Importance and performance analysis on the investor's choice of an offshore mutual fund and a bank channel in Taiwan

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Abstract

Purposes of the current research were conducted among these investors with importance-performance analysis (IPA) to reveal the selection factors of a mutual fund as well as the retailing bank. There were two parts in the questionnaire, first part was drawn from literature to measure funds, and the second part was summarized from several depth interviews based on SERVQUAL with senior investors. 240 valid responses from current fund investors. The factors investor's preference in evaluating a fund may be different in terms of residence areas and age. Perceived importance of fund selection criteria is not significantly different in terms of gender, education, marriage, and income levels. Test results indicated that "investment performance record", "management fees" and "additional features" of fund, and the bank's "sympathy" factors should be the first to be improved. This research helps fund companies and banks in making decision for future marketing strategies.

Keywords: *Offshore mutual fund; Importance-performance analysis (IPA); Bank; SERVQUAL; Risk; Return*

JEL classification: *G17; G21*

Introduction

Taiwan is one of the best markets for offshore mutual funds. There is a large middle-aged population, with high average earnings and a high rate of savings, and a subsequent desire to invest and actively manage their money overseas (Aldcroft, 2015). According to data by Securities Investment Trust & Consulting Association in Taiwan (SITCA), there were more than 1,000 offshore funds with local investments accounting for 3495.9 billion of New Taiwan Dollars (or 116.53 billion USD) at the end of 2017—a growth of 14% from 2016 (SITCA, 2018a). The average share by Taiwanese is 3.35 billion per offshore fund. Among these funds, 373 funds identified Taiwan as their major market (down from 402 in 2016) (SITCA, 2018a). The same data source indicated that 84% of funds were invested by 1,989,934 individuals. More recent data indicated that

as of Dec. 31, 2018, there were 1,035 offshore funds offered by 40 master agents, 69 offshore fund institutions, and domestic investors are holding NTD 3,185,603,433,034, (equivalent to USD \$106,186,781,101) (SITCA, 2018b).

In general, investors of offshore funds are approached by certified agents of varied bank branches around the nation (SITCA, 2018a). There are some 3,400 bank branches that are qualified to be sales channels for offshore funds (Bank Bureau, 2019).

Taiwanese prefer to invest in offshore funds, and they are good customers in the eyes of the world's major fund companies. However, because the number of funds is as large as 1,049 among some two million of investors in Taiwan, the competition among offshore funds is evident. Most of these funds are sold through bank branches around the nation, but competition for sales is even fiercer among these 3,400 bank branches.

Investors choose offshore funds for multiple reasons. Given the personal attitude toward an investment risk, some are aggressive while the others are conservative. The reasons behind investing in offshore funds are also varied from simply wanting to save with better returns to a desire for fast-growing wealth.

The next question regarding our research interest was how or what criteria the investors considered when deciding to invest in certain funds. The literature indicated that risk and return are the major drivers for net inflow of funds (Patel, Zeckhauser, & Hendricks, 1994; Sirri & Tufano, 1998). Based on the consumer decision model, others argued that fund consumers' purchasing decisions stemmed from three distinct, yet related dimensions, they are information sources, selection criteria, and purchase. As a result, there are nine criteria to be included in the decision process: investment performance track record, fund manager reputation, scope (number of funds in family), responsiveness to enquiries, management fees, investment management style, additional features (checking, brokerage), confidentiality, and community service/charity record (Capon, Fitzsimons, & Prince, 1996).

Although current wisdom generally advises us on the weight of each criteria when customers evaluate whether to invest in a certain fund, we still have limited knowledge about how consumers perceive performance corresponding to the factors of each fund (Goetzmann & Peles, 1997). Given that, it is risky for fund companies to adopt business ventures for particular funds without clear guidance. The importance and performance analysis on the customers' choosing factor associate with a fund can be good to accomplish this mission (Pan, 2015).

Beyond those factors associated with the fund itself, the extant literature also advised that higher levels of services have positive impacts as well. As advised by the SITCA (2018a), most funds relied on service outlets of local banks (either through physical or online services).

The levels of service offered by the retail bank branches thus play an important role in the consumers' decision process regarding offshore funds. This study believes that as a major sales channel for offshore funds, banks and their business characteristics, as well as their service quality in this financial services industry, are also critical factors affecting whether investors purchase specific funds. Based on service gap theories and the associated SERVQUAL scale (Parasuraman, Zeithaml, & Berry, 1988; also known as PZB), the same logic of IPA (importance and performance analysis) will be applied to measure the gaps of investors' perceived importance and perceived performance of retail banks' services factors.

Based on previous studies and the PZB's conceptual structure of service quality, the current research simultaneously examines the importance and performance of funds and trading agent banks by IPA, in an effort to highlight possible improvements for the fund and bank.

Literature Review

Martilla and James (1977) first introduced the Importance-Performance Analysis (IPA) technique to the automotive industry to identify the possible improvement prospects. IPA simply takes two dimensions—importance and performance—to prioritize the actions to be considered for effective improvement efforts, as shown in Figure 1. There are four quadrants of an IPA matrix: Q1 "Concentration," Q2 "Keep Up," Q3 "Low

priority,” and Q4 “Overkill,” among which Q1 is the focus of the entire mission, whereas other quadrants signal different strategic decisions (Martilla & James, 1977).

Figure 1: Structure of IPA

Source: Martilla, J. A. & James, J. C. (1977)

IPA has been widely adopted in multiple disciplines and businesses, such as production management (da Silveira, Snider, & Balakrishnan, 2013), selecting hotel (Chu & Choi, 2000), quality management (Tonge & Moore, 2007), competitiveness of a travel destination (Enright & Newton, 2004), restaurant operating strategy (Keyt, Yavas, & Riecken, 1994), building a tourism policy (Evans & Chon, 1989), measuring the service quality levels (Jemmasi, Strong, & Taylor, 1994), consumer satisfaction (Barbara, Jaffe, & Lin, 1994; Deng, 2007; Taplin, 2012; Dewi, Gundavarapu, & Cugati, 2013), brand positioning (Chapman, 1993), market segmentation approach (Cheron, McTavish, & Perrien, 1989), resort facility positioning (Kozak & Nield, 1998), service quality in hospital sector (Jemmasi et al., 1994), evaluating senior human resource (Siegenthaler, 1994), Factors in job satisfaction (Pan, 2015), and evaluating a course program (Martilla & James, 1977). Notable is the current work is the pioneer in adopting this technique in evaluating the performance in retail fund as previous studies had done with other methods, such as Kaushik (2019) and Kambeu (2017).

By referencing the IPA analysis, the current research applies customers' perceptions of service quality attributes (Parasuraman et al., 1988) to measure “importance” and “performance.” This means the fund investors will assess the importance of each criterion of PZB for banks as well as for funds and then provide their satisfaction levels on each corresponding criterion.

How an IPA technique is actually applied may depend on how or where to set the cutting point of judgment for each dimension. In the original framework, Martilla and James (1977) suggested that decision makers may determine the mid-point on their own in response to market diversity. This may result in a communication problem across departments of an organization; thus, some have recommended using the mean scores of each dimension to differentiate the high/low and better/worse areas for importance and performance, respectively (Hollenhors, Olson & Fortney, 1992). By doing this, it is more logical to consider importance and performance as two different factors in the decision maker's mindset. The current research follows this concept.

The current study is concerned with how to maximize fund investors' satisfaction. In this regard, one purpose of this research is to reveal what factors are important and what factors are satisfactory from the fund investors' perspective. For the fund investors, satisfaction comes from something performed well, so it is logical for the current research to use satisfaction as the performance factor in the IPA technique, as other scholars have done. In tourism and hospitality research, Chang and Chen (2011) replaced “performance” with “satisfaction” in their research to identify the satisfaction factors of disabled air passengers as well as other factors addressing customer satisfaction (Deng, 2007; Coghlan, 2012; Taplin, 2012; Ziegler, Dearden, & Rollins, 2012; Chen, 2014).

The past research that adopted the IPA technique to analyze issues of fund selection is extensive, yet most studies have focused on exploring the selection criteria of certain funds (e.g. Kambeu, 2017; Kaushik, 2019). This research is the first, to the best of my knowledge, to apply the IPA technique to identifying the critical attributes of fund investors' perceived importance and performance concurrently in both fund and bank levels in this particular industry.

Research and Methodology

The research subjects of this study are customers who purchased offshore funds from a bank in the past six months. Questionnaires were sent to 500 investors who had purchased any offshore funds in the last six months, and 240 complete and valid responses were obtained.

In the valid responses, 91 were from northern Taiwan (37.92%), 33 from central Taiwan (13.75%), and 103 from southern Taiwan (42.92%). Of the respondents, 110 (45.83%) are women, and 130 (54.17%) are men. Most respondents are aged 51-60 (98, 40.83%), followed by those aged 41-50 (57, 23.75%), 31-40 (46, 19.17%), and 30 or younger (15, 6.25%), as shown in Table 1.

Table 1: Sample distribution (N=240)

Variables	Categories	n	%	Importance			
				Mean	SD	F/t	Scheffe's
Area	North	91	37.92	3.23	0.21	35.096*	1, 2> 3
	Central	33	13.75	3.39	0.28		
	South	103	42.92	3.66	0.47		
Gender	Male	130	54.17	3.49	.39	1.832	-
	Female	110	45.83	3.39	.41		
Age	<30	15	6.25	3.24	0.21	6.327*	5>1,2,3,4
	31-40	46	19.17	3.35	0.30		
	41-50	57	23.75	3.38	0.35		
	51-60	98	40.83	3.47	0.43		
	>61	24	10.00	3.76	0.49		
Education	High school	37	15.42	3.41	0.24	.215	-
	College	154	64.17	3.45	0.43		
	Graduate	45	18.75	3.43	0.42		
Marriage	Single	51	21.25	3.46	0.42	-.347	-
	Married	189	78.75	3.44	0.40		
Income (month)	60-80K	10	4.17	3.49	0.34	.675	-
	81-100K	144	60.00	3.46	0.43		
	>100K	86	35.83	3.40	0.37		

*p<0.05

This study used the SERVQUAL, as recommended by Parasuraman et al. (1988) and which has been widely used in multiple types of business including banking, as criteria to measure the banks' service quality. A structured questionnaire based on the literature review was developed to collect the data. The questionnaire has acceptable reliability, in which the "fund selection" dimension has a Cronbach's alpha of .705; the "tangibility" of PZB dimensions is .756, "reliability" is .787, "reaction" is .789, "assurance" is .701, and "sympathy" is .757.

Findings

The mean scores of two dimensions of each factor are calculated and listed in Table 2 for fund selection and in Table 3 for bank's service quality. "Investment performance track record" is the highest in the "importance" dimension, with a mean score of 4.96. "Fund Manager Reputation" (mean score=4.05) and "Confidentiality" (4.03) follow. However, in the "Performance" dimension, "Fund Manager Reputation" was first with a mean score of 3.99, followed by "Scope" (3.71), and "Confidentiality" (3.62). The overall mean scores for the dimensions of importance and satisfaction are 3.59 and 3.45, respectively. It is evident that the investors are somewhat dissatisfied with what they receive from their investment. It is noteworthy that the investors graded "Investment Performance Track" as the most important, yet it was third from the bottom for perceived performance.

Table 2: Mean scores of important and satisfaction factors in funds

Factors / Dimensions	Importance		Performance (Satisfaction)		Gaps
	Mean	Rank	Mean	Rank	
F1. Investment Performance Track Record	4.96	1	3.30	7	(1.66)
F2. Fund Manager Reputation	4.05	2	3.99	1	(0.06)
F3. Scope (Number of Funds)	2.99	7	3.71	2	0.72
F4. Responsiveness to Enquiries	3.19	6	3.48	4	0.29
F5. Management Fees	4.01	4	3.23	8	(0.78)
F6. Management Style	2.45	8	3.18	9	0.73
F7. Additional (Checking etc.) Brokerage)	3.55	5	3.36	6	(0.19)
F.8 Confidentiality	4.03	3	3.62	3	(0.41)
F.9 Community Service	1.75	9	3.36	5	1.61
Average	3.59		3.45		

As far as the service quality of banks concerned, "Reliability" is the highest in the "importance" dimension, with a mean score of 4.62, and the "Sympathy" (mean score=4.21) dimension is second. In the perceived performance, "Tangibility" comes first with a mean score of 4.23, followed by "Reliability" (4.20). The overall mean scores for importance and satisfaction are 4.13 and 4.09, respectively. Although the average values are higher than those regarding the funds, it is apparent that the investors are somewhat dissatisfied with the bank's services, which may need some further improvements.

Tangibility. This dimension includes equipment, building appearance, officers' appearance, internal facilities, and handling of discounts (Parasuraman et al., 1988).

Reliability. Reliability is the top in the importance sector. This includes service precision, instant service, correct information, fast service, and privacy (Parasuraman et al., 1988).

Table 3: Mean scores of SERVQUAL of important and satisfaction factors in banks

Factors /		Importance		Performance		Gaps
Dimensions		Mean	Rank	Mean	Rank	
Tangibility		3.78	5	4.23	1	0.45
Reliability		4.62	1	4.20	2	(0.42)
Reaction		3.96	4	3.77	5	(0.19)
Assurance		4.06	3	4.17	3	0.11
Sympathy		4.21	2	4.06	4	(0.15)
Average		4.13		4.09		
Attributes of SERVQUAL						
Ta1	Equipment	3.74		4.21		0.48
Ta2	Building appearance	3.38		4.18		0.80
Ta3	Officer's appearance	3.98		4.32		0.35
Ta4	Facilities	3.64		4.21		0.57
Ta5	Handing discount	4.15		4.23		0.08
Re1	Service precision	4.70		4.17		(0.54)
Re2	Instant service	4.40		4.15		(0.25)
Re3	Correct information	4.60		4.24		(0.36)
Re4	Fast service	4.53		4.22		(0.31)
Re5	Privacy	4.86		4.23		(0.63)
Ra1	Willing to assist	3.96		4.16		0.20
Ra2	Efficiency	4.29		4.24		(0.05)
Ra3	Problem solving	4.01		4.21		0.20
Ra4	Fund information	3.51		1.88		(1.64)
Ra5	Respond to inquiry	4.02		4.37		0.35
As1	Courtesy	4.51		4.23		(0.28)
As2	Fully authorized	3.92		4.12		0.20
As3	Delivering promise	4.07		4.18		0.12
As4	Professional knowledge	3.71		4.22		0.51
As5	Qualification	4.12		4.12		0.00
Sy1	Fulfill needs	4.06		4.28		0.22
Sy2	Considerate	4.27		4.27		0.00
Sy3	Active service	4.12		4.25		0.13
Sy4	Warm	4.03		3.81		(0.21)
Sy5	Senior service	4.49		4.30		(0.20)
Sy6	Accessibility	4.27		3.44		(0.83)

The deficit between perceived performance and expectation in bank's reliability is the largest. Given that this factor is the one that most concerned by the investors, the survey results may imply that the respondents are extremely dissatisfied with the reliability of a bank when purchasing a fund.

Reaction. Respondents grade this dimension as the fourth expected and the fifth in what they received. This study uses five items to describe this dimension: willing to assist, efficiency, problem solving, providing fund information, and respond to inquiry (Parasuraman et al., 1988).

Assurance. Five items are used to measure the assurance dimension, which mainly addresses the importance and performance of timely and trustable services. This dimension contains courtesy, fully authorized employees, delivering on promises, professional knowledge, and qualified or certified personnel (Parasuraman et al., 1988).

Sympathy. Sympathy is highly important for those investors or customers who are not familiar with the banking system or the operating system of investing in offshore funds. This dimension contains: fulfill needs, considerate or patient, active service, warm, senior service, and accessibility, especially for those handicapped.

Analyses of the Differences Between Demographic Factors

The mean scores of perceived importance on offshore funds were computed (see Table 2) to reveal whether there are any differences between the various categories of demographic variables. A one-way ANOVA technique and the Scheffe's process reveals the post hoc comparisons of different categories in each variable. The analysis found that respondents from different areas and age groups, may perceive different weights in evaluating the factors associated with fund selection. Respondents from northern and central Taiwan appear to be more concerned on fund selection criteria than those from the southern region. Investors who were over 61 years old are more concerned than those younger generations, as shown in Table 2. Perceived importance of fund selection criteria is not significantly different in terms of gender, education, marriage status, and income levels.

Importance and Performance Analysis of a Fund

Two lines from the mid-points of the X and Y axes were then established vertically and horizontally across the matrix, as shown in Figure 2, for funds selection, and in Figure 3 for bank services.

Table 4: Cross point values for performance and importance

		Performance	X	Importance	Y
Fund choice	F1	3.30	(0.17)	4.96	1.52
	F2	3.99	0.52	4.05	0.61
	F3	3.71	0.24	2.99	(0.45)
	F4	3.48	0.01	3.19	(0.25)
	F5	3.23	(0.24)	4.01	0.57
	F6	3.18	(0.29)	2.45	(0.99)
	F7	3.36	(0.11)	3.55	0.11
	F8	3.62	0.15	4.03	0.59
	F9	3.36	(0.11)	1.75	(1.69)
	Average	3.47		3.44	
Service quality (Banks)	Tangibility	4.23	0.14	3.78	(0.35)
	Reliability	4.20	0.11	4.62	0.49
	Reaction	3.77	(0.32)	3.96	(0.17)
	Assurance	4.17	0.08	4.06	(0.07)
	Sympathy	4.06	(0.03)	4.21	0.08

Average	4.09	4.13
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figures in () represent negative values

The values of X and Y of each cross point were obtained by subtracting the mean value of each dimension (decentralization), as shown in Table 4 for fund choices and Table 5 for bank's service quality. The figures of Table 4 and Table 5 are then plotted into an IPA matrix, as Figure 2 for fund choices, and Figure 3 for bank's service quality.

As a result, "Investment performance track record," "Management fees," and "Additional features (checking, brokerage)" of fund choice, and "Sympathy" of the bank's service are located in Q1. These are the factors to focus on, in which the F1 investment record (as also shown in figure 2) becomes the first priority for the fund company, followed by F5 (management fees) and F7 (additional features such as checking), and in the other hand, sympathy should be put first on the improvement list in bank's service efforts.

"Fund manager reputation" (F2) and "confidentiality" (F8) of fund choice criteria are found in Q2, and in the other hand, the bank's "reliability" of service quality is strong and they should keep up the good work.

In Q3, there are "management style" (F6) and "community service" (F9) for funds, and in the meantime, the bank's "reaction" are low or the second priority for possible improvements. Last in Q4, there are "investment scope" (F3) and "responsiveness to enquiries" (F4) for funds, and in the meantime, bank's "tangibility" and "assurance" for service quality. Factors in Q4 are those maybe over-skilled, and may need to be divested.

According to Martilla and James (1977), Q3 is the quadrant that showing the factors that are performing well and need to be kept; thus, no special care will be needed for factors in Q3.

The distance of importance and satisfaction for each factor is also shown in Figure 2, which provides the magnitude of the gap. This is useful for helping decision makers to easily identify the priority of each factor for possible improvements. In practice, priority should be given to the factors with the largest figures in Q1, for instance, "management fees" (F5) and "investment performance" (F1) in this study.

Figure 2: Importance-Performance analysis of fund choice & bank's service quality
(Refer F1 through F9 in table 2)

Conclusion

The competition in the mutual fund business is strong and the number of investors continues to increase—including those from suburban or rural areas—and more funds continue to join the market. Bank, as one of the major sales outlets of such mutual funds, is facing a growing competition as well. As a result, the competition among mutual funds in the retail banking markets has become extremely fierce. Mutual funds and banks are financial service businesses, of which are professional in providing quality services to the investors. This is particularly true for banks since most of them provide general financial services that much wider in service lines than the mutual fund company. Cooperating with retail banks, mutual fund company may easily access prospective investors, simplify the transaction procedure, exploit the bank's service quality.

Survey results of the current research explore the perceived importance and performance of both mutual funds and banks simultaneously. By doing this, we can understand more on the investor's opinion on a mutual fund in a particular bank. Test results indicated that perceived importance levels of both mutual funds and bank services were not different among some of the demographic factors, such as education, marriage, and gender, which is in contrast to previous studies.

As a result, the importance-performance analysis indicates that the criteria of investment track record of a fund of the fund company, and sympathy of the bank service dimension are the most significant factors to be

improved respectively. This means that the fund's administration should make efforts to be transparent in all details of the previous investment to build the investor's trust. In the bank sector, as a retailer for mutual funds, tangibility and assurance of service quality are over-emphasized dimensions, which means the banks may have mistakenly allocate service efforts in these areas. This research suggests that the current services that bank offer are good enough for mutual fund investors.

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