GOLD INVESTMENT INTENTION AMONG URBAN PUBLIC SECTOR EMPLOYEES IN MALAYSIA

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Abstract

Asset accumulation has focused intensely on investment as a tool for elevating income. Gold investment has gained the attention among individuals due to the introduction of new forms of gold investment products. This study applied the Theory of Planned Behaviour to include the construct of gold investment literacy. The potential factors such as attitude, subjective norms, perceived behavioural control and literacy regarding gold investment are determined their significance of influence on gold investment intention. A total of 254 respondents among urban public sector employees in Peninsular Malaysia sampled via a multistage random sampling responded to self-administered questionnaires. Statistical analyses demonstrated moderate levels for gold investment literacy, subjective norms, perceived behavioural control, attitude and investment intention. Multiple regression analysis revealed that gold investment attitude, subjective norms and perceived behavioural control significantly predicted employees' intention to invest in gold with moderate explained variance (R^2 = 0.564) by the predictors. Gold investment literacy however, was not significant in influencing gold investment intention. These findings are useful information that may be incorporated into employees' development program aimed to improve personal financial behaviour of employees.

Keywords: Gold investment literacy, subjective norms, perceived behavioural control, gold investment intention

INTRODUCTION

Asset accumulation has focused intensely on investment as a tool for elevating individual or household income. Investment product such as gold investment has gained the attention among individuals due to the introduction of new forms of gold investment products. Nevertheless, fraud regarding gold investment such as not fulfilling the buy-back promise by the seller was reported (Bank Negara, 2012). Others involving fake gold certificate, fake gold and virtual E-gold. Virtual E-gold offered is more to resembling money laundering. These will hinder the intention of individuals to invest on gold investment products.

The global economic downturn in 1997 caused a large reduction in share prices that affect stock-holders' investment return (World Gold Council, 2014). Precious metals such as gold during that time experience stable prices, thus gold investment has been the focus among individuals searching for higher return with lower risk investment for their long-term planning especially those seeking suitable investments for their retirement needs. Their investment-mix may include

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gold which are available in several different forms. It is perceived by them as a safe investment as evidenced by Baur and Lucey (2010). In addition, research has found that gold has maintained its value over the long-term for decades, unlike paper currency, coins or other assets (Hundal, Grover, & Bhatia, 2013).

Though individuals were exposed to the promotion of products by financial institutions, they lack understanding of the investment concept. Having a grasp on the investment concept is vital for them to be a good decision maker in investing. As gold investment is perceived to be safe even in the long run, investing in gold may result in better mental wellbeing due to the low expected risk. Various forms of gold investments are available nowadays that consists of investing in the form of gold dinar, gold bar, gold jewellery or opening gold account (Saat, 2011). Private sectors actively encouraged individual to participate in investments by offering various types of investments. Individuals then faced numerous choices of investment products. Their decision to invest in certain products offered required them to be equipped with relevant knowledge in order for the choice to result in good financial wellbeing. In contrast, investing with lack of necessary knowledge would most probably make them incur losses in their investment activity.

Due to the issues regarding gold investment as mentioned above such as fraud and vigorous promotions however with lack of information on gold investing, individuals can be easily influenced to invest on gold. Hence, it is critical to assess the levels of gold investment literacy and gold investment intention of individuals. Furthermore, the factors influencing their intention to invest on gold are also determined. In addition, it applied the Theory of Planned Behaviour to include the construct of gold investment literacy. The potential factors as mentioned in the theory such as attitude, subjective norms, perceived behavioural control and literacy regarding gold investment are determined their significance of influence on gold investment intention. Selected socioeconomic characteristics such as education and gender are included as control variables in the regression model.

LITERATURE REVIEW

The Theory of Planned Behaviour is applied to the gold investment context in this study. Ajzen (1991) modified the Theory of Reasoned Action developed by Fishbein and Ajzen (1975) to create the Theory of Planned Behaviour. The difference between the theories is in the inclusion of perceived behavioural control in addition to attitude towards the behaviour and subjective norms. The three variables contribute to the formation of behavioural intentions and actual behaviour. The factor of perceived behavioural control addresses the issue of personal control of the potential investor. Past studies suggest that the more favourable the attitude toward the behaviour and subjective norms, and the greater the perceived behavioural control, the stronger will be the behavioural intention (Hrubes, Ajzen, & Daigle, 2001). In the context of this study, the more favourable the attitude, subjective norms and perceived behavioural control regarding gold investment then the stronger will be the gold investment intention. Results from experimental design with this theory provided prove of its predicting power regarding behavioural intention (Chatzisarantis, Hagger, & Smith, 2007).

Attitude towards gold investment behaviour includes an overall positive or negative evaluation of the behaviour. Ajzen (2008) defined attitude as the extent to which a person has a favourable or unfavourable evaluation or appraisal of a specific behaviour. Results from previous studies indicated that many different factors influence attitudes. For credit card debt attitude, factors influencing it were financial knowledge, debt tolerance and money specific attitudes (Hancock, Jorgensen, & Swanson, 2012; Slowik, 2012). Chudry, Foxall, and Pallister (2011) suggested that attitudes had a positive effect on borrowing intention. Other past studies further claimed a significant effect of attitude on behavioural intention (Michael, 2011; Ramayah & Suki, 2006; Shih & Fang, 2004; Teo & Pok, 2003). Intention to use internet stock trading was found to be significantly affected by attitude (Gopi & Ramayah, 2007). Alleyne and Broome (2011) concluded that attitude was significantly predicting investment intention. While Schmidt (2010) and Kuah (2008) found similar outcome showing positively significant influence of attitude on mutual funds purchase intention. In line with this, Hanudin (2013) using multiple regression analysis confirmed significant influence of attitude on the intention to use Islamic credit card. Hence, similar influence is expected for gold investment attitude on gold investment intention. In contrast, ordered probit model analysis revealed that attitude has no significant effect on the intention to use Islamic credit card (Hanudin, 2013). However, to this date there’s no empirical study on the effect of gold investment attitude on gold investment intention.

Furthermore, the subjective norms is the perceptions of whether others or a peer referent group approve or disapprove of the gold investment behaviour. According to Ajzen (2008), subjective norms refers to the perceived social pressure that leads individual either to perform or not to perform the behaviour. The intention to invest in gold may be due to the familiarity around them regarding gold investing. Referring to a study on credit card debt, subjective norms as an aggregate variable was found to have a positive and significant relationship with reported credit card debt (Kennedy & Wated, 2011). In contrast, a study by Chudry et al. (2011) suggested that subjective norms had a negative effect on borrowing intention. Empirical studies showed significant relationships between subjective norms and intention (Farn et al., 2006; Venkatesh & Davis, 2000) with other studies proving insignificant links between the two (Lewis, Agarwal, & Sambamurthy, 2003). Intention to use internet stock trading was found to be significantly affected by subjective norms (Gopi & Ramayah, 2007) while Hanudin (2013) using multiple regression analysis revealed significant influence of subjective norms on the intention to use Islamic credit card. Using Partial Least Square, Hanudin (2013) revealed that subjective norms was the second influential predictor after attitude. Nevertheless, inconsistent results regarding the predicting power of subjective norms on intention could still give a clue of a considerable link between them. Supported by empirical evidence, Armitage and Conner (2001) concluded subjective norms as the weakest predictor of intention. Rationally, it would result in a prediction that if an investor perceives supporting subjective norms, they may intent to invest more than individuals who do not feel similar investing pressure. Specifically regarding investment, Schmidt (2010) and Kuah (2008) found a positively significant influence of subjective norms on mutual funds purchase intention. In conjunction with that, Alleyne and Broome (2011) found that subjective norms was significantly predicting investment intention.

Perceived behavioural control refers to the perceived ease or difficulty of performing specific behaviour (Ajzen, 2008). It focuses on a specific situation that a person is trying to control. Past study on college student loan behaviour revealed that perceived behavioural control was found as a successful predictor of intention to borrow money (Chudry et al., 2011). It has also been found to be a negative and significant predictor of reported credit card debt (Kennedy & Wated, 2011). Many empirical studies show that perceived behavioural control could explain considerable variance in intention and prove a positive link between perceived behavioural control and intention (Fu, Farn, & Chao, 2006; Shih & Fang, 2004). High levels of perceived behavioural control are associated with strong relationships between intention and behaviour. Hanudin (2013) using multiple regression analysis found significant influence of perceived behavioural control on the intention to use Islamic credit card among local residents. In the investment context, Alleyne and Broome (2011) could conclude that perceived behavioural control was significantly predicting investment intention. In line with this, Schmidt (2010) and Kuah (2008) found similar outcome showing positively significant influence of perceived behavioural control on mutual funds purchase intention.

Gold investment literacy does not exist in the Theory of Planned Behaviour (TPB) however Ajzen (2008) states that additional predictors can be included if the predictors met additional criteria such as it should be behaviour-specific, independent of the TPB's existing predictors, and it should be conceivable that such predictors could be causal factors in the measured behavioural intention or actual behaviour. Financial literacy meets all Ajzen's (2008) criteria to be added as a predictor (Kennedy, 2013). Past studies on the effect of gold investment literacy on gold investment was not found however results from past studies (Chudry et al., 2011; Grable, Joo-Yung, & So-Hyun, 2009; Hayes, 2012; Jorgensen & Savla, 2010) supported the lack of financial knowledge to be a contributing factor to greater amounts of credit card debt or poorer financial attitudes and behaviour. Despite these findings, another study found no relationship between financial knowledge and amount of credit card debt (Mandell, 2008). There was a study on investment knowledge which found that individuals having high financial knowledge tend to involve more in investment suggested by investment experts (Hogarth & Hilgert, 2003). Those having high financial knowledge in investment were those that obtained high marks for investment management index. Hence, they concluded that investment knowledge had a significant impact on the quality of investment decision. Despite of that, none was found yet on the effect of investment knowledge on the intention to invest, moreover specifically for gold investment.

Schooley and Worden (1999), Bertaut and Starr-McCluer (2002) and studies in other countries also reported that education increased the probability of stock ownership. Guiso, Haliassos, and Jappelli (2001) used the Italy Bank of Italy Survey of Household Income and Wealth 1989 and determined that education positively affected the risky asset ratio of Italian investors. Dutch households exhibited a corresponding influence of education on risky asset ratio. Hochguertel (2003) who determined the influence of education on ratio of safe assets to financial assets found a negative effect of education on the ratio of safe assets to financial assets. This implied that the effect of education on the risky assets ratio among Dutch households was also positive, meaning that highly educated households were more likely to invest in risky assets. Consistent results were found in studies conducted in other countries (Christiansen, Joensen, & Rangvid, 2006; Cardak & Wilkins, 2008). A study specifically on investors' behaviour in the stock market suggested that investment behaviours' were usually influenced by internal factors such as education, experience, gender, culture and the impact of psychological factors (Hung, Lai, & Chou, 2010). Education level along with awareness about current financial system and age had significant impact on deciding the investment avenues by salaried peoples (Palanivelu & Chandrakumar, 2013). Searching for the influence of education on either intention to invest on gold or the actual gold investing was in avail.

Past research into food and health concerns (Herrmann, Warland, & Sterngold, 2000; Miles, Brennan, Kuznesof, Ness, Ritson, & Frewer, 2004); Worsley & Scott, 2000) suggested that other than education, factors such as women, older people and lower socio economic individuals would more likely have higher intention to purchase low fat, sugar and salt (LFSS) food products. Hence, in the food and health context, gender and low income apart from age played important roles on the intention to purchase LFSS food products. However, in another context specifically for retirement planning intention, high wage earners were found to be more likely to have a plan for retirement (Ng, Tay, Tan, & Lim, 2011) and Joo and Grable (2005) gave the same finding that higher income group tends to have a saving plan for retirement needs. Specifically regarding the influence of socioeconomic characteristics on gold investment intention, none was found from past studies.

METHODOLOGY

Cross-sectional design using survey method was employed to assess information on gold investing intention and other information from the respondents. Multi-stage random sampling was used to sample respondents among public sector employees in urban areas in Peninsular Malaysia. Due to higher cost of living in the urban area, their motivation to participate would most probably be higher. The population of public sector employees was chosen as they have regular income and secured job who most probably are not keen to invest. Four states were randomly selected in the first stage from the states in Peninsular Malaysia. At the second stage of random sampling, public sector departments situated in urban areas based on a list of the departments from the public-sector websites were selected. Questionnaires were distributed through liaison officers appointed at each location who make random sampling of the employees based on lists of name. A total of 254 respondents responded to the self-administered questionnaires.

Measurements for the main variables specifically gold investment attitude (see Hayhoe, Leach, & Turner, 1999), subjective norms, perceived behavioural control and intention are adapted from past studies (see Kennedy & Wated, 2011). To date, there is no measurement specifically for gold investment variables as used in this study. Likert scales were used for the main variables from strongly disagree to strongly agree. To measure gold investment literacy, gold investment knowledge statements were gathered from gold investment agents through their websites, financial institutions websites and past studies (see Baur and Lucey, 2010; Hundal, Grover, & Bhatia, 2013). The responses were either true or false thus respondents need to decide on the responses for the statements based on their knowledge. Statistical analyses used were descriptive, reliability test and a multiple regression to determine the influential factors on gold investment intention. The normality of the distributions of the data were assessed to ensure the appropriateness of the type of analyses used.

Sample items for gold investment subjective norms were “Most people who are important to me invest in gold.”, “The people in my life whose opinions I value invest in gold.” and “My friends invest in gold.” For perceived behavioural control, some items were “It is possible for me to invest in gold.”, “If I wanted to, I could invest in gold.” and “I have control over investing in gold.” As for gold investment intention, statements were “I intend to invest in gold.”, “I intend to invest in gold regularly.” and “I intend to invest a large amount on gold during the next two months.”

EMPIRICAL RESULTS

The socioeconomic characteristics of the urban residing respondents are displayed in Table 1. The results of the analysis showed that about three-quarter of the respondents were young workers. While more than two-third of the respondents were female employees with slightly more than half had working experience of less than 10 years and were graduates. As they were public sector employees, most of the respondents were Malay and slightly more than one-third are married with a small family size.

Table 1: Socioeconomic Characteristics of Respondent

Socioeconomic Characteristics of Respondent		**n (%)**
Age (years old)	Less than 30	98 (24.6)
	30 to 39	214 (53.8)
	40 to 49	49 (12.3)
	50 and more	47 (11.8)

Gender	Male	78 (30.7)
	Female	176 (69.3)
Work Experience	≤ 10 years	145 (57.9)
	> 10 years	106 (42.1)
Race	Malay	235 (92.5)
	Chinese	3 (1.2)
	Indian	8 (3.1)
	Bumiputra Sabah/Sarawak	7 (2.8)
Education	Non-graduate	121 (48.2)
	Graduate	130 (51.8)
Marital Status	Unmarried	58 (23.0)
	Married	203 (77.0)
Family Size	≤ 5 persons	164 (69.4)
	> 5 persons	71 (30.6)

In terms of gold investment literacy, Table 2 revealed the correct responses among the respondents. Most of the respondents can answer correctly questions on the ability of gold investment in hedging against inflation. Majority of them were also able to give correct answers regarding the higher resold price of gold nugget as compared to gold dinar and the better choice of gold jewellery as compared to diamond jewellery. Gold dinar is not readily bought even by the same financial institution which offers it.

Table 2: Gold Investment Literacy

No.	STATEMENT	Correct Answer n (%)
1.	Gold investment can protect from the inflation effect on *ringgit* currency.	206 (81.1)
2.	Gold maintain its value from time to time.	166 (65.4)
3.	Compared to land purchasing, gold purchasing is not taxable.	144 (56.7)
4.*	Gold price always increase.	143 (56.3)
5.*	Purchasing gold in the form of jewellery is the best choice of gold investment.	68 (26.8)
6.	It is easier to resell gold nugget to obtain cash as compared to gold dinar.	173 (68.1)
7.	The resold value of gold investment in the form of gold nugget is higher than gold dinar.	188 (74.0)

8.	Investing in gold nugget is the best form of gold investment.	196 (77.2)
9.*	Gold investment gives regular income.	78 (30.7)
10.	It is better to invest in gold jewellery as compared to diamond jewellery.	199 (78.3)

**Wrong statements*

Statistical analyses demonstrated moderate levels for gold investment literacy (66.5% respondents answered correctly 5 to 7 questions), subjective norms (mean = 2.68), perceived behavioural control (mean = 3.30), attitude towards gold investment (mean = 3.18) and investment intention (mean = 2.90). The average overall mean is referred to a Likert scale from 1 to 5. The variables studied had high reliabilities ranging from 0.797 to 0.933 of Cronbach alpha values.

A multiple regression analysis was conducted on selected socioeconomic characteristics and the factors in the Theory of Planned Behaviour to determine their significant influence on gold investment intention. Gold investment literacy was also included in the regression. The model which applied the factors as in the Theory of Planned Behaviour could explain 56.4 percent of the variance in gold investment intention that is considered as moderate (R^2 = 0.564). The results as displayed in Table 3 showed that none of the socioeconomic characteristics or gold investment literacy (B = -0.036; p = 0.831) significantly influence gold investment intention. Either the respondents were male or female, earning monthly household income exceeding RM3,500 or had higher education level, these had no significant influence on the intention to invest on gold. As for gold investment literacy, though the inclusion of gold investment literacy in the TPB context fulfilled the required criteria suggested by Ajzen (2008), it was not proven empirically to be an important factor in influencing gold investment intention.

The valid model (F=44.412; p=0.0001) further revealed that gold investment attitude (B=0.435; p=0.0001), subjective norms (B=0.157; p=0.0001) and perceived behavioural control (B=0.198; p=0.002) significantly predicted employees' intention to invest on gold. Past research on gold investment intention factors was not found however comparing with a study by Chudry et al. (2011) on the effect of attitude, subjective norms and perceived behavioural control in influencing financial behaviour intention, similar significant results were recorded in this study. In terms of the relative strength of influence on gold investment intention, gold investment attitude had the strongest influence (beta = 0.500) as compared to gold investment subjective norms (beta = 0.205) or perceived behavioural control (beta = 0.176). However, one past research found subjective norms as the weakest predictor of intention (Armitage & Conner, 2001). The results of this study also proved that the predictors as mentioned in the Theory of Planned Behaviour do have significant impact on the related intention.

Table 3: Multiple Regression for Gold Investment Intention

Variables	B	Std. Error	Beta	t	Sig.
Constant	0.000	1.813		0.000	1.000
Male	-0.128	0.505	-0.011	-0.254	0.800
Household Income >RM3,500	0.581	0.505	0.051	1.151	0.251
Education (years)	0.025	0.096	0.012	0.263	0.793
Gold Investment Literacy	-0.036	0.167	-0.009	-0.213	0.831
Gold Investment Attitude	0.435	0.052	0.500	8.323**	0.000
Gold Investment Perceived Behavioural Control	0.198	0.063	0.176	3.124**	0.002
Gold Investment Subjective Norms	0.157	0.038	0.205	4.112**	0.000

In the context of gold investment intention among these employees, it is proven that neither socioeconomic characteristics nor gold investment literacy is important in influencing gold investment intention. Have knowledge regarding gold investment is not critical in developing the intention to invest on gold. Influential factors were gold investment attitude, subjective norms and perceived behavioural control. Positive attitude towards gold investment that has developed over years and subjective norms which is the perception of whether others approve of the behaviour were important to predict gold investment intention. Hence, individuals who intent to invest on gold are not due to the information they know but more to referring to others that are important to them. Perceiving themselves to be able to control their action is also important in influencing their gold investment intention. By having control, they will be more confident that they will be able to invest later, thus creating intention prior to the investing. Comparison with past studies are not possible as past research on gold investment literacy influencing gold investment intention was not found.

CONCLUSION AND IMPLICATION

The levels of gold investment literacy, attitude, subjective norms, perceived behavioural control and gold investment intention among samples from public sector employees in Peninsular Malaysia urban areas were moderate. Though they did not understand much about gold investment, their intention to invest was found to be moderate. This study further examined the applicability of the Theory of Planned Behaviour in understanding gold investment intention. Gold investment attitude, subjective norms and perceived behavioural control as suggested by the theory significantly predicted employees' intention to invest on gold. Gold investment literacy which was included later in the planned behaviour framework however, was not significant in influencing gold investment intention. Thus, literacy is not an influential factor towards intention in the context of gold investment.

These findings are useful information that may be incorporated into development program aimed to improve personal financial behaviour of employees. Potential gold investors must be exposed to gold investment so that positive attitude towards gold investing can develop soon. The role of members in the family or friends in influencing other members in the family or group, are important in inducing intention to invest, hence, using them as role models in gold investment. In addition, the perception on the ability to control own's action is also required to enhance investment intention prior to investing. The aggregate contribution from these three factors is expected to elevate individual's financial well-being in the long run.

Financial institutions involved in selling gold to workers for investment purposes should deliver information on the benefit of gold investment especially in the long-run to make potential gold investors understand gold investing. Positive attitude towards gold investment through understanding what gold investment is all about would increase their intention to involve in gold investment. Effective promotion can be through family members who are currently gold investors.

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