

## **GENDER DISCREPANCY'S IMPACT ON PERCEIVED RISK AND INVESTMENT DECISION: A REVIEW OF FINANCIAL PRACTITIONERS BEHAVIOR IN HONG KONG, CHINA**

**Ping-fu LAI**

Caritas Institute of Higher Education, Hong Kong  
Peking University - Hong Kong University of Science and Technology  
Shenzhen HK Institution, **China**  
[dr.lai1000@yahoo.com](mailto:dr.lai1000@yahoo.com)

**Kit-yan TAM**

ABRS International Information and Consultancy  
[kityantam@yahoo.com.hk](mailto:kityantam@yahoo.com.hk)

### **Abstract:**

*This empirical study focuses on how professional men and women perceive and respond to investment risk. The results concluded that female advisors are more conservative than their male counterparts. Female practitioners' outweighed the loss of downside risk than the upside potential return. Female placed more confidence in low risk assets but perceive greater risk in high risk investment products than male advisors. Also, the study revealed that that the higher the educational level of the practitioners, the less risk averse they were in their risk profile. The surprising result of this research – as the practitioners earned more income, a decrease in their confidence in risk taking was manifested.*

**Keywords:** behaviour, gender discrepancy, financial practitioners, investment risk, decision making process, marketing.

**JEL Classification:** J11, J 16.

### **1. Introduction**

In many preceding behavior studies of genders, empirical evidence proved that women appear to be more risk averse and have less confidence in risk taking than men. Researchers recently found that gender differences in the styles of information processing, the personality and cultural differences were co-related in affecting the risk preferences of investment. In Hong Kong, over the past ten years, greater gender equality made women take a pro-active part in the financial decision due to their financial independence. Moreover, it is also stated that the number of women taking up managerial jobs has grown 155% since 1993, while men remained more or less constant in the same position. In Journal of Advisors Today (Summer 2010), it is stated that financial planners had quite an even spread of male and female clients base. Married working women also became primary decision maker in controlling the household savings of their families. Therefore, in order to explore this potential market, women clients should be much better informed and more empowered in financial planning.

The question that emerges is whether these factors will affect their risk attitudes. Since financial practitioners are the major players who should be familiar with handling investment risk, they may react and respond differently compared to general investors in making investment decisions. Greg Davies, head of behavioral analytics at Barclays Wealth (Professional Adviser 2010) rose that the risk defined by the investment world did not reflect the "risk" perceived by investors. The result is that financial practitioners offer unsuitable portfolios that do not reflect their clients' true risk-return trade-off.

### **2. Relevant Literature**

In recent decades, there has been a great interest in studying Behavioral Finance. Nevertheless, when thinking about investors' risk preferences and confidence, recent researchers suggested that gender, personality and even cultural factors are correlated (Sevdalis and Havey, 2007). Barber and Odean (1995) made an overview of the literature concerning the subject that women had different investment attitudes towards money than men. Later (Barber and Odean 2001) based on the strong overconfidence that men show versus women, they used it to study so as to explain excessive, detrimental trading behavior. A study of a major brokerage firm found that gender is the third most significant factor in the investment decision (Bajtelsmit and Bemasek, 1996), after the

most powerful determinants of age and income. This is an important empirical and anecdotal research that supports female as more risk averse than men in investing. The research results of Jianakoplos and Barnesek (1998) concluded that single women exhibited comparatively more risk aversion in financial decision making than single men.

Graham *et al.* (2002) raised a few studies that have focused on the underlying factors that made gender differences in investment decisions. Given the much higher status of women who are involved in both professional and personal investing, understanding the different gender manners of processing information is remarkable to investigate. If women employ different information processing models which utilize the information differently, it implies that they have unique needs for and uses of information.

Barber and Odean (1999) found that one of the most important advantage of the female investing styles is they tend to trade less often. Due to women greater risk aversion than men, higher returns may lead to the result in their long-term investment. In order to prove this financial behavior, Barber and Odean (2001) made a psychological research, which demonstrated that men are more overconfident than women. By analyzing the trading records of men and women investors from 1991 to 1997, they documented that the frequent trading habit of men led to a reduced net return.

In the study made by Graham *et al.* (2002), the authors stated that the underlying reason for gender differences in investment strategies may be related to the differing styles of information processing of female and male decision makers. According to the selectivity model, men and women selected different cues from the environment when processing information. Men often did not process all the information since they are highly selective. In contrast, women are hypothesized and process information comprehensively than men in the same circumstances. In investment scenario, the most significant result found by the model is that male investors tend to emphasize the upside expected return instead of risk bearing. Conversely, female investors are more concerns about the downside risk incorporated in their investment since they are more likely to perceive greater levels of risk. In confidence level, male investor is stronger than women in making financial decisions. The reason is the former only focuses on obvious information cues rather than disconfirming or tempering information, while the latter tends to be incompatible with her ultimate investment decision.

To extend the theme of former study of O'Barr and Conley (2000), Olsen and Cox (2001) furthered to explore the gender difference of professional men and women investment managers. The unique results found that professional women placed greater concern on downside risk and potential loss than men counterparts in investment choice. Besides, women practitioners were more sensitive towards uncertainty and ambiguity related to financial assets. The findings concluded that women professional weighed greater on security and protective vehicles rather than gaining in returns when making investment decisions. These outcomes rose the question of risk perceptions might cause remarkable problems of communication and management towards investment risks, particularly between clients and practitioners.

A more recent research of Beckmann and Menkhoff (2008) suspected that whether the change of focus from layman to professional fund managers have impact from gender difference. Therefore, they conducted a survey among both genders of fund managers and analyzed the differences between them. They discovered female practitioners are more appropriate to serve female clients due to sharing similar pattern of investment behavior. Personal characteristics play the important role in determining investors' confidence in investment decision. In the study of Estes and Hosseini (2001), the results found that the most significant variable for describing investors' confidence is sex. Being other independent variables remained constant women investors are less confidence in their investment decisions than men. On the contrary, confidence level was not significant determined by the factors of age, academic education level, general working experience and investment experience.

Felton *et al.* (2003) investigated the personality divergence of both genders in determining the investment choice. The experiment results suggested that males made more risky investment than females and the difference primarily came from the riskier choices of optimistic males. The most important findings came from the optimistic men who are primarily responsible for the greater preference for risk.

A recent research of Alex Wang (2009) demonstrated the correlation between investors' risk taking level and financial knowledge. The research has suggested financial knowledge can be divided into two aspects – objective knowledge and subjective knowledge. Subjective knowledge defined as an individual's degree of confidence from their knowledge accumulated, whereas objective knowledge referred to an individual already known (Brucks 1985). Therefore, accuracy determined by objective knowledge while confidence may be influenced by investors' subjective knowledge from education (Alba and Hutchinson, 2000). This belief has been proven by the preceding research (Schooley and Worden, 1999) that investors with higher education level hold

more equity shares in their investment portfolio, which implied they are willing to take more risk. The results found that subjective knowledge might be the key to investors' risk taking, which encouraged investors' confidence in making their investments. The outcome can be concluded as investors with higher level of subjective knowledge earned by education may be willing to take more risk due to their higher confidence level.

Based on President Clinton's proposal to invest Social Security Fund in the equities market of US in 1999, O'Barr W. and Conley J. (2000) attempted to examine the cultural differences interfered with fiduciary decision-making. The result revealed that public pension fund managers were more conservative than their private-sector counterparts.

### 3. Model Specification

Questionnaire survey of primary research was designed to gather the primary quantitative and demographic data from respondents. It separated into four parts. Part A: Risk profile analysis - to assess the investment risk taking level by scoring. Part B: Investment Risk Attributes Rating and Perceived Risk by Investment Asset Types. i) first part is to measure the importance on various investment risk attributes by Likert type scale from 1 (Very unimportant) to 5 (Very important); ii) second part is to evaluate the perceived risk on difference asset types by 5 point Likert type scale from 1 (No risk) to 5 (Very high risk). Part C: Scenario studies - to test asset allocation from conservative to aggressive portfolio by recommendation on three synthetic client scenarios. Part D: Demographic Data. To achieve the normal distribution of sample mean, in regardless of normality from the population parameter (Jaccard and Becker 2002). Therefore, the sample size was determined as 32 female practitioners and 32 male practitioners in this research. The respondents were selected as the practitioners who have securities advisory license granted by Securities and Futures Commission in Hong Kong. Further, a stratified random sample was applied to obtain separated sets of information from both genders. Hence, the researcher randomly selected 32 female and 32 male practitioners so that uneven distribution in the research can be avoided.

#### Questionnaire

Part A, the hypothesis to be tested is that the mean total score of female ( $\mu_1$ ) is greater than the mean total score of male practitioners ( $\mu_2$ ). Thus, the formula of alternative hypothesis ( $H_1$ ) is:  $H_1: (\mu_1 - \mu_2) > 0$ . As usual, the null hypothesis ( $H_0$ ) is set automatically as below:  $H_0: (\mu_1 - \mu_2) \leq 0$ .  $H_0$  = female are risk averse than male financial practitioners and  $H_1$  = female are not risk averse than male financial practitioners. The hypothesis testing of F-test is set as  $H_0: \sigma_1^2 / \sigma_2^2 = 1$  and  $H_1: \sigma_1^2 / \sigma_2^2 \neq 1$  where  $\sigma_1^2$  is the population variances of female and  $\sigma_2^2$  is the population variances of male. This is a two-tail test so that the reject region set as:  $FF_{\alpha/2, v_1, v_2}$  or  $FF_{\alpha/2, v_1, v_2}$ .

Regarding Part B, the attributes were determined and modified with reference from a preceding study of investment professionals (Olsen 1997). Second part of Part B aims to analysis the impact of gender on the perceptions of financial risk for different investment types. Significant difference of 5% or greater would be highlighted in the table presented.

Part C: Scenario studies, Respondents are requested to study three synthetic scenarios in this part and then ask to recommend the most appropriate investment portfolio to their clients. In general practice, three portfolios could be suggested as follows: *Conservative Portfolio* – assets allocation is 20% invested in equities, 20% invested in bonds and 60% invested in money markets; *Balanced Portfolio* – assets allocation is 50% invested in equities, 30% invested in bonds and 20% invested in money markets; *Aggressive Portfolio* – assets allocation is 70% invested in equities, 20% invested in bonds and 10% invested in money markets. Hypothesis testing is used to test the difference of sample mean between both genders.

Part D: Demographic Data, Other than the gender effect, personality and cultural factors are also valuable to investigate on how they influence the risk attitude of the population.

Multiple regression model is used to explain the correlation between dependent variable and independent variables. The equation and variables are defined as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6$$

where (Y) – total score indicates risk taking level; age

( $X_1$ ) – in number of years; investment experience

( $X_2$ ) – in number of years; working experience in financial sector

( $X_3$ ) – in number of years; educational level

- ( $X_4$ ) – years of school attended (Primary = 6 years; Secondary = 11 years, Tertiary/University = 16; Master = 18); monthly income
- ( $X_5$ ) – count as middle figure of each categories (\$5k-\$9.9k = 7.5; \$10k-\$19.9k = 15; \$20-\$29.9k = 25; \$30-\$39.9k = 35, \$40k-\$49.9k = 45; \$50k-\$59.9k = 55; \$60K or above = 65); company employed
- ( $X_6$ ) – use dummy variable (Bank = 0; Insurance company/Broker firm = 1); and  $\alpha$ (Alpha) is the intercept of the equation, while  $\beta$ (Beta) refers the slope (coefficient) for each independent variables
- (X). The total score in Part A – Risk Profile and Part C – Scenario studies represent the risk tolerance level and risk preferences of the respondents, i.e. the higher in total score, the more willing to take risk and are more confident in investing; the lower in total score, the more risk averse and are less confident in investing.

#### 4. Findings and Analysis

##### Part A – Investment Profile

Table 1. F-test: two-sample for variances

	Female	Male
Mean	29.56	30.50
Variance	38.32	27.35
Observations	32.00	32.00
Degree of Freedom	31.00	31.00
F	1.40	
P(F<=f) (one-tail)	0.18	
F Critical one-tail	1.82	
Significant level at 5%		

The value of Test statistic is  $F = 1.4$  with rejection region:  $FF_{.025,30,30} = 2.07$  or  $F1/F_{.025,30,30} = .48$ . Since  $F = 1.4$  do not fall into the reject region, i.e. it is not greater than 2.07 or smaller than .48, we do not reject the null hypothesis. There is not enough evidence to infer that the population variances of female and male are differ. Then, the t-test of equal-variances can be applied to test the difference of the population means of male and female.

Table 2. T-test: two-sample assuming equal variances

	Female	Male
Mean	29.56	30.50
Variance	38.32	27.35
Observations	32.00	32.00
Pooled (Pool Variances)	32.84	
Hypothesized Mean Difference	0.00	
Degree of Freedom	62.00	
t stat	-0.65	
P(T<=t) one-tail	0.26	
t Critical one-tail	1.67	
P(T<=t) two-tail	0.52	
t Critical two-tail	2.00	

Significant level is 5%

In Table 2, the value of the test statistics is -0.65 and the one-tail p-value is 0.26. This t-test is one-tail test the output of 1.67 is the critical value in standardized test statistic. Because of the test statistics value is -0.65, which is less than 1.67 that not fall into the reject region, the null hypothesis is not to be rejected due to insufficient evidence to infer the alternative hypothesis is true. As the output of p-value is 0.26, it is not statistically significant to infer the alternative hypothesis is true (generally the p-value exceeds 0.1 say not significant). Again, there is no evidence to infer that the alternative hypothesis is true and then do not reject the null hypothesis. The conclusion is female are risk averse than male financial practitioners.

*Part B – Risk Attributes and Perceived Risk Ratings*

**Table 3. Risk attributes mean rating**

Attributes	Female	Male
Chance of incurring large loss	4.6 <sup>†</sup>	4.4
Chance of earning less than expectation	2.7 <sup>†</sup>	3.8
Asset liquidity	4.0 <sup>†</sup>	3.8
Overall variability in return over time	3.5 <sup>†</sup>	3.6
Chance of realizing a large gain	3.8	3.8

In general, all of the mean ratings of risk attributes are medium important or above except 'earning less than expectation' from female response. Both genders are very concern about the chance of large loss incurring in investment. This result continuously confirms by the rating of asset liquidity, which refers to the ability to realize the asset quickly without large loss. Both of the risk attributes are related to the probability in investment loss. Due to professionalism of the respondents, both genders weight less important in variability of return that they are not fear in longer term investment. In comparing the responses of both genders, female place more emphasis on large loss and asset liquidity than men. However, what is unique in the result is that female is less concern about earning less, which male tends to be more important if the return would be less than expectation. Hence, it is obvious to infer that female are less concern in earning unexpected upside return, instead, they fear about the loss of downside risk in investment.

**Table 4. Perceived risk by investment type mean ratings**

Attributes	Female	Male
Deposit Account	1.4 <sup>†</sup>	1.6
Government Bond like i-bond	1.5 <sup>†</sup>	1.6
Money Market/Foreign Currency	2.4 <sup>†</sup>	2.7
Real Estate	3.6 <sup>†</sup>	3.4
IPO's of New Firms	4.0 <sup>†</sup>	3.7
Alternatives Investment like Paintings	4.5 <sup>†</sup>	4.1 <sup>†</sup>

<sup>†</sup>5% or above significant difference between female and male

In general, the mean risk ratings of both genders are almost identical on all of the assets classes. It reflects that they are well informed by receiving formal training which makes them have equality on the risk level of difference investment types. Significant differences are found in the lower risk assets and special types of investment between male and female. It seems that female has peace of mind and confidence on low risk assets class. However, the opposite result shows that female thinks sophisticated investments are more risky than men. It implies that female may be over-confidence on low risk assets but perceive greater risk on high risk complex investments than men.

Part C – Scenario studies

Table 5. F-test: two-sample for Variances

	Female	Male
Mean	14.25	13.25
Variance	11.94	11.81
Observations	32.00	32.00
Degree of Freedom	31.00	31.00
F	1.011	
P(F<=f) (one-tail)	0.49	
F Critical one-tail	1.82	
Significant level at 5%		

The value of test statistic is  $F = 1.011$  with rejection region:  $F \geq F_{.025, 30, 30} = 2.07$  or  $F \leq 1/F_{.025, 30, 30} = .483$ . Since  $F = 1.011$  not fall into the reject region, i.e. it is not smaller than .483 or greater than 2.07, we do not reject the null hypothesis. There is not enough evidence to infer that the population variances of female and male are differ. Then, the t-test of equal-variances can be applied as below:

Table 6. T-test: two-sample Assuming Equal Variances

	Female	Male
Mean	14.25	13.25
Variance	11.94	11.81
Observations	32.00	32.00
Pooled (Pool Variances)	11.87	
Hypothesized Mean Difference	0.00	
Degree of Freedom	62.00	
t stat	1.16	
P(T<=t) one-tail	0.13	
t Critical one-tail	1.67	
P(T<=t) two-tail	0.25	
t Critical two-tail	2.00	
Significant level at 5%		

After conducting the F-test, below hypotheses have been set in t-test  $H_0 =$  female are conservative than male practitioners on financial advisory and  $H_1 =$  female are not conservative than male practitioners on financial advisory. In formulae, they present as:  $H_0: (\mu_1 - \mu_2) \leq 0$  and  $H_1: (\mu_1 - \mu_2) > 0$  where  $\mu_1$  is the mean total score of female practitioners on financial advisory and  $\mu_2$  is the mean total score of male practitioners on financial advisory.

In Table 6, the value of the test statistics is 1.16 and the one-tail p-value is 0.13. Since this t-test is one-tail test, the output of 1.67 is the critical value in standardized test statistic. Because the test statistics value is 1.16, which is less than 1.67, the null hypothesis is not to be rejected due to the value not falling in the reject region. The p-value of 0.13 also confirms that it is not statistically significant to infer the alternative hypothesis is true. Therefore, there is no evidence to infer that the alternative hypothesis is true and then do not reject the null hypothesis. The result is female are conservative than male practitioners on financial advisory.

*Part D – Multiple Regression Model*

Respondents are requested to provide their personal data so as to investigate the personality and cultural factors influencing on their risk preferences. Therefore, the variable of 'gender' would be excluded in the multiple regression model.

The equation of multiple regression line is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6$$

where (Y) is the mean total score in Part A

$X_1$  = age;

$X_2$  = investment experience;

$X_3$  = working experience in financial sector;

$X_4$  = educational level;

$X_5$  = monthly income;

$X_6$  = company employed;  $\alpha$  (Alpha) is the intercept of the equation, while  $\beta$  (Beta) refers the slope (coefficient) for each independent variables (X).

**Table 7. Summary output of multiple regression**

Regression Statistics					
Multiple R					0.73
R Square					0.53
Adjusted R Square					0.48
Standard Error					4.10
Observations					64
ANOVA					
	df	SS	MS	F	Significance F
Regression	6	1090.44	181.74	10.80	5.42E-08
Residual	57	959.49	16.83		
Total	63	2049.94			
	Coefficients	Standard Error	t Stat	P-value	
Intercept	28.42	5.4	5.21	2.69E-06	
Age( $X_1$ )	-0.08	0.11	-0.72	0.48	
Investment Experience ( $X_2$ )	-0.12	0.12	-1.01	0.32	
Working Experience in financial sector ( $X_3$ )	0.17	0.14	1.2	0.24	
Educational Level ( $X_4$ )	0.49	0.24	2.09	0.041	
Monthly Income ( $X_5$ )	-0.20	0.06	-3.2	0.002	
Company Employed( $X_6$ )	4.2	1.22	3.44	0.001	
Significant level at 5%					

According to the output summary in Table 7, the regression model is estimated by  $Y = 28.42 + (-0.08) X_1 + (-0.12) X_2 + (0.17) X_3 + (0.49) X_4 + (-0.2) X_5 + (4.2) X_6$ . Before the interpretation of output, assessing the fitness of model is essential. The standard error of estimate 4.1 is relatively small compare to the sample mean 30.5 and 29.56 in Table 2. In this model, the  $R^2$  is .53 which means that 53% of the variation in practitioners' risk preferences is explained by the variation in the demographic characteristics of personality and cultural factors. Finally, the F-value is 10.8 and the latter is close to zero (0). Thus, due to the required conditions are satisfied, there is enough evidence to infer that the model is valid.

From the output summary, the regression line can be interpreted as: Practitioner risk taking level = 28.42 + (-0.08) *age* + (-0.12) *investment experience* + (0.17) *working experience* + (0.49) *educational level* + (-0.2) *income earned* + (4.2) *company employed*. The coefficients ( $\beta$ ) of each independent variable (X) describe the relationship between the risk taking level and the demographic characteristics of practitioners. The inferential methods to draw conclusion about the population are shown the value of intercept ( $\alpha=28.42$ ) is meaningless and irrelevant in this model. The output of regression model reveals that three independent variables (*age*, *investment experience* and *working experience* in financial sector) are significantly non-related to the risk preferences of practitioners. Due to their p-value are large (0.48, 0.32 and 0.24 respectively), there is no evidence to conclude that these three independent variables have linear relationship with risk taking level of practitioners.

For educational level, there is evidence to infer that education level have linear relationship with risk tolerance level of practitioners due to the value of test statistic (2.09) and p-value (0.041). The coefficient of 0.49 specifies that for one more additional year of practitioners educated, 0.49% extra risk they are willing to take, holding all other variables constant. Hence, the higher educational level the practitioners achieved, the less risk averse in their risk profile. For Monthly income, because of the t-stat value -3.2 and p-value 0.002, it is overwhelming evidence to infer that income earned and risk tolerance level is linearly related. The coefficient ( $\beta$ ) of -0.2 describes that for each additional unit of income earned, the risk taking level of practitioners decrease by -0.2%, keeping other independent variables constant. Surprisingly, this adverse relationship indicates the extraordinary result that the higher income earned by the practitioners, the more conservative in their risk profile.

For Company employed, since the value of company employed is nominal data, dummy variable is used and encoded as 0 equal to the practitioners employed by bank and 1 equal to the practitioners worked in insurance company or broker firm (Bank = 0, Insurance company/Broker firm = 1). Again, as indicated by the t-stat value and p-value (3.44 and 0.001 respectively), it is overwhelming evidence to conclude that the variable of which company employed and risk preferences of the practitioners have linear relationship. Since the dummy variable of 1 representing the practitioners employed by insurance company or broker firm, with holding other variables constant, the coefficient of 4.2 suggests that the practitioners work in insurance company/broker firm are willing to take extra (4.2%) risk compare to bank financial practitioners. In sum, the personality factors of age, investment experience and working experience in financial sector have no linear relationship with practitioners' risk attitude. Nonetheless, practitioners' with higher educational level are less risk averse in investment. Advisors employed by bank are willing to take more risk compare to their counterparts work in insurance company or broker firm. Unexpectedly, the unique result found that practitioners earning more bring them have more conservative in investment decisions.

## Conclusion

This conclusion is consistent with the hypothesis of "gender dominates expertise", which was proven by the recent research of Beckmann and Menkhoff 2008. The characteristics of well trained, knowledgeable and experienced in finance cannot overrule the gender effect on practitioners' behavior towards risk. This behavior can be explained by the assertion of 'Selectivity Model' (Graham *et al.* 2002) that females are more likely to attend the full complexity of cues in a decision situation. For further investigation on both genders' risk preferences, the findings in sensitivity on risk attributes and perceptions on various types of investment assets provide insights on explaining their behavior towards risk. What unique finding of gender difference on risk attributes is that women placed greater emphasis on downside risk, rather than earning less potential return than do men. Again, the selectivity model also suggested men focus on the most salient cue in investment, i.e. the expected return which male practitioners weighted heavier than females in this research. In contrast, female aware downside loss of investment since they perceive greater level of risk than males, who are less likely to process the disconfirming information, cues.

From the result of perceptions on investment risk for difference asset types, women have higher confidence on low risk investments like deposit account, government bond and money market fund. According to the previous literature of selectivity model, female practitioners perceive higher risk on these assets than male should be the outcome. The model suggested the underlying reason of this result may be related to the differ styles of information processing in each gender; males tend to employ simplifying devices rather than processing information in details; conversely, females are hypothetic to go through the whole information comprehensively. When female practitioners make investment decision on high-involved assets, they have to place extra effort in searching relevant information. Hence, the process may lead them to experience more uncertainty and perceive high risk on such products gradually.



Besides gender effect, personal characteristics and cultural factors are also valuable. As stated by a study of Bajtelsmit and Bernasek 1996, before the third determinant of gender, age and income play the more important role in investment decisions. Unexpectedly, in this empirical study, the regression model inferred that age, as well as investment experience and working experience in financial sector, have no linear correlation with risk attitudes of practitioners. The most likely explanation would be the statistically problem of collinearity that the model encountered. In order to confirm this belief, the correlation between the three independent variables should be needed to find out and computed in Table 8.

**Table 8.** Correlations of age, investment experience and working experience in financial sector

	Age	Investment Experience	Working Experience
Age	1		
Investment Experience	0.73	1	
Working Experience	0.82	0.77	1

The coefficients of correlation between three variables are great as 0.73, 0.77, and 0.82. These figures reflect the high correlation between the practitioners' age and years of investment experience, investment experience and working experience in financial sectors, then working experience and age of practitioners correspondingly. Firstly, consistent with previous literature (Alex Wang 2009), education obtained from college could enhance advisors' subjective financial knowledge. Therefore, confident in risk taking would be encouraged in investment decisions. Evidence can be found in this empirical study that the higher level of education the practitioners acquired, the more confidence in their risk profile as the result. Thus, self-assessed knowledge gained by education might be the key to advisors' risk tolerance.

Surprisingly, the final factor of how much the practitioners' earn drive them to have negative attitudes towards financial risk. More or less, income effect should influence one's attitudes in risk taking. It seems paradoxical that practitioners have higher income will lead them decrease on their confident level in risk taking. The most likely explanation may come the implication on the study of Felton *et al.* 2003, which brings out that investors are optimistic to make risky choice. If this inference links with current economic environment, it is easy to understand that this paradox would be relevant to Hong Kong financial practitioners. Finally, based on this regression model, cultural factor is the most significant determinant in the analysis. The study of O'Barr and Conley (2000) suggested that experts worked in private-sectors were more aggressive than the fund managers employed by public pension. In order to outperform the market, the former implemented active strategy in investment, whereas the latter invested passively to enjoy free rider in the market. Similar findings can be found in this empirical study as practitioners employed by bank are more risk averse than the counterparts who are working in insurance companies or broker firms.

Nowadays, financial practitioners in bank become more prudent than financial consultants working in other financial institutions. After the Lehman mini-bonds saga, investment corner was established in every branch of bank. If investors want to purchase investments products, financial advisors have to assess client's risk profile compulsorily before execute any transaction. The entire progress should be recorded to fulfill the requirement of SFC for compliance purpose. Therefore, it is understandable that financial advice from practitioners would be conservative in order to avoid misconduct in selling. From time to time, their risk preference should be affected and changed under the banking environment.

No amazing result can be found in this empirical study. Female financial practitioners are more risk averse in making investment decision than male counterparts based on research response. The analysis proved that gender emerged as a significant factor which differentiates advisors' attitudes and behavior towards risk. In other words, gender effect dominates professional issues - men advisors are more confident in investing than women. In-depth findings were explored as female practitioners outweigh downside risk than upside potential return of investment. Besides, they have more confidence in investing low risk assets but perceive higher risk in complex investment types than male advisors.

Investment behavior should be a complex construct which can be affected by other factors of advisors' personal characteristics and cultural determinants. Other than gender effect, the most important factor for

describing practitioners' risk attitudes is cultural issue. Financial advisors working in banking environment are more conservative compare to their counterparts employed by insurance companies or broker firms. For personal characteristics, subjective knowledge gained by education encourages practitioners to have more confidence in investment decisions. But surprisingly advisors with higher income adversely make them have negative attitudes in investment. Finally, age, investment experience and working experience in financial sectors have no direct relation with advisors' risk preference due to significant correlation between these variables.

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