

Asset Allocation Decisions for Private Banking Clients: A China Experience

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Abstract: Building on Markowitz's seminar study (1952,) studies on asset allocation decisions by investors typically focus on the efficient frontier from a mean-variance perspective. Given the efficient set, investors shall choose according to their risk-return preference represented by a utility function, typically resulting an asset allocation choice in the form of linear combination between cash, which is riskless, and the "optimal" combination of risky assets (Tobin, 1958.)This study looks at how different types of investors actually make their asset allocation decisions. Based on evidence obtained from private bankers who manages wealth for High Net Worth Individuals (HNWIs,) and private banking client classification in Chung (2014,) we found evidence which suggests that asset allocation decisions made by this group is rather different from that proposed in the literature.

Key words: Asset Allocation, Diversification, Investment Decisions, Portfolio, Portfolio Choice, Private Banking.

JEL: G11, G21

1. Introduction

Since Markowitz's seminar study (1952) a plethora of research has been devoted to the studying of asset allocation decisions by investors. Since then, studies including Brinson et. al (1986), Brinson et. al (1991), Bogle (1994) and others have found evidence supporting the view that asset allocation decision represents a main determinant to portfolio

performance.

To obtain an understanding of how asset allocation decisions are made, theoretical models on asset allocation decisions are typically developed based on specific objective function assumed, which describes the investor's willingness to accept higher risk in exchange for higher return, Sharpe (1987, 2007). The use of a specific objective function, be it of the power utility type (Lynch 2001) or the Epstein-Zin recursive type (Campbell et. al 2001) however, is likely to be unsatisfactory when applied universally to investors of different market segments.

This paper examines how asset allocation decisions are made for the different categories of private banking clients among asset classes. Private banking clients are of research interest not only because their investment preferences are not well understood, partly due to the "private" nature of private banking, but also that they represent a significant and growing segment in the market, Chen (2008), Dufey (2009), Lye (2011) and Chung et. al (2014.) Furthermore, the very nature of private banking clients, who are typically high net worth individuals (HNWIs,) also appear to have characteristics that satisfy assumptions used in Sharpe (1997,) i.e., "Asset only" analyses with liabilities equal zero, and Campbell and Viceira (1999), Campbell, et. al (2003), i.e., long-horizon analysis.

Using survey data from private bankers collected based on prior frameworks, Chung et. al (2014) segmented private banking clients using the source-of-wealth approach and arrived at the 4Es of private banking clients model; *Endowed, Entertainers, Executives* and *Entrepreneurs*. This classification allows researchers to look into how the different private banking client groups may actually make asset allocate choices that are different from one another given the same asset classes. The result not only represents a contribution to the understanding to a fundamental issue in the asset allocation, but also insights to the little understood world of private banking.

Section 2 of this paper reviews the nature of asset allocation, especially, along the basic asset classes – cash, bonds and equity. Section 3provides an overview of the business of private banks and the behavioral characteristics of private banking clients. Sections 4 and 5 shall review the behavioral characteristics of the different private banking client groups, i.e., the *Endowed*, *Entertainers*, *Executives*, and *Entrepreneurs*, and, more importantly, how the behavioral characteristics affect their preferences towards certain asset class in their asset allocation decisions. Section 6 describes the data for this study, and section 7 examines the evidence. Section 8 concludes the study.

2. The Nature of Asset Allocation in Wealth Management

Markowitz (1952, 1959) was among the first to look into asset allocation decisions by investors. Since then, a key component of the modern portfolio theory is the attaining of an "optimal" combination of two risky assets, i.e., bond and equity, based on their mean-variance characteristics. The resulting mean-variance combinations form a frontier that is said to be efficient.

Tobin (1958) extended the theory and looked into the inclusion of investing into a risk-free asset, i.e., cash. According to Tobin, all investors, conservative or otherwise, are to hold the sameoptimal portfolio of bonds and equity. In the meantime, investor's risk-return preference is revealed by the cash position in relations to risky assets. More (less) cash will be held for investors that are more (less) risk averse. Asset allocation will, in this case, be based on all linear combinations between the risk-free asset and a unique efficient portfolio of risky assets. Given this linear combination set, an investor shall make asset allocation decision according to his/her preference described by the utility function, U,

 $\mathbf{U}=\mathbf{u}(\mathbf{r}_{i},\,\mathbf{s}_{i}.),$

where $u(r_i, s_i)$ is a function driven by the return, r_i , and risk, s_i , of the respective asset i, i = 1, 2... n, with varied mathematical form (Lynch 2001, Campbell et. al 2003.) With the specification of the investor's preference out of the way, empirical analysis of optimal portfolio choice for investors can now conveniently focus on optimization from a mean-variance perspective.

This approach ignored several critically important factors. Campbell et. al (2003) point out that this type of analysis assumes that investors decisions are static in nature and fail to consider the need to finance a stream of consumption over a long life time, while Sharpe (2007) suggests the need to take into account of different investor preferences – hence, his proposing a reverse optimization approach. Indeed, to date, few studies have examined whether and how allocation decisions are different among investor groups. With investment clients frequently subdivided into different market segments in reality, and financial institutions effectively provide tailored advice to each of the client segment, this represents a significant void in the literature. The next section looks into the world of private banking and how private banking clients are segmented to allow private banks to provide effective advice.

3. Private Banking and Private Banking Clients

The world of private banking is little known, let alone understood by most finance practitioners as well as finance academics. Privacy represents a key to the nature of this branch of banking. This branch of banking has also been largely neglected by the creation of *Glass-Steagall Act* in the U.S. which created a banking structure that focuses on two types of banking business – commercial (or retail) banking and investment banking (Koch et. al, 2014.) With the study of commercial and retail banking focusing on the nature and operation of these banks as well as the implication of monetary economic policies on these institutions well covered (Mishkin, 2012,) studies on investment banking have also been well examined, in the investment area (Smith, 1986, Bodie et. al, 2013) and corporate finance literature (Brealey et. al, 2103)/

In contrast, studies in private banking, has been scarce. Even though the practice of private banking dates back as far as the seventeenth century in Europe (Maude et. al, 1996) private banks are frequently understood to be banks that are non-public sector banks (Reddy, 2011,) rather than banks that offer services only to selected high net worth (HNW) clients. Indeed, a policy definition of private banking in the U.S. only came into place in 1997 when the Federal Reserve issues a Supervisory Letter (SR97-19) on the definition and nature of private banking (Atz, 1999.) Since then, the practice of private banking have received more attention in the literature (Molyneux and Omarini, 2005, Maude, 2006, Rudolf, 2008, Dufey, 2009, Lye, 2011, and Rudolf and Baedorf, 2011,) as the level of private banking activities increases over time in the market place in the U.S., with the trend also spreading to Asia, (Chen, 2008, Long and Tan, 2010.)

Chung et. al (2014) provided further insights to the practice of private banking by (1) identifying the behavioral characteristics of private banking clients from a survey based on Maude (2006,) Dufey (2009) and Lye (2011,) as well as

(2) effectively segmenting these clients into four categories arriving at the 4E model of private banking clients i.e., the *Endowed*, *Entertainers*, *Executives*, and *Entrepreneurs*, based on the source-of-wealth approach.

With the distinct categories from the segmentation in Chung et. al (2014,) the private banking clients provides an ideal opportunity to address the asset allocation issues raised in Campbell (2001,) and Sharpe (2007) above.

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4. Asset Allocation Decisions with Basic Asset Classes

Following the classic approach by Tobin (1958), we shall consider asset allocation decisions by private banking clients on the three basic asset classes – cash, bonds and equities. In addition to the three basic asset classes, there are other asset classes, such as real estates and commodities, which can be considered in a client's portfolio. However, as these typically form a small portion of a typical client's portfolio, they shall be considered as outside of the scope of this paper.

The Role of Cash as an Asset Class

Cash as an asset class does not mean money for consumption purposes, nor money set aside for emergency. Cash as an asset class refers to the money that is part of the client's investment strategy, only that it has not been invested, in the meantime, for its liquid, non-volatile and flexible nature. A strategy to over-weight cash typically entails inflation risk to the portfolio and may generate costs in the form of opportunity foregone.

The Role of Bonds as an Asset Class

Many investors believe that bonds can play an important role as an asset class with its ability to generate a higher long-term return, when compared to cash, or preserve capital, when compared to equity. As such, bonds can play an important role in a properly diversified investment portfolio, and they can also be a way to help add some relatively predictable income over time Campbell et. al (1999).

The Role of Equity as an Asset Class

Equity investment represents money invested in a company in the form of ownership. Under this scenario, investors can recover their investment either through dividends received from the company and/or when they sell their shareholdings, or when the assets of the firm are liquidated and proceeds distributed among them after satisfying the firm's debt obligations. As such, there are significant risks associated with equity investment. On the other hand, as part owners, equity investors can enjoy the benefit of earnings and earnings growth that may be result yields that are over and beyond those of bonds, (Seigel, 2002.)

Given the same opportunity set with the same three asset classes; cash, bonds and equities, different private banking clients are expected to have different allocation based on their preferences. In general, a conservative investor with an "income-orientation" would have a long-term allocation that is biased towards cash and bonds, while a relatively more aggressive investor with a "growth-orientation" would have a more significant allocation towards equities.

These preferences are to be revealed by the private banking client to their respective private banker who shall then formally document the decision on the allocation to each of the asset classes into an agreement, frequently known as the "Investment Mandate," or simply the mandate. Hence, the allocation in accordance to the mandate would represent a proxy to the optimal allocation given the opportunity set and the client's risk-return preference.

5. Asset Allocation Preferences of Private Banking Clients

In order to study the allocation decisions by the different groups of private banking clients, we shall use the 4Es model as described in Chung et. al (2014). In their paper, the *Endowed* is defined as the group of clients whose wealth are inherited. As the wealth is accumulated over a long period of time and is of a multi-generations nature, the future outlook for the wealth in this category is expected to be stable and long term in nature. As such, Chung et. al (2014) concluded that a key objective for this group is wealth preservation and maintenance. Matching this orientation with the basic asset classes, it is likely for us to observe significant allocation towards asset class that displays a lower risk profile than it risky counterpart, as such, we hypothesize that:

H1: The Endowed will have more assets allocated towards bonds as an asset class than equity.

In the paper, a second category of private banking clients examined is labeled *Entertainers*, which include sports personnel. This group attains their achievement through hard work and dedication, and obtains their wealth through their special talent. Frequently, the *entertainers* come from families that are less well off. From a career perspective, the *entertainers* tend to have short careers and less predictable income streams. Matching the unpredictable nature of their wealth and, at the same time, a shorter nature of the income stream of the *Entertainers* group, it is difficult to hypothesize how this group will behave. On one hand, the unpredictable nature of their future wealth will drive their allocation towards safer asset class, i.e., bonds, on the other hand, the short-term nature of their future income will drive their allocation towards asset class that provides more growth, i.e., equity. This is the classic wealth effect versus income effect paradigm in classical economics. As such, we hypothesize:

H2: The Entertainers' preference towards asset allocation is uncertain.

A third group of private banking clients examined is the *Executives* and professional. The members in this group reach their position, and achieve their wealth, through hard work and intelligence. Typically, they come from middle class background, which have sufficient resources to support their striving to becoming professionals. The source of wealth in this group is expected to be stable and can possible be extended into the next generation, e.g., a second generation medical doctor, or lawyer. However, the wealth is not expected to last to multi-generational. Given their background of hard work and smarts, this group is expected to be rigorous and conservative when it comes to their investment decisions. Matching this background of the *Executives* to the basic asset classes, we expect them, again, to display a preference towards assets that displays a lower risk profile than it risky counterpart, i.e., we hypothesize:

H3: The Executives will have more assets allocated towards bonds as an asset class than equity.

A final group of private banking clients examined by Chung et. al (2014) are the *Entrepreneurs* who are self-starters. Like the Executives, the *Entrepreneurs* are hard workers, but, frequently, unlike the *executives*, they are rule breakers who do not build their wealth within the traditional system of schools and examinations, and eventually, the corporate structure. The *entrepreneurs*, typically, have a high appetite for risk that led them to take chances and achieve their wealth. As such, they are more likely to taking additional risk when making asset allocation decisions. Matching this background to the asset classes, we expect the *Entrepreneurs* to prefer asset class that provide opportunity for growth, i.e., equity, over protection, i.e., bonds.

H4: The Entrepreneurs will have less assets allocated towards bonds as an asset class than equity.

In addition to examining the allocation decisions by each group of private banking clients with characteristics described above, it would be of interest to also find out how asset allocation decisions may be different among the different groups of private banking clients, e.g., whether the allocation to bonds, as an asset class, among the *Endowed*, the *Entertainers*,

the Executives and the Entrepreneurs would differ.

6. Data Collection

Asset allocation data on private banking clients are obtained from four groups of senior private banker from a major Chinese bank who were on a field study trip to Hong Kong. The first three groups have 43 senior bankers each while the last group consists of only 40 bankers, hence, forming a total sample of 169 bankers. These senior bankers typically have clients that are in the high net-worth (HNW) and ultra-high net-worth (UHNW) categories. To be a senior banker of this group, a banker would advise at least 25 clients, with one banker reportedly advising 68 accounts in his client portfolio.

These bankers are given a description of the background of each of the four-client type (Chung et. al, 2014,) i.e., *Endowed*, *Entertainers*, *Executives* and *Entrepreneurs*. A brief description of the background of each type of client was given to the bankers, rather than the label to avoid any preconceived notion, hence a potential bias, by the bankers. After the bankers obtained an understanding of the background of each of the client type, they were then asked to assess, based on their understanding and experience, their expectations of how each of the client group may make their asset allocation decisions, in terms of percentages, over the three asset classes, i.e., cash, bonds and equities. Two conditions were further imposed on these allocations, the clients are expected to fully invest their assets, hence, the three allocation percentages should sum to 100%, i.e.,

% cash + % bond + % equity = 100% (full investment constraint)

In addition, borrowings and shorts are not allowed, hence, allocation percentages should not be negative, i.e.,

% cash ≥ 0 (cash non-negativity constraint)

% bond ≥ 0 (bonds non-negativity constraint)

% equities ≥ 0 (equities non-negativity constraint)

These constraints are reasonable as they represent the long term strategic allocation targets. In reality, even if the allocation percent for one of the assets class is negative, e.g., borrowing cash to invest in equities, the act is likely to be temporary, or tactical, in nature, and shall be reverse back to the strategic allocation once conditions revert back to normal.

The 169 sets of survey forms were distributed to the bankers between June 11, 2014 to November 10, 2014.Among these, 96 sets of surveys (55.6%) are usable. Among the unusable surveys included responses that with missing fields or surveys that did not satisfy the full investment constraints and/or the non-negativity constraints described above.

7. Data Analysis

Panel A in Table 1 presents the mean and the standard deviation statistics of the asset allocation decisions for the private banking clients in the sample. The results indicated that, according to the private bankers, the HNWIs as a group displayed a distinct preference towards bonds with 44.5% of the fund allocated to this asset class. This result is in line with the findings in Canner et al. (1999,) Campbell and Viceira (2001), which suggests a 48% allocation to bonds as a 2-asset (bonds and equities) allocation solution for the period 1983 – 1996.What appears to be a somewhat result in this study is the unexpected bias towards cash at 21.7%, and, as a result, an underweight of equity at 33.7%. However, the finding was, in fact, in line with findings for conservative and moderate investors in Canner et. al (1999.) Furthermore, excessive cash holding has also been found in corporations, Ku et. al (2013.)

In Panel B, the mean allocations by the *Endowed* over the three asset classes are 20.9% cash, 55.6% bonds and 23.6% equities. What is of interest is that in pair-wise comparisons, the results obtained between cash and equities suggested that, for the Endowed, the allocation for the two asset classes display no significant difference from a statistical perspective. While this may be counter intuitive as cash is perceived as a safe asset at the one end of the spectrum and equities is perceived as a risky asset at the other end of the spectrum. However, Gomes and Michaelides (2004) in their study did conclude that "marginal stockholders are (endogenously) more risk averse" (p. 897). Indeed, among the four segments of clients, the Endowed, would be the most conservative and most likely marginal stockholders. This is supported by the findings, the Endowed do have the lowest amount invested in equity. Furthermore, as it was suggested in earlier section of this paper, the definition of cash is "an asset class refers to the money that is part of the client's investment strategy, only that it has not been invested." In the meantime, the p-value provided strong evidence supporting the view expressed in H1, with bonds getting more than twice the allocation than equities, the null hypothesis of no difference between the allocations to bond versus equities can be rejected. In sum, the result supports the view that The Endowed has more assets allocated towards bonds as an asset class than equity.

With regard to the *Entertainers*, the mean values of the allocation are 23.1% cash, 43.8% bonds and 33.1% equities. The results indicate that the *Entertainers* tend to focus on bonds as

well, but this client segment displays a more balanced allocation than the *Endowed*. This provides evidence that is consistent with the second hypothesis that *The Entertainers' preference towards asset allocation is less certain*,(H2.) The p-value, in the meantime, indicated that these private banking clients treat all three asset classes as distinct, with all of the p-values suggesting statistical significance among the asset classes.

For the *Executives*, the mean values of the allocation are 19.5% cash, 47.2% bonds and 33.3% equities. While the *Executives* also display a bias towards bonds, they also take on more bonds via a reduction in cash holding. This is consistent with the view proposed by Campbell and Viceira (2001), which suggests that for a long-term investor, long term bonds, and not cash, are the riskless asset. Again, given the rigorous and conservative nature of *Executives*, the data provide evidence that is consistent with the hypothesis. As stated in H3: *The Executives will have more assets allocated towards bonds as an asset class than equity.* Again, in general, the p-value indicated that the *Executives* treat all three asset classes differently, with p-values all displaying statistical significance.

With regard to the *Entrepreneurs*, the mean values of the allocation are 23.9% cash, 31.5% bonds and 44.9% equities. In addition, it is expected that the *Entrepreneurs* with more willingness towards risks will have an allocation that is more equity oriented and less on bonds. This is indeed the case as can be seen by the mean allocation figures. Again, the data provided evidence of *Entrepreneurs*' preference for growth, i.e., equity, over protection, i.e., bonds, hence supporting *H4: The Entrepreneurs will have less assets allocated towards bonds as an asset class than equity*. Finally, the p-values indicate that these private banking clients treat all three asset classes differently.

Also of interest is the observation that this group has the highest allocation to cash as well as equities among the four categories of clients, displaying a "bifurcation" profile. This is, in fact, consistent with an observation by Dufey (2009) where he found "Asian portfolios in generally contain relatively few bonds and fixed income securities... Investors' portfolios then tend to be bifurcated in terms of risk: safe banking deposits are held in combination with lots of risky equities, often from the home countries of the investors." (p. 9).

While in the above analysis, we examined how each type of private banking client allocates their assets across the different asset class. It would be of interest to also examine how the different types of clients treat each asset class. Traditionally, the regression model may provide a popular method for the examining of relationship, client type and asset allocation decisions in our case, the nature of our data, however, restricts our using this method. As a typical regression model will have the following specification,

$$E = \alpha + \beta_1 \cosh + \beta_2 bonds + \beta_3 equity + e$$

Given that we have the full investment constraint, i.e., $\% \cosh + \% \mod + \% = 100\%$. multicollinearity will potentially pose problems with this analysis. As such, we shall use pair-wise comparison to study the asset allocation decisions by the different categories of clients.

Table 2 displays the results on how the different groups of private banking clients allocate to the same asset class. As can be seen from the table, most of the pair-wise statistics comparing allocation decisions by the different types of private banking clients on the same asset class displays statistically significance, suggesting that different types of clients treat the same type of asset differently.

When looking at the *Endowed* and the *Entertainers*, the result indicates that while the two groups treat their allocation decision towards cash the same way, they treat their allocation decisions towards bonds and equities very differently. This is the same between the *Endowed* and the *Executives* as well as the *Endowed* and the *Entrepreneurs*. The results suggest a consistently different attitude towards bonds and equity by the *Endowed* than the three other types of private banking clients. This is consistent with the view in our earlier discussion.

When examining the attitude between the *Entertainers* and the *Executives*, the results in table 2 suggests that these two groups treat cash and bonds very similarly, with the *Entertainers* having more cash in the portfolio and the *Executives* have more of their assets invested in bonds. This behavior appears to be consistent with our hypothesis that the *Entertainers* tend to have a more uncertain and shorter career; hence, to counter this, they tend to keep more cash around. In the meantime, the *Executives* who have careers with more certainly and longevity, tend to keep less cash assets and have the resource put into work for long-term safety. Beyond that, results in table 2 also indicate that the allocation decisions concerning equities are very different between the *Entertainers* and the *Executives*.

Our result indicates that the *Entertainers* and *Entrepreneurs* have similar views of cash as an asset class, while their views on bonds and equity are very different.

Finally, between the two groups that spend most of their time in the business world i.e., *Executives* and *Entrepreneurs*, their respective views on bonds and equity are quite different.

This is probably driven by their attitude towards risk, as the *Executives* represent the group that stay within the corporate boundary, while the *Entrepreneurs* represent the group that venue beyond the corporate boundary and create their own new world. In the meantime, their view towards cash is rather similar.

The most striking finding in table 2 is that all the pairwise statistics indicated no difference regarding our private banking clients' asset allocation decisions when it comes to cash, and at the same time most of the bonds-equities pairs are different. This appears to be contradictory to the reasoning by Tobin (1958) where investors are supposed to have the same optimal risky asset allocation and adjust their cash holding according to their risk preference. While the allocation puzzle in the Tobin (1958) context have been address in Canner (1999,) all private banking clients treat cash the same way is another puzzle by itself. Apparently, our results seemed to suggest that all the HNWIs first make decisions regarding allocation to cash, then work on the split between bonds and equities. One possible explanation is, again, as suggested before, cash is held for its liquid, non-volatile and flexible nature. For long-term investors in the Campbell and Viceira (2001) context, bonds and equities is where the real action is with long-term bonds, and not cash, as the riskless asset. Again, this appears to be appropriate for HNWIs with significant wealth.

8. Summary and Conclusion

While most studies at asset allocation look at optimal allocation from an efficient frontier perspective, this study examines allocation decisions for investors from different market segments. Chung et. al (2014) identified four segments of private banking clients, *Endowed*, *Entertainers, Executives* and *Entrepreneurs*, and demonstrated their behavioral differences. This paper obtained results on how the different background and different behavior lead to different asset allocation decisions by these four types of private banking clients.

This paper obtained evidence on how asset are allocated among the three basic asset classes by the different client segments. The results obtained are, in general, consistent with our hypothesized view. The *Endowed* will tend to have more assets allocated in cash and bonds and is the group with the smallest proportion of their assets allocated to equity (23.6%.) The allocation by the *Entertainers* is expected to be mixed, and indeed, their mean allocation to bonds 43.8% versus that of equity, 33.1% represents the smallest gap among the four groups of private banking clients. The *Executives*, as a rational and conservative group, demonstrated a preference towards predictability and, hence, a bias toward bonds (47.2%) over equities

(33.3%) when it comes to asset allocation decisions. When it comes to the *Entrepreneurs*, a group with a tendency to take risk, they tend to lean towards equities (44.9%) rather than bonds (31.5%) when making decisions on asset allocation. In addition, this paper detected the "bifurcation" characteristics observed by Dufey (2009) in the allocation by the *entrepreneurs*.

In addition to examining the asset allocation decision by each group of private banking client, this paper also looked at whether the investment decisions by the four segments of private banking clients are different and unique. In general, pair-wise results indicated the way each group approaches asset allocation decisions are different. For instance, while both the *Endowed* and the *Executives* have a bias towards bonds in their portfolio, the pair-wise statistics on their allocation in bonds indicated that the two are from different samples, suggesting significant differences in their decisions. Significant pair-wise differences are found in just about all risky asset classes across the different groups.

A rather unusual result in this paper is the departure in practice from Tobin (1958.) However, this finding is consistent with those in Canner et. al (1999,) and Campbell and Viceira (2001) and the definition of cash as a "to-be-invested" asset. In addition, prior research in the corporate finance literature has also observed significant cash holdings by corporations. Our results appear to echo this in the corporate finance segment of the finance literature. This is reasonable as the practice of private banking, with its management of significant wealth, has always have traces of corporate elements in it.

Clearly, this paper represents an early attempt in the study of asset allocation decisions by private banking clients, an area not very well understood due to the "private" nature of the sector. Given the results in this paper, future research on asset allocation can not only look at efficient frontier and optimization, but also look into the behavioral characteristics of the investors, leading to better understanding and more comprehensive models.

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Table 1: Asset Allocation Statistics by Private Banking Client TypeClient TypeInvestment in Cash Investment inInvestment in

Asset Allocation Decisions for Private Banking Clients: A China Experience

| F | ixed Income | Equity | Panel A: Total Sample | |
|-----------------------|-------------|----------|-----------------------|--|
| Mean | 21.7% | 44.5% | 33.7% | |
| STD. 15.5% | | 20.6% | 19.8% | |
| Panel B: Endowe | ed | | | |
| Mean | 20.9% | 55.6% | 23.6% | |
| STD. | 18.0% | 22.3% | 16.65 | |
| p-value | | | | |
| Cash v. Bonds | | 0.290 | | |
| Cash v. Equity | | | 0.000*** | |
| Bond v. Equity | | | 0.000*** | |
| – Panel C: Enterta | iners | | | |
| Mean | 23.1% | 43.8% | 33.1% | |
| STD. | 14.8% | 18.1% | 16.6% | |
| p-value | 1.0070 | 1011/0 | 101070 | |
| Cash v. Bonds | | 0.001*** | | |
| Cash v. Equity | | 01001 | 0.000*** | |
| Bond v. Equity | | | 0.000*** | |
| Panel D: Executi | ves | | | |
| Mean | 19.1% | 47.2% | 33.3% | |
| STD. | 12.7% | 16.9% | 17.1% | |
| p-value | | | | |
| Cash v. Bonds | | 0.000*** | | |
| Cash v. Equity | | | 0.000*** | |
| Bond v. Equity | | | 0.000*** | |
| Panel E: Entrepr | eneurs | | | |
| Mean | 23.6% | 31.5% | 44.9% | |
| STD. | 15.8% | 17.1% | 21.1% | |
| p-value | | | | |
| Cash v. Bonds | | 0.000*** | | |
| Cash v. Equity | | | 0.000*** | |
| Bond v. Equity | | | 0.000*** | |

*** indicates significant at a .01 level.

| Background | Investment in Cash | Investment in Fixed Income Security | Investment in Equity |
|--------------------------------|-----------------------|--|----------------------|
| Endowed / Entertainers | 0.358 | 0.000*** | 0.000*** |
| Endowed / Executives | 0.524 | 0.004*** | 0.000*** |
| Endowed/ Entrepreneurs | 0.276 | 0.000*** | 0.000*** |
| Entertainers / Executives | 0.075* | 0.190 | 0.000*** |
| Entertainers /Entrepreneurs | 0.828 | 0.000*** | 0.000*** |
| Executives /Entrepreneurs | 0.053* | 0.000*** | 0.000*** |

Table 2: Pair-wise p-statistics on Client attitude towards each Asset Class Type

***, **, * indicate significant at the .01, .05, and 10 percent level, respectively.