

## RESEARCH ARTICLE

# Customers' of savings rate and share of wallet: the moderating role of religion and ethnicity/immigrant generation vis-à-vis attitude as mediator

### ABSTRACT

This study explores the role of attitude towards money, religion and ethnicity in the relationship between income and consumer behavior. The three country (Australia, Canada and China) study sampled 755 consumers and uses structural equation modeling and multivariate analysis to test for mediating effects of attitude towards money and moderating effects of religion and ethnicity/immigrant generation. Religion is found to be a moderating variable for savings rate and share of wallet, whilst ethnicity/immigrant generation only moderates the association between income and savings rate. We also demonstrate the interaction effects of religion and ethnicity/immigrant generation with income as determinants of savings rate and share of wallet. This research provides the foundation for modeling savings rate and share of wallet, incorporating attitude, religion and ethnicity/immigrant generation, as well as income, demonstrating the need to include other factors to better identify, understand and strategically target consumer segments with potential for profitability and growth.

**Keywords** customer loyalty; savings rate; share of wallet; ethnicity; religion; intra-national diversity

## **Introduction**

There is convincing evidence that customer loyalty is driven by customer satisfaction, as established in the longitudinal study by Cooil, Keiningham, Aksoy, and Hsu, (2007). At the same, it has also been shown that the relationship between customer satisfaction and loyalty is non-linear (Baumann, Elliot, & Burton, 2012) indicating that other factors are also at play. Given that income has been identified as driving consumer behavior (Klaubert, 2010), it is expected that income might be one of these factors. In addition, in increasingly intra-nationally diverse Western markets such as the USA, UK, Australia and Canada, consumer segments may behave very differently depending on their ethnic and religious backgrounds or attitude towards money (Tung & Baumann, 2009; Baumann, Hamin, & Tung, 2012; Tung, Baumann, & Hamin, 2014). We further investigate the role of these intercultural factors in explaining consumer behavior (Tam, Sharma, & Kim, 2014), including customer loyalty. Our study extends the previous research in this area in three ways: ethnicity is more delicately segmented by the distinction between first and second generation immigrants; the moderating role of religion and ethnicity/immigration is contrasted with the mediating role of attitude; and savings rate and share of wallet are both examined.

Ethnic Chinese consumers have become an important market segment in Western markets. At the same time, the rapid growth of the Chinese economy makes it an attractive market, and understanding Chinese consumers is essential for businesses to be able to function and flourish there. Chinese consumers, both in China and overseas, constitute a massive market and growing market with increasing demand for services of all sorts, for example, travel, financial and entertainment.

What has become increasingly apparent, however, is that understanding Chinese consumers both overseas and within China requires more than simple cross-cultural

comparisons (Baumann & Hamin, 2013). The idea of static national cultures which are able to be simplified to allow straightforward comparison is becoming increasingly unfeasible (Fang, 2005; Pankhania, Lee, & Hooley, 2007). Intra-national differences need to be factored into any cross-cultural study (Tung, 2008; Tung & Verbeke, 2010). Although it has been suggested that China may have comparatively little intra-national cultural variation because of the conservative ('tight') nature of its culture, there has not been much research to clarify this (Au, 1999). In fact, it has been established (Hung, Gu, & Kim, 2007) that there is a generation breakdown of the Chinese population into 'Red Guard', 'Modern Realist' and 'Global Materialists' and there are meaningful differences in how these groups of consumers behave.

Thus, this study aims to investigate the relationships between income and savings rate and share of wallet for consumers in China, and as part of the diaspora in Australia and Canada, to determine the effect of attitude, ethnicity/immigrant generation and religious affiliation. Such diasporas have been shown to differ from resident country norms in terms of consumer behavior, for example Li, Zhou, Dymski and Chee (2001) and Bocian and Erns (2010) in relation to Chinese/Asian communities in the US. However, in Australian and Canada this divergence is mitigated by income, as consumer behaviour tends to converge at higher income levels (Tung et al., 2014). In addition, Tung et al.'s (ibid.) research indicates that the consumer behaviour within the diaposia can vary greatly, with the children of Chinese migrants perhaps moving towards Australian and Canadian cultural norms.

This a significant area of interest for marketers as the connection between share of wallet and profits has been clarified; i.e. the more business customers assign to a service provider, such as an airline, a retail store, a hotel chain, or a bank as in our study, the more profitable the firm will be. Whilst for fast moving consumer goods (FMCG) and durables a

key measure of customer loyalty is repeat purchases, for services the more relevant indicator of customer loyalty is share of wallet i.e. the percentage of overall business a customer allocates a service provider. The purpose of the study is to move beyond the idea of income as the primary driver of actual financial behavior, taking into account the role of intra-national cultural differences to explain consumer behavior, following Sharma and Wu (2015). Our approach to modeling is to test for both mediating (attitude) and moderating (religion and ethnicity/immigrant generation) effects in the relationship between income and financial behavior.

### **Theoretical foundation and model development**

This section reviews the literature that leads to the development of hypotheses and model proposed this study. The starting point is the obvious relationship between income, savings rate and share of wallet extending to the mediating role of attitude to money in this relationship. Next, the literature on intra-national cultural difference is explored and, in particular, religion and ethnicity/immigrant generation as cultural factors that influence financial behavior. Finally, the potential interaction effects of religion and ethnicity/immigrant generation in the relationship between income and saving rate and share of wallet are discussed.

#### ***Relationship between income, saving rate and share of wallet***

It is generally accepted that income is related to savings rate, such that higher income is associated with a higher rate of savings. This is supported by the work of Klaubert (2010), who found that wealth affected the amount of saving undertaken, with greater wealth associated with higher savings. In a related study in the retail banking sector, it was found

(Du, Kumakura, & Mela, 2007) that customers who have a large wallet and utilize a variety of financial services provide an opportunity for growth if marketed to appropriately. In addition, research has shown income level affects attitude towards money that in turn affects savings rate (Tung & Baumann, 2009), and other financial behavior, such as share of wallet (Baumann, Hamin, & Tung, 2012). Thus, our first hypotheses are:

H1: Income has a significant impact on savings rate mediated by attitude

H2: Income has a significant impact on share of wallet mediated by attitude.

### ***Intra-national cultural difference and consumer behavior***

Research has shown that financial behavior is not solely driven by income or even by income mediated by attitude, it is also affected by cultural factors, such as religion, ethnicity and immigration (Tung et al., 2014).

Understanding cultural differences is now recognized as an essential aspect of successful (international) business and strategic marketing, a change that began largely as a result of the seminal work of Hofstede in the 1980s (Hofstede, 1983; Hofstede, 1984; Hofstede & Bond, 1988). Studies of culture continue to be important for marketing research, as culture remains a significant influence on the behavior of individuals (Leung, Bhagat, Erez, & Gibson, 2005). Increasingly, culture cannot be simply understood as synonymous with nationality and instead needs to be studied in terms of “socio-economic-political variables” (2005, p.174). Culture is strongly linked to the economic development of nations. Economic development is as much a product of cultural change, as cultural change is a product of a changing economic environment (Granato, Inglehart, & Leblang, 1996). This implies that finance behavior and

culture are also inextricably linked such that cultural factors such as religion and ethnicity/immigrant generation will influence financial behavior.

In relation to religion, modernization and industrialization have historically been associated with secularization (Granato et al., 1996). Organic atheism (as opposed to the coercive atheism of countries such as North Korea) is strongly associated with countries with high levels of development and democracy such as Norway, Australia and Canada (Zuckerman, 2007). The situation is markedly different in China, where, although reliable data is hard to find, it appears that rapid industrialization has not been accompanied by the adoption of atheism. The 2007 Spiritual Life Study of Chinese Residents, undertaken in mainland China, found that although only 17.8% of respondents identified as having religious belief, ancestor worship, which Weber (2009) had identified as a feature which retarded the emergence of capitalism, remains commonplace (Horizon, 2007; Ryman & Turner, 2007).

Although the relationship between religion and modernity in China is ambiguous, it is clear that economic growth has changed the attitudes of Chinese people toward money. Even workers who earn very low wages prioritize saving (Barboza, 2010). While Chinese people do save to high rates, they are also increasingly engaging in the consumption of luxury goods, to a degree unimaginable a generation or two ago (Faure & Fang, 2008).

In relation to ethnicity and immigration, migrants experience economic conditions distinct from native residents of the country that they have migrated to. For example, in the United States, migrants generally experience economic disadvantage at a greater rate than native-born residents (Thamer, Richard, Casebeer, & Ray, 1997). In 2009 the median income of native-born Americans was \$50,503, while for foreign born residents it was \$43,923 (U.S. Census Bureau, 2010). However, the experiences of different migrant groups is varied,

immigrants of Asian descent had a median income in 2009 of \$65,469, almost 30% higher than the national average of \$49,777 (U.S. Census Bureau, 2010).

Culture, and the influence of culture on behavior needs to be understood as fluid and interrelated. Not only because culture changes over time, but also because the influence of culture is different in migrant communities in comparison to communities in the home country. There is considerable evidence that religion takes on new meanings through the process of migration, either because it provides a strong identity to anchor oneself to after a destabilizing or marginalizing migration experience, or because religion becomes representative of cultural heritage more generally, and so gains greater significance (Mohammad-Arif, 2007). Spending and saving have been shown to acquire new meaning in the context of South Asian migration to Britain, with consumption providing access to a sense of belonging as religious affiliation decreased in the Asian migrant population (Lindridge, 2005).

#### *Religion and consumer behavior*

Religion is an important aspect of culture, one which shapes many behaviors, including those related to savings and consumption, including the allocation of business or, in short, loyalty. Religious affiliation and religiosity affect demographic and economic outcomes including age of marriage and probability of divorce, adherence to traditional gender roles in work inside and outside the home, and the level of education received (Lehrer, 2004). However, the link between religion and asset accumulation is not simple. In the case of American Conservative Protestants, religion influenced economic outcomes firstly through demographic factors related to religion including low levels of education and large family size, and secondly

through attitudes toward money which encouraged tithing and avoiding accumulating money and assets (Keister, 2008).

Kumar, Page, and Spalt (2011) demonstrated the importance of religious attitudes on financial behaviors by showing that the attitudes of Protestants and Catholics in the United States to gambling transferred to gambling-like speculative behaviors on the stock market. In a Dutch context, religious households generally are more likely to save than non-religious households, and contrary to Kumar et al.'s findings in the US, Catholics are more risk-averse than Protestants, demonstrating the importance of country-specific data (Renneboog & Spaenjers, 2012).

Klaubert has found that, in the US at least, higher religiosity is associated with higher rates of saving (Klaubert, 2010). However, the link between religion and savings is more complex than might be suggested when looking at religiosity alone, with fewer of the non-religious sample saving than the religious on average, but those who do save, save a larger amount (Klaubert, 2010).

Overall, the literature indicates that religion does have an effect on financial behavior, albeit a complex one. Thus, we propose two further hypotheses:

H3: The significant relationship between income and savings rate is moderated by religion

H4: The significant relationship between income and share of wallet is moderated by religion.

#### *Ethnicity, immigration and consumer behavior*

An aspect of many countries which challenges a simple understanding of nationality as synonymous with culture is the significant migrant populations present. The Chinese-American community historically have proven themselves to be both safe and loyal clients



(Li et al., 2001). In the recent banking crisis in the US, Asian owners experienced very low rates of foreclosure, second only to non-Hispanic White owners (Bocian & Erns, 2010). Ethnic banking services, with customized products and services, have developed to meet the needs of migrant communities, as practitioners are beginning to understand that ethnic groups have different product and service preferences (Li et al., 2001). Ethnic, foreign owned, and domestic banks need to be able to market to this population appropriately in order to gain the largest share of wallet (Shanmuganthaan, Stone, & Foss, 2004). A recent study has also looked at Chinese consumers, this time in relation to car preferences (Hamin, Baumann, & Tung, 2014) and that study too included three sub-segments per country market, including within China. In another recent study on preferences for Premium Generic Brands (PGB) it was demonstrated that Chinese are indeed a unique segment in comparison to Caucasians (Baumann & Hamin, 2014).

Further, immigrant generation affects economic behavior. The first and second generations of the children of migrants have been demonstrated by earlier studies to be somewhat between their parents' behaviors, and the behavior of the native born population. The degree to which the attitudes of migrants and their children towards saving remain different from the longer established population demonstrates the importance of identifying these groups within any sample (Chai, Deans, & Biggemann, 2012; Tung & Baumann, 2009). Although South Asian British migrants tended to retain savings patterns close to their own culture with regards to pensions, their British-born children tended to invest in pensions schemes to a greater extent than their parents (Burton, 1996). The savings rates of the children of Chinese migrants in Australia and Canada were the most varied in a study of Chinese in China, Chinese born in Australia and Canada, and Caucasians born in Australia and Canada (2009). The range of savings rates of the Chinese in Australia ranged from zero

to 68.33% and those in Canada ranged from 25% to 61.67%, whilst Chinese in China was narrow, with less than 15% difference between the highest and lowest rates (2009).

There is currently limited research on the extent to which these differences continue after the first generation of children. However, if the children of migrants are moving away from the attitudes of their parents, it seems logical that they would be moving toward the norms of the country in which they were raised.

Tung et al. (2014) also looked at the cross-cultural management of money with a focus on the roles of ethnicity, religious affiliation and income levels in asset allocation. Tung and her colleagues established that for higher-income earners, asset allocation decisions converged in spite of differences in ethnic and religious background. In the low income bracket, asset allocation decisions varied along ethnic lines. Such differences were compounded by religious background.

Overall, the literature indicates that different ethnic groups and generations within ethnic groups represent identifiable market segments that behave differently. Thus, we propose two more hypotheses:

H5: The significant relationship between income and savings rate is moderated by ethnicity/immigrant generation

H6: The significant relationship between income and share of wallet is moderated by ethnicity/immigrant generation.

### *Interaction effects*

Lastly, as has been established in the literature review, the relationships between income and religion and income and ethnicity/immigrant generation in relation to savings rate and share of wallet are complex. Since the effect of income on savings rate and share of

wallet is likely to vary depending on religion and ethnicity/immigrant generation there is likely to be an interaction effect between the variables (Andersson, Cuervo-Cazurra, & Nielsen, 2014). The research seeks to establish whether an interaction effect exists and also whether the effect of religion and ethnicity/immigrant generation is positive or negative (Cohen et al., 2003). Thus, we propose four additional hypotheses which combine the dimension of 'income' with the moderators religion and ethnicity/immigrant generation to examine the interaction between them:

H7: There is significant interaction effect between religion and income on savings rate

H8: There is significant interaction effect between religion and income on share of wallet

H9: There is significant interaction effect between ethnicity/immigrant generation and income on savings rate

H10: There is significant interaction effect between ethnicity/immigrant generation and income on share of wallet.

In summary, we propose the hypothetical model (Figure 1) showing the associations between income and savings rate and share of wallet mediated by attitude, extended to include religion and ethnicity/immigrant generation as moderators on the relationships between income and savings rate and share of wallet.

**Figure 1. Hypothetical model.** (Insert near here.)

## **Methodology**

### ***Questionnaire design***

The questionnaire consisted of questions related to the variables as shown in Table 1. Following Petrescu (2013), the variables are mainly demographic data (income, religion, ethnicity/immigrant generation) and single item constructs (saving rate and share of wallet), requiring closed responses as shown in the table. The only multi item construct is attitude, which consists of three items with responses indicated on a scale of 1-7. In order to test the reliability of this construct the Cronbach Alpha was calculated and the test result (0.867) indicated good reliability according Hair et al. (2006). In addition, the factor loadings of each of the three questions within the construct were also calculated and the results (0.893, 0.897 and 0.876) were all high, indicating a robust construct with no disproportionate contribution by any of the three items.

**Table 1. Variables and related questions.** (Insert near here.)

### ***Sample population***

The sample size for the study was 755. The population was just about equally split between males (377) and females (378). In terms of income, three categories were used: low income – up to AUD17,000 p.a. (329), middle income – up to AUD80,000 p.a. (299), and high income – AUD>80,000 p.a. (129). There were 478 religious and 277 non-religious respondents. The sample was further grouped into four categories in relation to the respondent's ethnic background and generation of immigration: the Chinese in Mainland China (322), the first (63) and the second (46) generation Chinese immigrants in Australia/Canada, and the Caucasians in Australia/Canada (324).

### ***Data collection***

In order to test the hypotheses of this study a questionnaire was designed and administered (in English and Chinese) to consumers in three countries, Australia, Canada and China. In selecting Australia and Canada, we follow Tung and her colleagues in choosing countries that

have not only had significant migration from the county of origin, China, but also where the ethnic Chinese population is notable for its economic success (Tung & Bauman, 2009; Baumann, Hamin, & Tung, 2012; Tung et al., 2014). The English version of the questionnaire was pre-tested among a sample of thirty respondents, both ethnic Chinese and Caucasian, in Australia and Canada. The Chinese version was tested for accuracy using the back-translation technique. The questionnaire was administered online utilizing a panel provided by a professional data collection company to gain access to the population of respondents.

## **Results**

### ***Model assessment***

In this study structural equation modeling (SEM) was applied to specify fit measurements of a baseline model before testing moderation effects (Table 2). The maximum likelihood estimation procedure was used (AMOS 17.0) to assess the relationships among income, attitude towards money, share of wallet and savings rate. The general convention to assess model fit statistics is to report the model chi-square, significance tests and other indices (Bollen, 1989; Hu & Bentler, 1998; Jarvis, MacKenzie, & Podsakoff, 2003). There was no evidence that the model does not fit the data (Table 2). Specifically, the baseline model shows a good fit:  $\chi^2 = 9.450$ , p-value = 0.150, df = 6,  $\chi^2/df = 1.575$ , Root Mean Square Error of Approximation (RMSEA) = 0.028, Goodness of Fit Index (GFI) = 0.996, Confirmatory Fit Index (CFI) = 0.997. In sum, all fit indices are better than the cut-off values such as a p-value of  $\chi^2 > 0.05$ , RMSEA  $\leq 0.05$ , GFI  $> 0.90$ , CFI  $> 0.95$ , and  $\chi^2/df \leq 5$  (1989; 2003).

In order to determine, firstly, whether attitude is a mediator and, secondly, religion and ethnicity/immigrant generation are moderating variables on the associations between income and savings rate and share of wallet as hypothesized, this study applies the Moderated

Regression Analysis (MRA) (Sharma et al., 1981; Bagozzi & Yi, 1989) where first the baseline model is compared to the moderation model (Table 2).

**Table 2. Baseline and moderation model.** (Insert near here.)

### *Attitude as mediator*

Attitude towards money was significantly associated with savings rate in both the baseline and in the moderation model, but was not significantly associated with share of wallet in either model (Table 2). Thus, attitude acts as mediator variable for savings rate (H1), but not for share of wallet (H2) (MacKenzie, Lutz, & Belch, 1986; Wu & Zumbo, 2008).

### *Religion and ethnicity/immigrant generation as moderators*

As shown in table 2, the significant association between the multiplicative term ‘income \* religion’ and savings rate ( $p=0.058$ ) and share of wallet ( $p < 0.001$ ) provides evidence of a moderating effect of religion on the association between income and savings rate and share of wallet as hypothesized in H3 and H4. In contrast, the association between income and savings rate ( $p=0.382$ ) and share of wallet ( $p=0.365$ ) was not significant in the baseline model. There is a significant association between the multiplicative term ‘income \* ethnicity/immigrant generation’ and savings rate ( $p < 0.001$ ), but a non-significant association between the same multiplicative term and share of wallet ( $p = 0.946$ ), suggesting that there is a moderating effect of ethnicity/immigrant generation on the association between income and savings rate, but not on share of wallet. This finding provides support for H5, but not for H6.

### *Multivariate analysis*

The sub-groups of religious and non-religious, and the four ethnicity/immigrant generation sub-groups, were analyzed in combination with the income sub-groups (i.e. low, middle and high). In essence, the multivariate testing thus combined the dimension of ‘income’ with the moderators religion and ethnicity/immigrant generation. The magnitude effects of the

moderators are shown in table 3. The columns present the relationship between the income levels and savings rate as well as share of wallet across the moderators religion and ethnicity/immigrant generation.

As table 3 shows there is a significant interaction effect between religion and income ( $p=0.008$ ) and also between ethnicity/immigrant generation and income on savings rate ( $p<0.001$ ). In contrast only mild support was found for a significant interaction effect between ethnicity/immigrant generation and income on share of wallet ( $p=0.061$ ). At the same time, no support was found for a significant interaction effect between religion and income on share of wallet ( $p=0.926$ ). Thus, of the four interaction hypotheses (H7-H10) three are supported but one (H8) is not supported. The mean values for the interaction effect between religion and income and also between ethnicity/immigrant generation and income on savings rate and share of wallet from table 3 are plotted for each income group and discussed in Figure 2 below.

**Table 3. Multivariate Analysis on the Interaction of Income – Religion and Ethnicity/Immigrant Generation Groups.** (Insert near here.)

## **Discussion**

The purpose of this study was to examine the role of income on savings rate and share of wallet as mediated by attitude and moderated by religion and ethnicity/immigrant generation. Ten specific hypotheses were formulated based on the literature review, and were supported or not supported as shown in table 4.

**Table 4. Summary of hypotheses and results.** (Insert near here.)

As can be seen from table 4, although attitude mediates the significant relationship between income and saving rate (H1) the same cannot be said for the relationship between

income and share of wallet (H2). Thus, income and attitude together explain how much someone saves and, conversely and importantly, how much they spend as a percentage of income. However, share of wallet is not reliably explained by income and attitude.

In relation to moderating effects, the relationship between income and savings rate is moderated by both religion (H3) and ethnicity/immigrant generation (H5). This also means that the amount someone spends is affected by both religion and ethnicity/immigrant generation. Just as the relationship between income and share of wallet was not moderated by attitude, it could not be explained in terms of ethnicity/immigrant generation having a moderating effect (H6). However, a significant moderation effect was demonstrated between income and share of wallet allowing for the effect of religion (H4).

The combined effects of income and religion and income and ethnicity/immigrant generation on savings rate and share of wallet were further hypothesized as interaction effects (H7-H10). The mean values for each income group for each hypothesis are presented graphically in Figure 2.

**Figure 2. Interaction between income, religion and ethnicity/immigrant generation.**  
(Insert near here.)

Figure 2 (chart A and B) shows the effect of the interaction of income and religion and income and ethnicity/immigrant generation in terms of different savings rates (H7 and H9). For the low income group both the religious as well as the non-religious groups save very similar percentages of their (low) income. The effect of 'religion' is stronger for the middle income group where the religious group saves approximately 35% of their income in contrast to about 27% for the non-religious group. The strongest effect of 'religion' was found for the high income earners where in fact the impact is now reversed, i.e. the religious group saves less (only about 25%) than the non-religious group (36%).



The non-religious group may, at least in the mid and low income bracket, pursue more hedonistic values and as such spend more on entertainment and everyday materials, whereas the religious group may be more thrifty. They spend less and save more, possibly because they pursue higher spiritual targets. For the high income bracket, where the non-religious respondents save significantly more than the religious group (chart A), a substantial proportion of the non-religious high income earners have a Chinese background. This conclusion is further supported in the analysis of chart C that shows that the savings rate of the Chinese is generally high. This may be due to the different cultural mores of two very different cultural groups. That is, the Chinese as a culture, known to be frugal and have strong tendencies towards savings to provide security for the family unit, in contrast to Caucasians raised under very different conditions. On other hand, the low savings rate for the religious high income segment is very low (chart A), and this group is mostly made up of Caucasians, where chart C confirms their low savings rate. In terms of share of wallet (Chart B), whilst there is a difference between the religious and non-religious groups in terms of savings rate, the difference is not significant (H8). In relation to ethnicity/immigrant generation (Chart D), the interaction effect is significant.

Overall, figure 2 supports the discussion in the literature review that religion (Keister, 2008; Tung et al., 2014) and ethnicity/immigrant generation (Tung et al., 2014) influence financial behavior. More specifically, being religious is associated with higher rate of saving for low and middle income groups (chart A) as per Kumar et al. (2011) and Klaubert (2010) and greater loyalty (chart B). For both savings rate (chart C) and share of wallet (chart D) different ethnicity/immigrant generation groups behaved differently. This supports the findings of Tung and Baumann (2009) in relation to savings rate and Baumann, Hamin and Tung (2012) in relation to share of wallet.

### ***Implications for practice***

Our research supports the generally accepted principle that savings rate is related to income. However, we demonstrate that attitude, religion and ethnicity/immigrant generation play significant roles in the relationship between income and savings. From a financial services marketing perspective, the motivation is to increase the savings rate of their customers, since this will lead to more deposits, assets under management and ultimately higher profits. In contrast, for all other consumer marketing (FMCG and durables) the motivation is to decrease savings rate to increase consumer spending. Either way, marketing practitioners need to use attitude, religion and ethnicity/immigrant generation to more effectively profile customers to identify segments to target.

Our model is less powerful in explaining share of wallet, with seemingly contradictory results. However, given the importance of share of wallet to profitability, marketing practitioners can use the findings of the study to inform their understandings of customer behavior as influenced by religion and ethnicity/immigrant generation in conjunction with income. For example, religion makes a difference to savings rate for low and middle income earners. However the difference is smaller for high income earners, who are less loyal in comparison regardless of religion.

Overall, our study provides empirical support for the conceptual framework proposed by Poulis, Poulis and Yamin (2013). In particular, the intra-national (ethnic) diversity as modeled in our study calls for the replication, tailoring and invention of services to minority populations specified in their framework (2013).

### ***Implications for theory***

Future modeling of savings rate and spending ought to take into account the role of attitude, religion and ethnicity/immigrant generation as well as income. Whilst our study provides a

starting point in modeling a more complex relationship between income and share of wallet, further research is required to more precisely understand the actual mechanisms involved with more precision. For example, a recent study has established the explanatory power of Confucian consumer behavior components (CCBC) for brand category choice as roughly 18% (Yao, Baumann, & Peng, 2015). Thus, Confucian values such as face saving, humility, group orientation, hierarchy and reciprocity are likely to influence financial behavior, as well as how all services are consumed and consumer behavior generally. In addition, future models could explore the interplay of Confucianism with ethnicity/immigrant generation. That is, whether Confucian values are affected by ethnicity/immigrant generation and, in turn, whether this affects consumer behavior. In relation to religion, there is potential to extend the modeling with regards to not only which religion is followed, but also the extent to which the consumer practices and/or believes.

## **Conclusion**

In this study we looked at the factors that explain differences in how religious and non-religious groups as well as different ethnic/immigrant generation groups handle their savings and how they allocate their money to banks. Our overarching hypothesis was that the associations between income and savings rate and share of wallet are moderated by factors of societal change, namely religion and immigration. Thus, these intra-national cultural factors influence financial behavior and are therefore a basis for customer segmentation

Marketing practitioners can now better segment markets and fine-tune products, services and promotion campaigns based on our findings. This is key in Western markets with high level of intra-national diversity, but also in emerging markets such as China with enormous potential for Western (and local) service providers. Both markets are complex when it comes to market segmentation, as our study shows.

A key aspect of our study was the sampling of immigrant minorities. The samples of first and second generation immigrants were small in comparison to the non-immigrant groups. This reflects recognized problems in sampling minorities in relation to ability to locate and language/cultural issues (Baumann, Hamin, & Tung, 2012). Overall, whilst all the individual cells exceeded the generally accepted rule of thumb of 30 and statistical conventions have been followed, ideally the immigrant groups would be closer to the non-immigrant groups in size. This is an area where our study could be more robust. An additional approach for future research would be to use secondary data from service providers as evidence of consumer behavior to verify the moderating and mediating effects identified in this paper. Naturally, the challenge of this approach would be to gain access to the secondary data in combination with data in relation to income, religion and ethnicity/immigrant generation.

Overall, the results of our study provide a framework for a broader understanding of the roles of religion and ethnicity/immigrant generation in the formation of saving behavior and customer loyalty, and therefore provide a basis for future customer loyalty research for other immigrant and religious groups.

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## Tables

**Table 1. Variables and related questions.**

| Variable                           | Question   | Response type                    | Source                         |
|------------------------------------|--|----------------------------------|--------------------------------|
| Attitude                           | Success (i.e. money and status) is very important to me.   | Scale 1-7                        | Tung and Baumann, 2009         |
|                                    | Material things (i.e. house, car, luxury branded goods) are very important to me.  |                                  |                                |
|                                    | Money is important to me.  |                                  |                                |
| Share of Wallet                    | Approximately what proportion of your total financial assets (e.g. accounts, shares or bonds, but excluding property or registered retirement savings) are held with your main bank? | Percentage                       | Baumann, Hamin, and Tung, 2011 |
| Savings Rate                       | What percentage of your annual net income is set aside as savings?   | Percentage                       | Tung and Baumann, 2009         |
| Income                             | What is your approximate gross income per annum from all sources, including pensions and allowances?   | Amount                           | Tung et al. 2014               |
| Religion                           | What is your religious belief?   | Selection from list plus "other" |                                |
| Ethnicity/<br>immigrant generation | What is your ethnic background, regardless of your citizenship?  | Selection from list plus "other" |                                |
|                                    | In which country were you born?*   | Selection from list plus "other" |                                |

Note: \*New question for this study to capture immigrant generation.

**Table 2. Baseline and moderation model.**

| Relationship                              |   |                 | Baseline model  |                |              | Moderation model  |                |              |
|---|---|-----------------|---|----------------|--------------|---|----------------|--------------|
|   |   |                 | Estimate  | Standard Error | P-value      | Estimate  | Standard Error | P-value      |
| Income                                    | → | Attitude        | 0.357   | 0.422          | 0.397        | 0.094   | 0.036          | <b>0.008</b> |
| Attitude                                  | → | Savings Rate    | 5.962   | 1.290          | <b>0.000</b> | -7.747  | 2.126          | <b>0.000</b> |
| Income                                    | → | Savings Rate    | -6.254  | 7.148          | 0.382        | -72.060   | 10.132         | <b>0.000</b> |
| Attitude                                  | → | Share of Wallet | -0.866  | 1.478          | 0.558        | -1.542  | 1.319          | 0.242        |
| Income                                    | → | Share of Wallet | -6.727  | 7.427          | 0.365        | -8.240  | 4.274          | <b>0.054</b> |
| Income*Religion                           | → | Share of Wallet |   |                |              | 26.803  | 4.092          | <b>0.000</b> |
| Income*Religion                           | → | Savings Rate    |   |                |              | 3.274   | 1.726          | <b>0.058</b> |
| Income*Ethnicity/<br>Immigrant generation | → | Share of Wallet |   |                |              | -0.025  | 0.370          | 0.946        |
| Income*Ethnicity/<br>Immigrant generation | → | Savings Rate    |   |                |              | 6.300   | 0.877          | <b>0.000</b> |
| R-squared                                 |   |                 | Attitude = 0.051, Savings Rate = 0.982, Share of Wallet = 0.966   |                |              | Attitude = 0.012, Savings Rate = 0.998, Share of Wallet = 0.951   |                |              |
| Model fit                                 |   |                 | $\chi^2 = 9.450$ , p-value= 0.150, DF = 6, $\chi^2/df = 1.575$ , GFI = 0.996, CFI = 0.997, NFI = 0.992, RMSEA = 0.028 |                |              | $\chi^2 = 29.325$ , p-value= 0.004, DF = 12, $\chi^2/df = 2.444$ , GFI = 0.971, CFI = 0.992, NFI = 0.987, RMSEA = 0.044 |                |              |

**Table 3. Multivariate Analysis on the Interaction of Income – Religion and Ethnicity/Immigrant Generation Groups.**

Chris I have added column labels as discussed and switched the order of the SR columns and the SOW columns to match the order in the hypotheses and figure 1, Would you spot check the numbers are in the right place?

|   | Savings rate              |           |               |           |             |           | Share of wallet        |           |               |           |             |           |
|---|---------------------------|-----------|---------------|-----------|-------------|-----------|------------------------|-----------|---------------|-----------|-------------|-----------|
|   | Low income                |           | Middle income |           | High income |           | Low income             |           | Middle income |           | High income |           |
|   | Mean                      | Std error | Mean          | Std error | Mean        | Std error | Mean                   | Std error | Mean          | Std error | Mean        | Std error |
| <b>Religion</b>                               |                           |           |               |           |             |           |                        |           |               |           |             |           |
| Religious                                     | 32.92                     | 1.881     | 35.25         | 2.198     | 25.22       | 3.06      | 77.01                  | 3.175     | 76.14         | 3.71      | 68.04       | 5.166     |
| Non-religious                                 | 31.79                     | 2.036     | 27.09         | 2.502     | 35.90       | 4.055     | 72.96                  | 3.436     | 70.56         | 4.224     | 66.43       | 6.845     |
|   | <i>P-value = 0.008</i>    |           |               |           |             |           | <i>P-value = 0.926</i> |           |               |           |             |           |
| <b>Ethnicity/immigrant generation</b>         |                           |           |               |           |             |           |                        |           |               |           |             |           |
| Chinese in China                              | 31.26                     | 1.363     | 39.51         | 1.753     | 48.92       | 3.696     | 73.25                  | 2.301     | 69.21         | 2.959     | 67.05       | 6.239     |
| First generation Chinese in Australia/Canada  | 39.18                     | 3.468     | 30.74         | 3.759     | 31          | 5.273     | 74.38                  | 5.854     | 86.41         | 6.345     | 64.29       | 8.9       |
| Second generation Chinese in Australia/Canada | 44.88                     | 3.605     | 43.23         | 4.863     | 26.6        | 7.534     | 82.05                  | 6.085     | 61.25         | 8.209     | 65.5        | 12.717    |
| Caucasian                                     | 14.1                      | 1.961     | 11.2          | 1.874     | 15.7        | 2.242     | 70.26                  | 3.31      | 76.54         | 3.164     | 72.1        | 3.785     |
|   | <i>P-value &lt; 0.001</i> |           |               |           |             |           | <i>P-value = 0.091</i> |           |               |           |             |           |
|   | R-squared = 0.332         |           |               |           |             |           | R-squared = 0.061      |           |               |           |             |           |

**Table 4. Summary of hypotheses and results.**

|  |               |
|--|---------------|
| H1: Income has a significant impact on savings rate mediated by attitude   | Supported     |
| H2: Income has a significant impact on share of wallet mediated by attitude  | Not supported |
| H3: The significant relationship between income and savings rate is moderated by religion                          | Supported     |
| H4: The significant relationship between income and share of wallet is moderated by religion                       | Supported     |
| H5: The significant relationship between income and savings rate is moderated by ethnicity/immigrant generation    | Supported     |
| H6: The significant relationship between income and share of wallet is moderated by ethnicity/immigrant generation | Not supported |
| H7: There is significant interaction effect between religion and income on savings rate                            | Supported     |
| H8: There is significant interaction effect between religion and income on share of wallet                         | Not supported |
| H9: There is significant interaction effect between ethnicity/immigrant generation and income on savings rate      | Supported     |
| H10: There is significant interaction effect between ethnicity/immigrant generation and income on share of wallet  | Supported*    |

Note: \* significant at 10 percent level.

**Figure captions**

**Figure 1. Hypothetical model.**

**Figure 2. Interaction between income, religion and ethnicity/immigrant generation.**