and older had a significantly higher intention to become a franchisee than other age groups. In addition, retirees had a significantly higher intention to become franchisees than other occupational groups. Better target markets for franchising would be applicants with the age of 50 years and older, and retirees.

These also have some implications for policy makers. The findings of this study suggested ways to enhance franchising in Thailand. Attitude toward franchising was found to be significant correlated to franchisees' purchase intention. The attitude toward franchising was measured based on respondents' beliefs about the advantages of franchising. Therefore, Franchisee education focusing on those advantages of franchising could contribute to increasing potential franchisee's favorable attitudes toward franchising, which in turn, increases franchising intent.

The study revealed that potential franchisees had high educational levels. In order to expand franchises and promote franchise operations, numerous resources offering insights into franchising should be available, from local franchise and business opportunity exhibitions to useful Web sites and publications, and from franchising organizations such as the Thai Department of Business Development. Research into franchising should be encouraged, especially in universities, in order to provide useful sources of information.

The findings of this study suggested that subjective norms had influence on respondent's purchase intention. Encouraging government units to provide more informational support and services regarding franchising is necessary, because the more that prospective franchisees have professional advice from expert referents and perceive their advice in favor of purchasing or investing, the more they may be likely to become franchisees.

Job satisfaction was perceived as a great advantage of franchising, therefore governmental and private sectors who market franchising should provide informational support for potential franchisees and disclosure in order to reduce the differences between franchisees' pre-purchase expectations and perceptions, which result in franchise failure.

Future Research

The following recommendations for future research are suggested. Future research should focus on tracking the respondents as they actually make their decisions and confront the outcomes. In so doing, longitudinal franchise studies would offer interesting research perspectives. Further research should also focus on the ability of prospective determinants to predict franchisees' purchase intention or behavior in order to have deeper insights into franchisees' purchase decision. Replication of this study also includes testing the theory of reasoned action with a cross-cultural study design. Future research should validate the findings of this study using data collected from franchisees in different cultural environment. A cross-cultural comparison study between Western and non-Western cultures in this area would be very useful in developing culturally-based franchising interventions. Future research should explore subgroups of population such as potential franchisees who attend training programs for prospective franchisees organized by Thai Department of Business Development. This is because people in this group show a strong purchase intent.

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AN EMPIRICAL APPROACH TO EVALUATING GROCERY PRICES IN UK SUPERMARKETS

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ABSTRACT

This evaluative paper compares the prices of selected national and own label brands in four leading UK supermarkets. The objective is to find out price differentials between manufacturers' and retailers' brands in the leading supermarkets. Prices of nine grocery products were taken from four leading supermarkets and a comparison was made between the prices charged for national brands and those charged for equivalent own label brands. An evaluation of prices within the selected stores reveals that although own label brands were cheaper by a small margin than those of equivalent national brands, a large segment of customers still prefer national brands to own label brands. The review also suggests that more consumers were willing to pay premium prices for national food brands than for own label brands irrespective of price differentials and store image. It is recommended that retailers use packaging information to dispel uncertainty and innovate in areas where they have a strong presence, as this indicates consumer acceptance.

Key Terms: Grocery retailing; store prices; supermarket pricing strategy; grocery brand perception

INTRODUCTION

Price is probably the most responsive and potent weapon in the retail marketing mix. Yet, according to Omar (1999: 231), the markets in which price wars are fought are littered with corporate casualties and pyrrhic victories. The supermarket sector provides obvious evidence of the most blatant use of price to attract shoppers into the stores. In food and household goods, price competition is particularly fierce (Mintel, 2005), usually in the form of discounting of selected lines, combined with promotion of own-label products.

Walking down the aisle of any UK supermarket will show the display of own-label food products next to that of national food brands. The prices of both brands are displayed next to each other, thus giving consumers price comparisons to take into account when making their purchase decisions. With one of the bases for selling own label food brands being the price differential between own labels and national food brands (McGodrick, 2003), supermarkets normally use comparative pricing strategy to persuade consumers to buy own label products in view of their cheaper prices (Omar,

1998, p. 234). Marketing literature on pricing (Dickson and Sawyer 1990), tends to suggest that consumers' attention to price and as a result quality inferences, depend on time limits (Sethuraman, 2000), type of product, and the habitual nature of the purchase decision (De Wulf et al., 2005). Although, Raju et al. (1995) have suggested that price differential is not an important determinant of brand choice, Sivakumar (1996) observed that consumer brand choices are based not only on price but also on quality.

The purpose of this paper is to investigate consumers' price evaluations in four UK leading supermarkets in order to find out if consumers shop for own-label on the basis of price. Evidence in the literature suggests that price differential between national and own label brands is one of the factors accounting for high own label sales (Sethuraman 1995); and that price differential has a positive relationship with own label shares - meaning that own-labels are gaining sales at the expense of national brands on the basis of lower prices (Raju et al. 1995). Thus, the objective of this paper is to find out the main factors influencing consumer food purchase decisions. The outcome of this review will generate a

better understanding of consumer food shopping decisions which will help supermarkets and food manufacturers to target their brands strategically.

The rest of the paper is organised as follows: in the next section the paper explains what is meant by price and how it applies to the retailer and the consumer. The extant literature on the role of price in the UK supermarket and price-demand relationships is reviewed. Next, consumers' price-value perception is reviewed drawing from previous research in consumer price judgment and shopping decision. The paper then reviews on-spot price checks compiled from four leading UK supermarkets to perform a descriptive analysis of consumers' perceptions of national and own-label prices. Evaluation is based on the relationships between price, perceived quality, and intentions. Finally, the paper concludes by presenting a decision-making guideline derived from the price signal that supermarket managers could use to assess whether they can increase revenues by increasing price.

THE MEANING OF PRICE

Price is the one element of the marketing mix that produces revenue; the other elements produce costs (Kotler, 2003); and has traditionally operated as the major determinant of buyer choice. Table I, reproduced from Omar (1999) depicts the difference in the meaning of price to the retailer and to the shopper.

In its simplest term, price may be defined as 'what the market will bear or what consumers are willing to pay for an item on offer'. Although price may mean different things to retailers and consumers, the correct definition of the 'right price' to the retailer is 'the price which will bring the largest contribution to overheads and profit' (Omar, 1999). Theoretically, in price-sensitive supermarket sector, the role of price is diverse, and the higher the supermarket sets its price, the fewer units it will sell, but - up to a point - the higher price will be its unit contribution to profit and overheads. Thus the trick is to find the price point at which the largest contribution to overheads and profit will be made (Ortmeyer, et al. 1991).

THE ROLE OF PRICE IN CONSUMER PERCEPTION

Drawing on literature on consumer judgment and decision-making, this market review paper evaluates the proposition that price serves two distinct roles in consumers' value judgments. First, as a product attribute, price affects the perceived similarity of the target product to the mental prototype of a higher or lower quality product. However, price is not the only attribute used to make similarity based quality judgments. Other relevant and available product attributes moderate the effect of price on quality judgments. Second, as a measure of sacrifice, price serves as the benchmark for comparing utility gains from superior

Table I: Meaning of Price to the Retailer and the Shopper

	Price to the retailer	Price to the shopper
1	An element in the retail marketing mix, or the store promotion mix, which can be manipulated within a defined range to achieve corporate objectives, e.g. to promote sales, to create an image, to forestall competition.	A measure of the value of the total bundle of satisfaction they are offered, with the corollary that the significance of price may vary within the decision making process.
2	Part of the relationship which, when taken in conjunction with the sales volume, yields a revenue fund from which costs can be met and a profit obtained.	A cost, particularly where the purchase is for industrial or commercial purposes. It is also a measure of quality. That means 'you may get what you pay for', etc.
3	A measure of the risks to the retailer involved in the sale, and/or an insurance premium against the maturing of these risks.	A measure of the alternatives forgone: either directly, i.e. directly competitive products or substitutes, or indirectly, i.e. alternative uses for the money to be spent.
4	Part of the overall bundle of factors, including discounts, settlement terms, credit terms which can be used to affect both the 'willingness' and the 'ability' of the customer to purchase.	Part of a conglomerate of things which the shopper often takes into account under the heading of price - discounts, settlement terms, credits, credit terms, part-exchange, guarantees which may affect shopper's 'willingness' or 'ability' to purchase.

Source: Omar, O. (1999), Retail Marketing, London: Financia Times/Pitman Publishing, p. 232.

product quality. However, this comparison process is dynamic because the relative importance of money and product quality changes across consumption occasions. In terms of the consumer decision-making process, Monroe (2003) explained how consumers perceived supermarket prices, and demonstrates how high prices simultaneously increase as well as decrease purchase intentions.

In supermarket operation, price could be regarded as serving two distinct roles: as a measure of sacrifice and as a signal of quality. These pricing roles have been known for a long time (Leavitt 1954). However, it is not clear when the "signal effect" of price dominates the "sacrifice effect" (Jacoby and Olson 1985, Rao and Monroe 1989, Zeithaml 1988). Evidently, marketing literature suggests that retailers do use consumers' judgments of quality and value to predict when higher prices lead to higher grocery purchases in the supermarket (Dodds, et al., 1991, Harvey, 2003). Thomas et al. (2004) used consumer price-value judgment to show how three broad factors interactively predict consumers' value judgments for merchandise in the supermarkets with uncertain quality: (i) the odds of high quality based on product grouping process (ii) the relative importance of product quality and price evaluation and (iii) the actual distribution of prices in the supermarket. It is important to note that the third factor is exogenous and is largely outside the supermarket's domain of influence. The review in this paper is therefore more relevant to the first two factors.

PRICE AND PERCEIVED QUALITY RELATIONSHIP

As Thomas et al. (2004) observed, over the past several decades researchers have adopted several different perspectives to explain the positive relationship between price, product quality, and demand. Some of this research has examined the positive relationship between price and quality from a manufacturer's perspective (see for example, Klein and Leffler 1981, Pashigian 1995). These previous approaches examined the optimal strategy for suppliers when there is irregular information about a product whose quality is revealed to consumers only after purchase. When consumers are uncertain of product quality, then profit-maximising firms have to decide

whether or not to charge a price premium as a signal of high quality for national brands (Harvey, 2003). This approach suggests that manufacturers will choose the pricing strategy for national brands that maximises their long-term profits. In such models, description of consumer behaviour is restricted to examining how consumers conduct their price search.

Other researchers have examined price and quality relationship from a consumer perspective. Some investigations into this aspect focused on the relationship between objective product quality and price (for example, Hjorth-Anderson, 1984, Gerstner 1985, Sproles 1977). However, with the proliferation of the perspective that purchase decisions are not based on objective facts but on subjective beliefs, the emphasis shifted from objective product quality to perceived quality (Leavitt 1954, Jacoby and Olson 1985, Nagle and Holden 1987, Monroe 2003). However, an unequivocal positive relationship between price and perceived quality is yet to emerge. While in some studies higher price was associated with high perceived quality, in other studies no such relationship manifested (Bonner and Nelson 1985, Parasumaran, Zeithaml and Berry 1985). Based on a review of nearly 90 studies done in the past 30 years, Zeithaml (1988, p.11) concluded that a "general price-perceived quality relationship does not exist."

In the light of such research finding, the higher the level of uncertainty with regards to the quality of food brand, the higher the possibility that consumers will use price as a measure of quality (Sivakumar, 1996). Consumers' attitude to price and thus quality inferences is dependent on time limits, the habitual nature of the purchase decision, and the type of product (Urbany et al. 1996).

Selling an own-label brand at a low price would lower consumer perception of quality, which would result in negative price-quality inferences for the own-label brand. Rather than sending out the positive message of being a bargain, a low price offer could send out negative messages of poor quality (Drake and Chung, 2005), especially when consumer value judgments are checked against three main factors enumerated by Thomas et al. (2004) listed previously as: (i) the odds of high quality based on a categorization process (ii) the relative importance of product quality and price evaluation; and (iii) the actual distribution of prices in the market. Consumers are aware that whilst high prices could be a signal for high quality, espe-

cially in categories where quality is uncertain, it is also possible for high prices to be used as a camouflage for inferior products. Thus the high price charged would only be signalling high profits on the part of the retailer.

GROCERY PRICES IN COMPETING SUPERMARKETS

Previous marketing research has focused on areas such as consumer perceptions of promotional price deals (Sivakumar 1996, Ailawadi et al. 2001), transfer pricing and the meaning of price to suppliers and consumers (Smith 2000, Dawson 2000, Moreau 2001). Other researches have focused on the level of competition that exists between national and own label brands (Sethuraman 1995, Dick et al. 1997). However, this current paper focuses on comparing prices between national and own label brands in leading UK supermarkets.

Consumers are usually willing to pay more for national brands than own label brands because they believe that the higher prices charged by national brands signify a higher quality and value (McGoldrick, 2003). Grocery shoppers may not believe that there is a high quality difference but they may be sensitive to changes in quality and as a result will pay for the more expensive product believing it to be of a better quality, hence the higher price (Sethuraman 2000). Added to this however is the fact that consumers expect certain retail premium ranges to be more cost effective than others in line with the umbrella retail brand proposition. Asda claims that its premium 'Extra Special' food range is 19 per cent cheaper than Tesco 'Finest' and 30 per cent cheaper than Sainsbury's 'Taste the Difference' (Mintel 2005).

There is on average a price discrepancy of 89 per cent between the prices of national brands and that of own label brands. However, in spite of this price difference, available figures (see Table II) shows that own label products under perform their national brand equivalents.

Table II: Comparison of National and Own-label Food Brands by Supermarket

		Corn flakes	Soup	Rice	Fish Fingers	Salad Cream	Rice Pudding	Milk	Bread	Tomato Plum	Total
Tesco	O/L (?)	0.75	0.33	0.68	1.15	0.35	0.4	0.34	0.57	0.35	4.92
	NB (?)	1.38	0.59	2.65	1.45	0.85	0.63	0.56	0.96	0.58	9.65
	Pd (%)	84	78	290	26	142	58	65	68	65	
Sainsbury	O/L (?)	0.75	0.33	0.68	1.15	0.36	0.38	0.34	0.57	0.45	5.01
	NB (?)	1.38	0.59	2.65	1.45	0.93	0.63	0.56	0.96	0.57	9.72
	Pd (%)	84	78	290	26	158	66	65	68	27	
Asda	O/L (?)	0.75	0.32	0.74	1.15	0.33	0.38	0.34	0.67	0.35	5.61
	NB (?)	1.38	0.59	2.74	1.45	0.85	0.63	0.55	0.96	0.58	9.73
	Pd (%)	84	84	270	26	157	66	62	43	66	
Morrisons	O/L (?)	0.75	0.38	0.75	1.15	0.33	0.42	0.45	0.5	0.35	5.08
	NB (?)	1.38	0.59	2.74	1.45	0.85	0.58	0.56	0.96	0.58	9.69
	Pd (%)	84	55	265	26	157	50	24	96	66	

Key: Pd = Price differentials; NB = National brand; O/L = Own label

NB National brand products surveyed are: Kellogg's cornflakes; Heinz soup; Uncle Ben's rice; Bird's Eye fish fingers; Heinz salad cream; Ambrosia rice pudding; Kingsmill Gold Coby; Mapolina tomato plum

When comparing "like-for-like" item prices, in all cases the national brand prices are higher than those of own-label brand prices of selected grocery items (see Table II). In spite of this price differential, figures released by Mintel, (2005) show that in all categories except rice, national brand products out-perform those of own-label brands. This supports Sethuraman's (2000) explanation that in spite of the higher prices of national brands, consumers will still buy more of them because of their familiarity, imagery or habit. It could be argued that own-labels out-performed the national brands for rice as a result of excessive gap in prices. The over 200 per cent difference in price could possibly be the reason consumers were willing to buy own labels rather than the more familiar national brand in the rice category. This supports arguments by Agarwal and Cha (1998) who suggest that there is an absolute price threshold over which consumers will not cross.

In terms of retailer versus retailer brand, Tesco products are overall cheaper than those of the other supermarkets polled (refer to Table II). Apart from cornflakes and fish fingers where all supermarkets are charging the same prices, Tesco prices in almost all other categories are cheaper than those of their competitors. This has resulted in Tesco having the cheapest shopping basket (see also Mintel, 2005). Based on the general acceptance of Tesco as the leading grocery retailer, it can be assumed that most consumers shop with them because of their low pricing policy. In terms of horizontal price comparisons, the price calculation revealed that national brands exceed own labels by 89 per cent. In spite of the high percentage differential, national brands still dominate the market in all product categories sampled. It is probable that consumers are basing their purchase decisions on non-quality utility factors like product familiarity, image and habit (Sethuraman 2000). This is also consistent with De Wulf et al. (2005) who found that irrespective of actual quality, national brands enjoy a favourable level of brand equity.

PRICE PERCEPTIONS AND ITS INFLUENCES ON BRAND CHOICE

This could be defined as the manner in which consumers rank brands according to price tiers within the category. This ranking is based on inferences which

are the process of collecting and combining often diverse and complex information into a judgement (Fiske and Taylor 1984, p 283). Thus consumers could perceive a high priced product as having a high quality (Sethuraman, 2000). Price has complex meaning and can play a lot of roles to the consumer. It has long been established that price can be used as a benchmark to signify quality (Leavitt 1954). It is possible for consumers to perceive own-label food brands as lower in quality because of their relatively low price. Meanwhile, rather than thinking that they are getting more value for their money, by inferring that a low priced product has the same value as a higher priced one, consumers could equate the low-priced product with lower quality (Darke and Chung 2005).

With consumers' expectation of keen prices on all foods, and the enjoyment of good promotional offers on brands as well as own label products, consumers now expect good prices as a matter of course. A study conducted by Richardson et al. (1996) shows that next to price, brand familiarity, perceived value for money, and perceived quality variation play an important role in consumer brand evaluation. Dick et al. (1997) believe that taste, overall brand quality and ingredient quality are the main factors apart from price which consumers use when evaluating own label and national brand products.

Finally, the influence of price on choice is dependent on the roles the consumer wishes prices to play at the time of purchase (Sivakumar 1996). Price could be used to determine perceived value or perceived monetary influence (Monroe 1990 p 46). The monetary sacrifice of brand acquisition could be increased by its price and through this reduce the value-in-exchange the consumer would receive from the brand. Thus, from an economic perspective, higher prices are likely to result in higher perceived monetary sacrifice. Thus, using price as a determinant of quality is dependent on the degree of trust the consumer places on the use of price as a quality determinant (Sivakumar 1996) A positive price-quality association increases the quality effect with an increase in price. While a negative price-quality association has the opposite effect (Rao and Monroe 1996). It is probable that price-quality associations are formed from general price levels.

CONCLUSIONS

Consumers it seems are not just looking for good bargains, but they are also looking to get value for their purchases. They are becoming choosy when shopping and will not settle for just any thing because the price of the product is cheaper. Rather they are making their choices on the basis of taste, familiarity, etc. There is a higher likelihood of repeat purchase if the product appeals after purchase.

The high demand for national food brands in spite of the high price premium placed on them could be attributed to consumer perception of high quality differentials between national and own label brands. With the inability to judge the quality of a food product except through taste, consumers will always buy national food brands based on experience and believing that national brands will always provide higher consumption pleasures.

Own labels are put at a disadvantage because they are operating with less concentration in a competitive market without product differentiation (Ailawadi and Harlam; 2001). With own label brands being less known compared to national brands and unidentifiable with a particular manufacturer (Dick et al; 1996), they are undifferentiated in the minds of the consumer (Richardson; 1997).

FUTURE RESEARCH DIRECTION

In the light of this market review, it is necessary to emphasize the need to study how consumers make judgments of price, quality and value in relation to supermarket retailing. Also there is a need to investigate how quality perceptions are formed and how these quality perceptions influence perceptions of brand values in relation to national and own-label food brands.

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