

# Investigating the Influence of Asian Cultural Value and Financial Knowledge on Investment Behaviours

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## Abstract

This study showed the combination of composite Asian cultural value (ACV), kiasuism (“fear of loss”), and the often-associated self-esteem, social intelligence, and achievement orientation exerted an impact on investment decision-making. It further explored the mediating influence of financial knowledge on investing behaviours (namely rational, risk aversion, herding and diversification). This research is novel as it addresses a gap in behavioural research particularly on the influence on ACVs and investing decision-making. In terms of research design, this study employed a purposive sampling method engaging with 463 respondents within the Klang Valley, Malaysia. A voluntary and anonymous quantitative questionnaire utilising a 7-point Likert-like scale was employed to measure the constructs. Due to the exploratory nature and formative constructs used in this study, the PLS-SEM method was implemented to assess the model validity and test the hypotheses. The findings thus showed that kiasu values promoted herding behaviour among investors. Besides, financial knowledge acquisition was a mediator between kiasu positive behaviours and rational investing, risk aversion, and diversification. Accordingly, the study offers suggestions of importance for financial planners, especially in Malaysia and Asian countries, in better understanding their clients. Besides, it also has implications on how more culturally relevant financial education content could further enhance the effectiveness of financial decision-making in general.

**Keywords:** Behavioural Finance, Investing Behaviour, Financial Decision-making, Financial Planning

## 1.0 Background of the study

Money is more than just a medium of exchange in economics (Kövecses, 2018; Baker & Jimmerson, 1992); it has deeper-rooted meanings within the social structure/relations and culture. Culture is often defined as the underlying common shared beliefs, values, motives, interpretation, and identities of the members of a society or

group, which are handed down through generations (Hofstede, 2011; House, Javidan & Dorfman, 2001). The ubiquitous, sub-conscious and yet salient nature of culture could have an impact on the mental programming of an individual (Hofstede, Hofstede & Minkov, 2010). Accordingly, many studies have been conducted using Hofstede's (1980) five cultural dimensions, namely: power distance, uncertainty avoidance, individualistic/collectivistic, masculinity and long-term orientation. They are mainly carried out in the areas of cross-cultural management, communications, and leadership. However, these dimensions have also been critiqued due to failure to capture the uniqueness of Eastern (including Asian) cultural contexts. In view of this, the Confucianism work dynamic (CWD) dimension has been added to replace the long-term orientation dimension (Fang, 2003; Robertson, 2000). The dimension includes face values, harmony/balance, respect for tradition, and reciprocity.

Furthermore, past research has shown that CWD values disperse from its Asian origins to countries such as Chile, Australia, and the United States (Robertson, 2000). Of particular interest is the concept of upholding/preserving one's face (in the moral and social sense alike). Closely related to this notion is the *kiasu* trait, which is literally translated as the "fear of losing out". Although the trait is often associated with Singapore with connotations of selfishness due to the hypercompetitive obsession of getting ahead of others, it also has a positive side. This trait can promote industriousness in terms of diligence and hard work to achieve one's goals (Kirby & Ross, 2007). Besides, the Asian cultural value (ACV) of *kiasuism* has been found in past research to influence behaviour throughout business negotiations, risk-taking, academic task performance, and aspects of consumer behaviour (Cheo, 2013; Coclanis, 2009; King & Wei, 2018). However, research incorporating these values in financial behaviour is lacking.

Moreover, the associated values have been narrowly defined and, to an extent, negatively stereotyped; this can be a factor further limiting the research interest. For instance, the concept of face is perceived as a predominantly Chinese trait and *kiasuism* as a predominantly Singaporean stereotype). In reality, the related concepts of face upholding and saving can be found in literature across areas such as interpersonal relationships, negotiations, and spending on gift-giving (Buttery and Leung, 1998). Similarly, past research has found that *kiasuism* is not unique to Singapore and has positive aspects (Ho, Loh & Ng, 1998). Despite the above, these efforts are predominantly

focused on the Chinese community, while limited research has been done in the area of individual financial behaviour. In line with these well-cited past research, this study will investigate the impact of *kiasuism* on the investment behaviour in the working adult population in Malaysia.

The conceptual framework of this study as shown in Figure 1 is developed by applying the relevant concepts advanced in Ajzen's (1991) Theory of Planned Behaviour (TPB). Here, the Asian cultural value of *kiasuism* (both positive and negative dimensions) have composite traits representative of attitudes, social norms and perceived behavioural controls on the TPB are the independent variables. Besides, financial knowledge acquisition is investigated as the intention construct thus enabling the investment behaviour, which comprises the dimensions of rational investing, risk aversion, herding, and diversification. In this respect, past research in the USA has shown that cultural values work via attitudes and beliefs to have an impact on households, specifically through consumption, savings, and investment decisions that they make (Daniels, 2018). However, less effort has focused on Asian cultural values, financial knowledge acquisition, and financial behaviours within a South-East Asian context and in terms of Malaysia.

As understanding client attitude and motivation are the pinnacle of knowing their financial planning process, this study will offer substantial implications for financial planning firms and practitioners alike. It will thus show that promoting financial education and providing good advice are of importance but these efforts could be enhanced by knowing the underlying fears and motivations of the clients. This will enhance their investment behaviour, and in doing so, impact the effectiveness of the financial planning services provided.

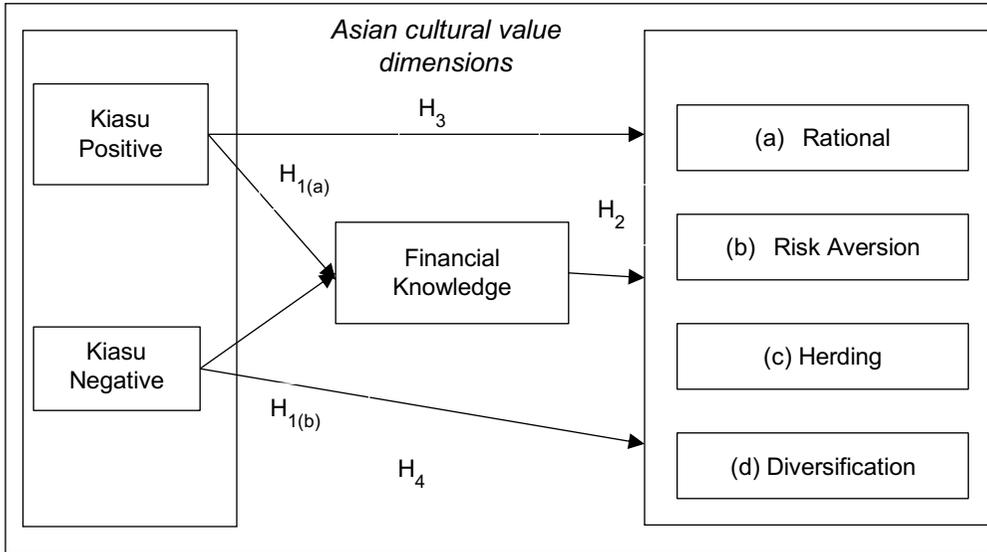


Figure 1 : Conceptual Framework of the Study

In summary, the research questions for this study are as follows:

- RQ1: What are the influences of *kiasuism* on financial knowledge acquisition?
- RQ2: Does financial knowledge acquisition mediate the relationship between *kiasuism* values and financial behaviours?

## 2.0 Literature review

Malaysia is chosen for this study due to its unique multicultural identity. Based on the Department of Statistics (2018), its current population is 32.4 million; here, Bumiputeras comprise 69.1% of the overall population, followed by Chinese and Indians (23% and 6.9%, respectively) and other races (1%) Besides, Malaysia has a history of British colonisation (1824 to 1941 and 1945 to 1957) and Japanese occupation (1941 to 1945) before obtaining its independence in 1957. Then, the country was governed by the Barisan National political party and went through an era of recent political change in 2018. Unlike Singapore, the Malaysian political landscape is one of promoting the affirmative action of *Bumiputera* rights as defined in the National Economic Policy (NEP) (Cheong, Nagaraj & Lee, 2009).

Despite the controversies surrounding the policy, various races have successfully lived together in the spirit of "muhibbah" (i.e. interethnic goodwill) while embracing the different inter-racial traditions.

Although a Malaysian race (or *Bangsa Malaysia*) is still a work in progress, what defines this nation is its potpourri of traditions: the society has been translated in such a way that there are no more pure Malay, Chinese, Indian, or other races (Gabriel, 2011). Furthermore, past research has shown that even though significant differences are seen between the Malays, Chinese, and Indians in terms of traditions, they bear no notable differences in values such as conformity, benevolence, hedonism, universalism, self-direction, power, and security (Fontaine & Richardson, 2005).

In contrast, Singapore gained its independence from Malaysia on 9 August 1965. Due to its proximity and historical linkages with Malaysia, the citizens of both countries share many similarities in practices and values. They share a similar national language, which is Malay, while the major languages spoken by their citizens include English, Chinese (i.e. Mandarin, Cantonese, and Hokkien), and Tamil. Furthermore, the major races in both countries are similar, although the Malays dominate in Malaysia while the Chinese are the majority in Singapore. To put things into perspective, in 2015, about 44% of the population in Singapore was born in Malaysia (Yang, Yang & Zhan, 2017). Besides, it is estimated that about 700,000 Malaysians are working the neighbouring country (Musa, 2018). As such, Malaysians and Singaporeans may share many underlying cultural practices and values.

*Kiasuism* is derived from the Chinese Hokkien dialect and can be literally translated as the “fear of losing out”. Tacitly embedded in this notion is the need for self-preservation and excessive degree of caution as things will go wrong (Yao, 1996). Although it is commonly stereotyped to Singapore, various studies have found that this is not completely true; instead, it may be present to some degree in other countries, such as Australia, Hong Kong, and the USA (Cheng & Hong, 2017; Ayyavoo & Tennakoon, 2015; Ho, Loh & Ng, 1998). Besides, a similar fear of missing out (FOMO) culture has been reported in Western-based studies with a focus on consumer behaviour such as social media fatigue due to the compulsive need to keep abreast with certain brands (Bright & Logan, 2018). More recently, the outset of lockdown for the COVID-19 has shown that FOMO is linked to the panic-buying of toilet paper rolls in countries such as Singapore, Malaysia, the United Kingdom, Australia, and others (AFP, 2020; Mao, 2020).

Interestingly, along with the increasing urbanisation, past studies have shown that Malaysians are becoming more self-centred (i.e. a close characteristic of *kiasuism*) than Singaporeans (Ipsos, 2016a; Ipsos, 2016b). In particular, prior work on Malaysian Muslim students in Sydney found above-average scores in self-consciousness, agreeableness, and achievement/striving personality traits. This suggests that these younger Malays show an emerging entrepreneurial spirit and are concerned about what others may think of them (Mastor, Jin & Cooper, 2000). Besides, it indicates that the aspects of *kiasuism* are also prevalent in the non-Chinese Malaysian population. Here, the proximity to Singapore and shared history may be the reasons behind the pervasiveness of *kiasuism* in Malaysia being apparent (Ibrahim, 2007). This value-laden attitudinal trait acts as a *modus operandi* to get the most out of others in each transaction that one participates in, to the extent that it has been often described as an obsession (Cheng & Hong, 2017). Furthermore, *kiasuism* can be linked to the concept of self-efficacy, wherein Bandura's (1994) self-efficacy theory (SET) thus posits that one's belief on their ability to achieve a task/goal depends on their mastery, motivation, and emotional well-being. In line with this, Deci and Ryan's (2000) self-determination theory also delineates that an individual's motivation and personality are determined by the degree of autonomy, competence, and relatedness to their social environment. Therefore, two sub-dimensions to *kiasuism* trait, namely positive and negative, are shown as discussed below.

## 2.1 Kiasu positive

This dimension of *kiasuism* is defined as a competitive attitude to achieve more in life without depriving others (Hwang, 2003; Ayyavoo and Brandon, 2015). Individuals with the *kiasu* positive trait would make them hard-working, have a positive mental attitude, and be willing to go the extra distance to achieve excellence (Hwang, 2003). Furthermore, they are more willing to share knowledge and not threatened with the benefits that others may derive from this action. Here, past studies have found that the *kiasu* value may show more positive aspects for some tasks requiring perseverance/endurance, such as academic performance and national sportsmanship (Cheng & Hong, 2017; Ibrahim, 2007). Besides, the *kiasu* positive trait can result in behaviours that bring out the best outcome for an individual without the intention of depriving others (Ayyavoo and Brandon, 2015). In this sense, it

encompasses the culture of healthy competition, efficiency, performance, diligence, and hard work (Neville, 2014; Bedford and Chua, 2017).

Moreover, this trait may potentially drive an individual to develop financial discipline (includes investing) and gain the social recognition perceived to get ahead in life. In this respect, Professor Ungku Aziz has once quoted that Malays need to be more *kiasu* to succeed (The Star Online, 29 Oct 2007). Unfortunately, the positive aspect of *kiasuism* is often undermined in literature; needless to say, the lack of research on how it relates to the acquisition of financial knowledge and investment behaviours is apparent.

## 2.2 Kiasu Negative

The *kiasu* negative trait focuses on the self-centred behaviour to get ahead of others or winning at all cost (Hwang, 2003; Neville, 2014). In line with SET, it is closely aligned with self-esteem, self-efficacy, and self-regulation. In particular, self-esteem is the general perception of one's self-worth, while self-efficacy represents their perception of inherent abilities. Meanwhile, self-regulation describes the perceived alignment of abilities and strategy towards achieving their goals (Bandura, 1994). With respect to the *kiasu* negative trait, an individual may fall short in terms of self-esteem and self-regulation and thus lead to unhealthy coping mechanisms to get ahead of others. Such individuals will view the achievements of others as threats to their own self-worth and fuel greater self-centred, selfish, and manipulative behaviours (Kirby, Kirby, Bell & Schafer, 2010). At the extreme, it may include the intention of depriving others to access specific things (Ayyavoo and Brandon, 2015) and the hyper-competitive form of keeping up with the Joneses (Coclanis, 2009).

Furthermore, previous research has shown that *kiasu* negative traits can lead to manipulative behaviours, thus hindering the sharing of knowledge and performance of group work (Kirby & Ross, 2007). These behaviours have also resulted in risk aversion and lessened creativity in Singapore, especially within the entrepreneurial context (Cheng & Hong, 2017; Ho et al., 1998). In this respect, many aspects of practitioner-focused research are quantitative, whereby the studies have been conducted to confirm existing findings rather than to explore new issues due to fears of the lack of success (Neville, 2014). Besides, research from Singapore has highlighted how *kiasu* negative

behaviours lead to many parents sending their children for private tuition even though these efforts do not substantially improve their grades (Poh, 2016). The over-involvement in the lives of one's children, which is often linked to helicopter parenting, is also becoming prevalent in Malaysia (Perimbanayagam, 2017, November 24; Padilla-Walker & Nelson, 2012).

### 2.3 Financial Knowledge

Financial knowledge (FK) comprises one's awareness on issues such as money management and the relationship between risk and returns and the aspects of financial planning, which include debt management, investments, insurance, and retirement planning. Such knowledge can be obtained explicitly through structured programmes or tacitly acquired via experience and nurturing (Tang & Baker, 2016; Robb & Woodyard, 2013; Schuhen & Schürkmann, 2014). Furthermore, FK encompasses the concepts required to manage financial resources and make wise financial decisions (Huston, 2010; Bay, Bino & Johed, 2014; OECD INFE, 2011). Past studies have shown a positive relationship between financial knowledge and household wealth and wealth inequality (Lusardi & Michaud Mitchell, 2013). While prior research has acknowledged FK as a driver of financial behaviour, the scholars also find that it operates more prominently when considered with personal values such as self-esteem and other personal attitudes (Hira, 2012; Nye & Hillyard, 2013; Tang & Baker, 2016). As such, FK is a mediator between these personal attributes and general financial behaviours.

However, the further harnessing of FK may rest upon one's ability to apply, learn, and master new experiences on financial matters and hinge on the acts of knowledge transfer and sharing. Past studies have shown that its transfer breakdown can occur from high school to adulthood (Yates & Ward, 2011). Besides, another work has noted that social and cultural characteristics (i.e. the concept of face and *guanxi*) have a may also have a significant impact on knowledge sharing among the Chinese (Huang & Davidson & Gu, 2008).

As noted above, *kiasuism* is a trait that links self-worth, self-preservation, and the fear of losing out in life to others. Inadvertently, it encompasses the concept of face, *guanxi*, and another motivational aspects that promote the practice of diligence and hard work. In the context of knowledge sharing, high face-saving attitudes among

individuals have been found to stifle assistance-seeking on a task as it can be perceived as a limitation of their knowledge capacity and thus a threat to their self-worth (Ding, Liu, Huang & Gu, 2017). In this respect, the *kiasu* negative trait can cause these individuals to hoard financial knowledge, such as student's reluctance to provide feedback due to fear of their peers using this knowledge and getting ahead of them and their reluctance to collaborate in knowledge sharing (Hwang & Ang, 2002; Hodkinson & Poropat, 2014). In contrast, the idea of face is found to promote greater knowledge sharing intentions so as to exhibit one's superiority in knowledge possession (Huang, Davidson & Gu, 2008). In line with this, high positive *kiasuism* can encourage individuals to put in more effort into acquiring new knowledge for boosting their targeted achievements (Kirby & Ross, 2007).

Despite the above, the effect of *kiasuism* on FK acquisition has yet to be studied. As such, the following hypotheses are posited:

H<sub>1(a)</sub>: Kiasu positive values will have an influence on financial knowledge.

H<sub>1(b)</sub>: Kiasu negative values will have an influence on financial knowledge.

## 2.4 Investment behaviours

Typically, traditional theories of investments in the 1950s (e.g. Modern Portfolio Theory) and neoclassical finance theories developed in the 1960s to 1970s (e.g. Capital Asset Pricing Model and Efficient Market Hypotheses) are relied upon in research to discuss investment risks and returns in a perfect market (Joo and Durri, 2015). However, these theories have been critiqued due to their underpinning assumptions that investors are perfectly rational and will always act to maximise utility (i.e. *Homo Economicus*). They further suggest random walk applies in the determination of market price of a security and that this will reflect all the available information. In other words, an individual would have unbounded rationality.

In reality, humans are *Homo Sapiens* who are limited in terms of cognitive abilities (i.e. skills and knowledge) and values that they hold. In this matter, Herbert Simon's (1997) theory of bounded rationality argues that humans are fallacious and innate biological and behavioural limits to human reasoning are present (Cristofaro, 2017; Takahashi, 2015; Schilirò, 2013). In this regard, human decision-

making is also subconsciously led by emotions and intuition (Kuzmina, 2010; Gabbi & Zanotti, 2019; Rodney, 2011). Due to their bounded rationality, humans tend to strive for satisfactorily rather than economically optimal decisions and behaviours.

Furthermore, researchers within the behavioural finance sphere hold that risk measured by statistics such as standard deviations, co-variances, means, and variances and beta cannot fully account for subjective human limitations and biases in investment decision-making (Pistorius, 2014; Schilirò, 2013). Similarly, investment uncertainties that encompass individual beliefs, value judgments, and virtues cannot be fully reflected in objective probability measures. Hence, advocates of behavioural finance suggest that statistics should play a supportive rather than a dominant role in guiding investment decisions (Pistorius, 2014). In line with the above notion, Kahneman and Tvesky's (1979) Prospect Theory critiques the tenets of utility maximisation and reinforces bounded rationality through the findings underlining the idea that individuals tend to under-weigh gain and over-weigh loss in investment decision-making.

Besides, past studies have often linked financial attitudes and financial knowledge to general financial behaviours (Robb & Woodyard, 2011; Bhushan & Medury, 2014), whereas repeated association of ACV with money has yet to result in a study linking *kiasuism* to investment behaviours. As such, the following hypotheses are posited:

- H<sub>2(a)</sub>: Financial knowledge has an influence on rational investing behaviour.
- H<sub>2(b)</sub>: Financial knowledge has an influence on risk aversion investing behaviour.
- H<sub>2(c)</sub>: Financial knowledge has an influence on herding investing behaviour.
- H<sub>2(d)</sub>: Financial knowledge has an influence on diversification investing behaviour.

## 2.5 Rational investing

As the name suggests, rational decision-making involves the use of logic and reason to arrive at a decision that strives to derive the optimal outcome (Kumar & Goyal, 2016). One would tend to rely on past and present information in a typical Bayesian manner to achieve

utility maximisation (Kuzmina, 2010) but it is devoid of emotions (Levy, 2014; Kocaslan, 2019). This also follows a rational process of decision-making involving the identification of the problem, identification and evaluation of alternative courses of action, and eventually, selection and implementation of the solution.

However, in reality, humans are limited in their cognition and face restrictions in the amount of information and time constraints. In such situations, bounded rationality leads to a more natural way of making decisions through satisfactory solutions rather than optimum (i.e. utility-maximising) ones (Schilirò, 2013; Fellner, Güth & Maciejovsky, 2009). In this regard, heuristics are often used and individual emotions and risk attitudes may have a role in the reasoning process. Besides, individual and cultural differences in reason may further affect the financial decision-making process (Kuzmina, 2010; Eiqayam & Evans, 2011). As such, one can expect *kiasuism* of both positive and negative aspects to affect the investment decision-making process. Here, *kiasu* positive individuals may be more meticulous in researching and making logical deductions, whereas *kiasu* negative one may be more impulsive in their decision-making due to the fear of loss.

## 2.6 Risk aversion

Risk aversion is one of the most fundamental and innate characteristics of the human species. In this respect, past studies have found that those related to the reproductive function is linked to risk aversion exhibited in financial decision-making (Zhang, Brennan & Lo, 2014). However, it may be a subconscious choice if the risk is more systematic and a binary choice is required, whereas it becomes more idiosyncratic if the risk is not systematic.

In line with this, Kahneman and Tvesky's (1979) Prospect Theory posits that in making economic decisions, individuals value gains and losses differently. Therefore, the study has found that they would feel more pain for the losses made compared to joy in the same quantum of gains. As such, myopic loss aversion occurs when one tends to dispose of winning stocks too soon and hold on to losing stocks for too long (Bernatzi & Thaler, 1993). This will lead the them placing a greater emphasis on capital preservation rather than venturing into risky investments that could potentially generate above-average returns.

In this study, the kiasu negative individuals are associated with the fear of losing out and would be expected to have a close link with risk aversion (Bedford & Chua, 2017). Here, greed may cause them to act irrationally in search of short-term gains. In contrast, individuals with high kiasu positive would be motivated to do more research for coming out ahead of the curve.

## 2.7 Herding

Herding is a behavioural bias that arises that would cause investors to put aside their rational judgements and imitate the actions of other investors. This may happen due to uncertainties in the market and in view of asymmetric and insufficient information (Luo & Schinckus, 2015). In this respect, past research has shown that overconfidence and past experience may motivate herding behaviour tendencies (Mohammad and Shahar, 2019).

Based on Wilczek's (2016) Herding Behaviour Theory, the behaviour can be triggered by the extent to which one's personal preferences match public opinion, social networks, expertise in their field, and reputation. In reality, herding behaviours will also intertwine with personal and cultural values and beliefs held by individuals about an investment and the market (Igual & Santamaria, 2017). Here, they complement unbounded rationality by applying public opinion as the heuristics to decision-making (Nickles, 2019). If a sufficiently large number of investors subscribe to the same public opinion and act coherently, a self-reinforcing pattern will emerge in the market. Examples of herding behaviour in the past include the Dot Com Bubble in 2000, cryptocurrency markets, and the real estate bubble (Vidal-Tomás, Ana and Viñas, 2018; Ciccotello, 2009). It is an inherently risky behaviour as it creates unsubstantiated rationalisations about the valuation of assets.

Furthermore, the fear of losing out may cause individuals to follow the crowd for the purpose of "keeping up with the Joneses" with the belief that the crowd or popular view is always right. In this sense, kiasu negative individuals have been found to exhibit the lack of individual problem-solving creativity (Cheng & Hong, 2017). In contrast, one can expect kiasu positive people to be motivated towards using their common knowledge and not so much to follow the status quo in order to enhance their own investment returns.

## 2.8 Diversification

Markowitz's Modern Portfolio Theory (MPT) promotes diversification by positing that by the act of investing in a portfolio of uncorrelated or negatively correlated assets reduces the unsystematic portfolio risk. Following this, an optimal portfolio of assets will thus yield the highest return for any given amount of risk. Past research has also shown that small portfolio employing MPT maintains higher returns over the longer term (Lovicsek, 2015; Buttell, 2010).

However, the MPT is critiqued for not being fully capable of explaining reality due to the limiting assumptions that it hosts. This includes: the composition of asset classes (i.e. stable and well defined), portfolio construction (i.e. inputs of risk and return parameters only), projection of historical data to determine future returns, assumptions that investors are rational and normal distribution of returns, and that standard deviation alone is the appropriate measure of risk (Ballentine, 2013; Veres, 2006). The market behaviours are oftentimes statistically haphazard and do not fully conform to the random walk theory or fractal geometry (Jahnke, 2005).

In practice, the use and reliance of statistical models may be overly complicated for the ordinary man on the street. Besides, such models describe one's positions on average and may not exactly apply to the unique personal investment needs and timeframe for the less-rational investors, each having a unique risk tolerance. To this extent, subjective individual judgements and the influence of emotions cannot be ignored (Schanzenbach & Sitkoff, 2016; Bernstein, 2003). Fear of losing money and greed have a steady grip on investor's decisions, while market forces are indifferent towards individual needs. During a financial crisis and panic, investors tend to react out of fear and sell risky assets, which creates an artificial asset class correlation (Grote, 2012). Based on the above, it is posited that kiasu positive values will influence of investing behaviours as follows:

- H<sub>3(a)</sub>: Kiasu positive values will have an influence on rational investing behaviour.
- H<sub>3(b)</sub>: Kiasu positive values will have an influence risk aversion investing behaviour.
- H<sub>3(c)</sub>: Kiasu positive values will have an influence on herding investing behaviour.

H<sub>3(d)</sub>: Kiasu positive values will have an influence on diversification investing behaviour.

It is also posited that kiasu negative values will influence investing behaviours as follows:

H<sub>4(a)</sub>: Kiasu negative values will have an influence on rational investing behaviours

H<sub>4(b)</sub>: Kiasu negative values will have an influence on risk aversion investing behaviour.

H<sub>4(c)</sub>: Kiasu negative values will have an influence on herding investing behaviour

H<sub>4(d)</sub>: Kiasu negative values will have an influence on diversification investing behaviours

### 3.0 Research Design and Methodology

The purposive sampling design was employed in this study due to the exploratory nature of the research objective, namely achieving theoretical rather than predictive generalisability. Therefore, 463 respondents were involved and comprised adults above the age of 18 years within the Klang Valley, Malaysia. A voluntary and anonymous questionnaire was employed to gather their responses accordingly.

As shown in Figure 1 above, the independent constructs of this study are the ACV dimensions (i.e. Kiasu-Positive and Kiasu-Negative cultural traits), while the dependent constructs are the investing behaviour dimensions of rational investing, risk aversion, herding and diversification. Financial Knowledge is the mediating variable between the ACV and the investing behaviour dimensions. The items were measured using a 7-point Likert-like scale (1 = Strongly Disagree to 7 = Strongly Agree). The sources from which the scales are adapted and/or developed from are shown in Table 1 below:

Table 1 : Constructs of the study

<b>Construct</b>	<b>Number of items</b>	<b>Developed for the study based on:</b>
Kiasu-Positive	8	Ho et al. (1998); Kirby et al. (2010)
Kiasu- Negative	9	
Financial Knowledge (FK)	10	OECD INFE (2011)
Rational investing	2	Kumar and Goyal (2016)
Risk Aversion	3	Gilliam, Chatterjee, and Grable (2010).
Herding	3	Vidanalage and Shantha (2019); Kumar and Goyal (2016)
Diversification	2	Lusardi, . Michell, & Curto, (2014) Cronqvist and Siegel (2014)

Based on the literature review and Table 1, a recapitulation and brief working definition of the constructs are provided accordingly. Kiasu Positive encompasses the competitive drive to excel in life but without the intention of depriving others, whereas Kiasu Negative reflects the fear of losing out that led to self-centredness. By adapting OECD INFE (2011) in this study, Financial Knowledge refers to the self-assessment of cognitive financial aspects, especially of risk, return, and interest accumulation. It also includes some cognitive aspects of financial planning and financial products available in Malaysia.

In terms of investing behaviours, rational investing refers to the use of logic and reasoning with the intention of arriving at an optimal level utility in this study. Meanwhile, risk aversion is conceptually defined as the tendency of humans to avoid being exposed to excessive price volatility in favour of the status quo, particularly capital preservation. Herding behaviours refers to the tendency of investors to follow the crowd rather than engage in financial and economic fundamentals. Finally, diversification is defined as the preference of maintaining a portfolio of an uncorrelated or negatively correlated investments rather than a single asset; this is done with the intention of achieving the highest return for any level of risk.

In this study, Partial Least Square-Structural Equation Modelling (PLS-SEM) was employed to analyse the data obtained due to the exploratory and formative nature of some constructs (e.g. ACV and the investing behaviour dimensions). Besides, this method would not rely on the presence of a normal distribution (Ringle & Hair, 2014).

Next, convergent reliability was measured via Cronbach's Alpha and should be above the value of 0.7 (Nunnally & Bernstein, 1994).

Besides, Dijkstra-Henseler's rho ( $\rho_A$ ) and Jöreskog's rho ( $\rho_c$ ) measures being above the value of 0.6 (Henseler, Ringle & Sinkovics, 2009) were implemented as additional measures of composite reliability. For exploratory research, however, a lower threshold of 0.60 is acceptable for the measures in the study (Hair, Ringle & Sarstedt, 2011). Meanwhile, discriminant validity measurements were done using the Heterotrait-Monotrait (HTMT) criterion and cross-loadings (Henseler, Ringle & Sarstedt, 2015; Hair, Ringle & Sarstedt, 2011; Henseler et al., 2009). To assess the discriminant validity, the HTMT values should not exceed the threshold of between 0.85 to 0.90 (Henseler et al., 2015).

Next, a structural path model was used to analyse the significance of the hypotheses. Being a social science study, the hypotheses would be accepted if the one-tailed p-value is less than 0.10. Then, bootstrapping process of 200 iterations with 999 samples was applied, following which the model fit (R-square) effect sizes of 0.75, 0.50, or 0.25 were thus considered as substantial, moderate, or weak, respectively (Cohen, 1992).

Finally, the test of significance was analysed via direct effects on the path diagram by examining the t-value and associated p-value. This study considered the hypotheses as significant if the two-tailed p-value were less than 0.05 and 0.10, which was the commonly accepted values in social sciences.

#### **4.0 Findings of the study**

Based on Table 2 below, a majority of the respondents are working adults between the ages of 23 to 28 years (30%), female (52%), and with an income between RM3,000 to RM6,000 (42.5%). About 30% of them owned equity either in the form of unit trusts or shares/equity.

Table 2 : Descriptive Statistics

		Frequency	Percent
AGE	18 to 23	31	6.7
	23 to 28	136	29.4
	29 to 34	91	19.7
	35 to 40	93	20.1
	41 to 45	64	13.8
	46 to 50	17	3.7
	Above 50	30	6.5
	Total	462	99.8
Missing	System	1	0.2
Total		463	100.0
GENDER	Female	244	52.7
	Male	214	46.2
	Total	458	98.9
Missing	System	5	1.1
Total		463	100
ETNICITY	Malay	201	43.4
	Chinese	166	35.9
	Indian	75	16.2
	Others	18	3.9
	Total	460	99.4
Missing	System	3	0.6
Total		463	100.0
Valid	Below RM3000	142	30.7
	Between RM3,001 to RM6,000	197	42.5
	Between RM6,001 to RM9,000	51	11.0
	Between RM9,001 to RM12,000	27	5.8
	Between RM12,001 to RM15,000	23	5.0
	More than RM15,000	10	2.2
	Total	450	97.2
Missing	System	13	2.8
Total		463	100.0
Unit Trust - Foreign Funds		36	7.78
Unit-trust - Equity		137	29.59
Unit Trust - Bond and Money Market		52	11.23
Shares - Local		130	28.08

#### 4.1 Measurement assessment

Based on Table 3, the values of Cronbach's Alpha, Dijkstra-Henseler's rho ( $\rho_A$ ), and Jöreskog's rho ( $\rho_c$ ) are all 0.60 and above, which was within the threshold of acceptance for exploratory research (Hair, Ringle & Sarstedt, 2011).

Table 3 : Results of measurement assessment of reliability and convergent validity

Construct	Indicator	Loadings	Dijkstra-Henseler's rho ( $\rho_A$ )	Jöreskog's rho ( $\rho_c$ )	Cronbach's alpha ( $\alpha$ )	Average Mean Extracted (AVE)
Kiasu Positive	kp2	0.673	0.85	0.85	0.85	0.45
	kp3	0.591				
	kp4	0.706				
	kp5	0.644				
	kp6	0.759				
	kp7	0.621				
	kp8	0.674				
	Kiasu Negative	kn1				
kn3		0.632				
Financial Knowledge	fk1	0.631	0.64	0.64	0.64	0.38
	fk11	0.600				
	fk12	0.609				
Rational	ir1	0.799	0.85	0.85	0.85	0.65
	ir2	0.826				
	ir3	0.797				
Risk Aversion	ira1	0.652	0.69	0.68	0.69	0.69
	ira2	0.548				
	ira3	0.733				
Herding	ih2	0.588	0.64	0.62	0.62	0.46
	ih3	0.755				
Diversification	id1	0.702	0.75	0.74	0.74	0.59
	id2	0.833				

Based on the summarised indicators above, Table 4 tabulates the comparative descriptive statistics between ethnicities. Overall, the results showed that the Indian respondents recorded higher mean *kiasuism* scores, while the Malays and Chinese did not vary widely. Furthermore, the Malaysian Malay respondents exhibited slightly higher financial knowledge and investment behaviour mean scores compared to the Chinese and Indians.

Table 4 : Further descriptive statistics of the constructs of the study

ETHNICITY		Kiasu Positive	Kiasu Negative	Financial Knowledge	Rational	Risk Aversion	Herding	Diversification
Malay	Mean	36.781	9.622	16.622	17.070	15.448	7.955	9.488
	N	201	201	201	201	201	201	201
	Std. Deviation	5.9709	2.1809	2.7976	3.0765	3.1110	2.3201	2.2475
Chinese	Mean	36.470	8.566	15.747	16.614	14.440	7.313	9.934
	N	166	166	166	166	166	166	166
	Std. Deviation	6.487	2.480	3.090	3.144	3.631	2.371	2.147
Indian	Mean	39.987	9.293	16.467	15.880	14.440	7.453	10.027
	N	75	75	75	75	75	75	75
	Std. Deviation	4.898	2.572	2.835	3.349	3.519	2.429	2.422
Others	Mean	36.222	8.889	16.056	17.500	14.833	7.000	9.611
	N	18	18	18	18	18	18	18
	Std. Deviation	6.015	3.411	3.226	3.053	3.276	2.567	2.973
Total	Mean	37.170	9.159	16.259	16.728	14.896	7.604	9.741
	N	460	460	460	460	460	460	460
	Std. Deviation	6.119	2.451	2.947	3.167	3.405	2.380	2.277

In terms of discriminant validity, Table 5 shows the item loadings of the respective constructs, which load higher within itself than the items of other constructs, indicating that they are statistically distinct items. Besides, Table 6 reveals that the HTMT Criterion is satisfactorily met as all values do not exceed 0.85.

Table 5 : Discriminant validity – Cross Loading

Indicator	Kiasu Positive	Kiasu negative	Financial Knowledge	Rational	Risk Aversion	Herding	Diversification
kp2	<b>0.673</b>	0.359	0.484	0.324	0.139	0.169	0.223
kp3	<b>0.591</b>	0.471	0.430	0.268	0.121	0.169	0.202
kp4	<b>0.706</b>	0.543	0.509	0.354	0.167	0.183	0.189
kp5	<b>0.644</b>	0.425	0.441	0.341	0.144	0.104	0.228
kp6	<b>0.759</b>	0.467	0.505	0.356	0.216	0.175	0.307
kp7	<b>0.621</b>	0.422	0.401	0.345	0.133	0.097	0.246
kp8	<b>0.674</b>	0.516	0.484	0.308	0.207	0.248	0.156
kn1	0.428	<b>0.739</b>	0.373	0.218	0.124	0.407	0.234
kn3	0.523	<b>0.632</b>	0.415	0.218	0.007	0.246	0.177
fk1	0.429	0.386	0.631	0.410	0.342	0.229	0.191
fk11	0.457	0.204	0.600	0.447	0.190	0.151	0.321
fk12	0.397	0.453	0.609	0.352	0.143	0.244	0.325
ira1	0.228	-0.012	0.201	0.364	<b>0.652</b>	0.264	0.055
ira2	0.135	0.013	0.212	0.371	<b>0.548</b>	0.271	0.103
ira3	0.115	0.175	0.298	0.378	<b>0.733</b>	0.414	0.237
ih2	0.159	0.314	0.142	0.253	0.372	<b>0.588</b>	0.078
ih3	0.174	0.340	0.302	0.451	0.311	<b>0.755</b>	0.300
ir1	0.385	0.354	0.482	<b>0.799</b>	0.396	0.588	0.379
ir2	0.413	0.228	0.550	<b>0.826</b>	0.479	0.381	0.376
ir3	0.390	0.184	0.556	<b>0.797</b>	0.501	0.326	0.442
id1	0.215	0.188	0.351	0.474	0.200	0.267	<b>0.702</b>
id2	0.292	0.270	0.349	0.304	0.131	0.198	<b>0.833</b>

Table 6 : Discriminant validity - Heterotrait-Monotrait (HTMT)

Construct	Financial Knowledge	Kiasu Positive	Kiasu negative	Risk Aversion	Rational	Diversification
Kiasu Positive	0.77					
Kiasu negative	0.69	0.77				
Risk Aversion	0.48	0.35	0.21			
Rational	0.74	0.57	0.42	0.66		
Diversification	0.58	0.44	0.43	0.35	0.60	
Herding	0.46	0.36	0.61	0.62	0.63	0.43

Next, the AVE was between 0.38 and 0.66, wherein SEM was previously used for exploratory theory development and predictive purposes (Richter, Sinkovics, Ringle & Schlägel, 2016). Since this research was exploratory in nature (rather than predictive) and the alternative measures of convergent and discriminant validities were met, however, the focus should be emphasised on the overall model fit and explanatory power of the structural model (Fornell & Lacker, 1981; Huang, Wang & Wang, 2013). Furthermore, the measurement aspect of validity testing should not over-ride the underlying theoretical and practical implications of the structural model (Borsdom, Mellenbergh & Heerden, 2004).

### 4.2 Structural Model

The structural diagram developed for this study is shown in Figure 2 below. The direct and indirect effects, as well as the results of the hypotheses testing, are shown in Figure 2.

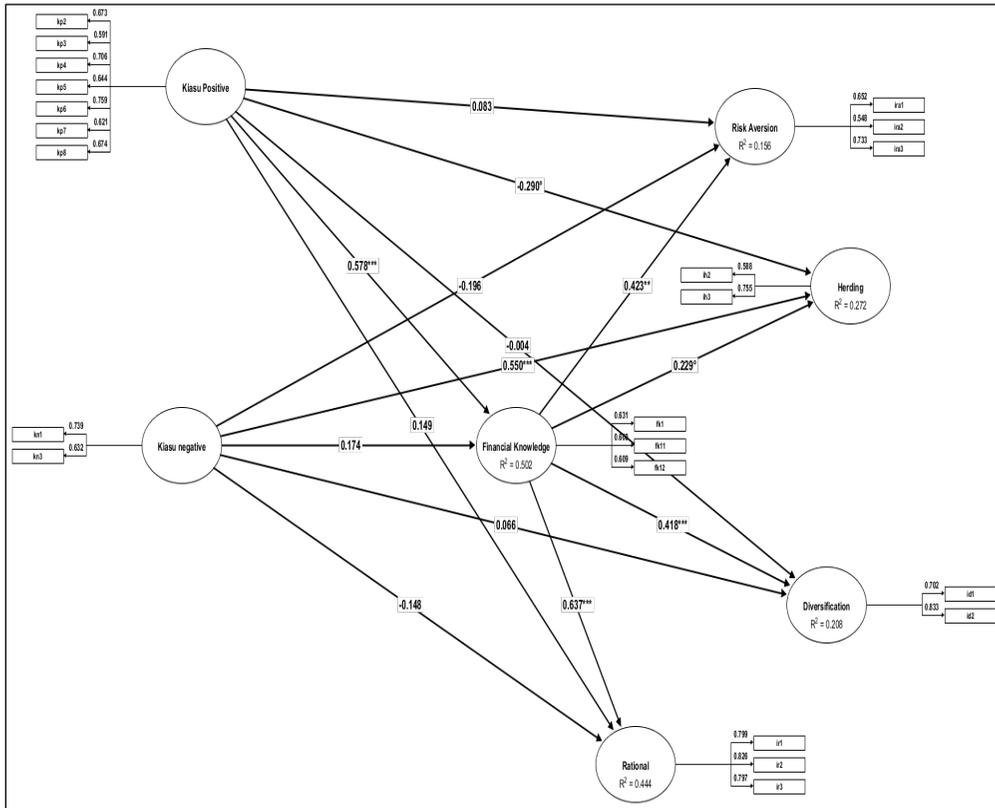


Figure 2 : Structural model diagram

In terms of the model fit (i.e. measured by the adjusted R-squared value), the relationships between *Kiasu Positive* and *Kiasu Negative* to *Financial Knowledge* both showed a strong effect size of 0.499. Meanwhile, the model fit for the relationship between *ACV* (i.e. *kiasu positive* and *kiasu negative*) and *Financial Knowledge* with the investing behaviours of rational investing, risk aversion, herding, and diversion was 0.44 (strong), 0.15 (moderate), 0.27 (strong), and 0.2 (moderate), respectively.

As a result, the structural model showed that the *Kiasu Positive* construct had a significant and positive effect on financial knowledge acquisition, rendering hypothesis H1(a) supported. However,

hypothesis H1(b) was not supported, indicating that *Kiasu* Negative did not have a significant relationship with Financial Knowledge. In turn, Financial Knowledge had a significantly positive effect on all sub-dimensions of investing behaviour, rendering hypotheses H2(a), H2(b), H2(c) and H2(d) supported. Interestingly, in terms of the direct effects, the effect between *Kiasu* Positive and *Kiasu* Negative towards the Herding behaviour was significant at  $p < 0.10$ , thereby hypotheses H3(c) and H4(c) were supported. However, the *kiasu* negative values did not have any significant influence on financial knowledge and the influence of such values on rational and risk-averse behaviour was negative, albeit insignificant.

Based on Baron and Kenny (1986), Financial Knowledge would be a mediator for the relationship between *Kiasu* Positive and rational investing, risk aversion, and diversification. This is because *Kiasu* Positive has a significant influence on Financial Knowledge (i.e. H1(a) was supported) and *Kiasu* Positive have also have significant influences on rational investing, risk aversion and diversification investing behaviours (H2(a), H2(b) and H2(d) were supported). Moreover, *Kiasu* Positive did not have direct significant influences on rational investing, risk aversion and diversification investing behaviours (H3(a), H3(b) and H3(d) were not supported). Furthermore on Figure 8 and 9, the absolute value of the indirect effects are more than 0.08 and are greater than the direct effects respectively. However, Financial Knowledge was not a mediator for the relationship between *Kiasu* Negative and the investing behaviour dimensions as H1(b) was not supported.

Hypotheses	Effect	Original coefficient (Direct Effect)	Indirect	Standard bootstrap results			Remark	
				Mean value	t-value	p-value (2-sided)		
H1(a)	Kiasu Positive -> Financial Knowledge	0.578		0.579	6.067	0.000	Supported	
H1(b)	Kiasu negative -> Financial Knowledge	0.174		0.177	1.562	0.119	Not supported	
H2(a)	Financial Knowledge -> Rational	0.637		0.641	5.333	0.000	Supported	
H2(b)	Financial Knowledge -> Risk Aversion	0.423		0.427	3.162	0.002	Supported	
H2(c)	Financial Knowledge -> Herding	0.229		0.228	1.755	0.079	Supported	
H2(d)	Financial Knowledge -> Diversification	0.418		0.423	3.422	0.001	Supported	
H3(a)	Kiasu Positive -> Rational	0.149	0.368	0.147	1.362	0.174	Not supported	Mediator
H3(b)	Kiasu Positive -> Risk Aversion	0.083	0.245	0.084	0.495	0.621	Not supported	Mediator
H3(c)	Kiasu Positive -> Herding	-0.290	0.132	-0.284	-1.929	0.054	Supported	
H3(d)	Kiasu Positive -> Diversification	-0.004	0.242	-0.004	-0.032	0.974	Not supported	Mediator
H4(a)	Kiasu negative -> Rational	-0.148	0.111	-0.152	-1.363	0.173	Not supported	
H4(b)	Kiasu negative -> Risk Aversion	-0.196	0.073	-0.200	-1.370	0.171	Not supported	
H4(c)	Kiasu negative -> Herding	0.550	0.040	0.548	3.980	0.000	Supported	
H4(d)	Kiasu negative -> Diversification	0.066	0.073	0.063	0.517	0.605	Not supported	

Figure 3 : Direct and Indirect Effects

## 5.0 Discussion and implications

The findings of this study clearly showed that when left to their own, *kiasuism* would cause many Malaysians to follow the crowd when it came to investing. However, recognising the *kiasu* positive trait along with the intervention of financial knowledge acquisition would allow the positive aspects of investing behaviours to be reinforced. In this view, this study showed that when fear of failure and making mistakes were combined with a proper emphasis on hard work, diligence, meticulousness, and endurance to seek knowledge for investments, some positive aspects of investment biases could be promoted in making investment decisions (Freeze, 2017). In contrast, *kiasu negative* aspects of one's behaviour could lead to impulsive investing behaviour that is less rational and riskier.

### 5.1 Implication on the financial planning profession

An understanding and appreciation of Asian cultural values should be given some focus regarding the process of understanding clients. This may help financial planners to better assess the manner in which advice that they would communicate will be translated into prudent investing behaviours. Furthermore, they are provided with an

added dimension of observation to enhance their services to the client. Here, *kiasu* attitudes are a composite value that encompasses the elements of self-esteem, social intelligence, and personal attitudes towards money. Therefore, it may be more relevant for financial planning firms and practitioners to understand the fears and motivation felt by the clients to better assess how their advice would be translated into prudent investing behaviours. Moreover, ACV and financial knowledge acquisition can both reinforce investment behaviours, wherein financial planning certification curriculum could also be modified to be more inclusive and emphasise on how ACV can affect the behavioural aspects of financial planning. This will enable future financial planners to better understand their clients and enhance service delivery.

## 5.2 Implication on financial education

The effectiveness of financial knowledge development can be reinforced by understanding the values held by a recipient. In subjects such as financial planning wherein street smarts are just as important as academic knowledge in encouraging and reinforcing the proper behaviours, the content needs to promote real-life examples that emphasise Asian cultural values. In particular, the *kiasu* positive trait should be understood as a reinforcement in the delivery of financial facts in order to promote more effective investment practices.

In the Malaysian society, *kiasuism*, in general, may reside subconsciously in many individuals and inhibit potential participation in open discussions. As such, tailoring online courses and certifications for financial planning would make knowledge acquisition more discreet and personal with accessibility around the clock. In an online environment, knowledge sharing may also be viewed as less socially threatening.

## 5.3 Societal implications

This study shows that cultural values cannot be ignored in Malaysia. Although it is not generalisable, the study sample lend support to the fact that the composite Asian cultural trait of *kiasuism* is quite prevalent and common within the local community. Therefore, a culturally relevant financial education curriculum has the potential of further increasing the motivation and level of knowledge that Malaysians have, as well as increase their inclusion in the financial

capital markets. A more financially savvy Malaysian society would also be in line with the nation's plan to attain the developed nation status by 2030.

#### 5.4 Limitations

The respondents of this study are limited to Klang Valley, Malaysia. Due to ethical sensitivities, the effect of race and gender was not investigated, while some study scales showed a low AVE. However, the convergent validity was assessed via other alternative measures, such as Cronbach's Alpha, Dijkstra-Henseler's rho ( $\rho_A$ ), and Jöreskog's rho ( $\rho_C$ ); this did not violate the integrity of validity and model fit concepts. It further confirmed the ability of this nascent study in explaining the influence of *kiasuism* and financial knowledge in view of investment behaviour (Boorsdoom, Mallenbergh & Heerden, 2004; Buntins, Buntins & Egghart, 2017).

#### 6.0 Conclusion

The purpose of this study was to fill the knowledge gap and investigate the role played by *kiasuism* and financial knowledge of investing behaviours. It was thus found that financial knowledge served as a mediator between the *kiasu* positive cultural trait and investing behaviours of rational investing, risk aversion, and diversification. However, financial knowledge was not a mediator in the case of *kiasu* negative value and investing. Left on their own, *kiasu* individuals would practice herding behaviour. In conclusion, this study emphasises the important reinforcing role played by Asian cultural values on the promotion of positive investment behaviour. The implications extend the notion of better incorporation for Asian cultural values in enhancing the communication of financial advice and delivery of financial planning education on investment behaviours. In addition, understanding the influence of an implicitly prevalent cultural value such as *kiasuism* that transcends countries has the potential of bridging the gap and promoting a more financially inclusive Malaysian society in the quest towards achieving the developed nation status.

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