Do As I Say, Not As I Do:

An Analysis of Portfolio Development Recommendations Made by Financial Advisors

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Running Head: Do As I Say

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Abstract

This paper describes how financial advisors rank, weigh, and use client characteristics and portfolio development factors when making an asset allocation recommendation. It was determined that in a scenario free context, a client's time horizon was the top ranked portfolio development factor. Findings also showed that financial advisors alter the importance of certain factors when working with clients of differing ages and employment status. Additionally, results showed that financial advisors are somewhat inconsistent in their use of portfolio development factors across client scenarios. Finally, findings indicated that older financial advisors with more experience do a better job of matching asset allocation recommendations to normative portfolio guidelines as described in mean-variance optimization models.

Key Words: Asset Allocation, Risk Tolerance, Portfolio Management, Financial Planning

Introduction

How do financial advisors arrive at portfolio allocation recommendations for clients? Researchers have been asking this question for over a century. Numerous answers have been proffered.

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During the first half of the 20th Century financial professionals argued that the allocation choice should primarily be built upon an investor's goal time horizon. This evolved into the widely used "100 – age" rule. This rule states that an investor should allocate the result of the calculation towards equities (or other risky assets), with the remaining balance allocated to fixed income assets. Based on the rule, someone who is age 40 should allocate 60% of portfolio assets into equities and 40% of assets into fixed income and cash investments. Economics and finance researchers working during the middle part of the 20th Century concluded that the "100 – age" rule, and similar practice-derived heuristics, tend to be overly simplistic and often biased. This lead to the development of numerous normative portfolio allocation theories, most of which are still in use today.

Although asset allocation models have been proposed, few answers have been provided over the years that adequately describe how financial advisors arrive at a portfolio allocation recommendation in practice. Rather than describe how financial advisors arrive at allocation decisions, the thrust of the literature has been devoted to describing how financial advisors should make these decisions. The general consensus is that financial advisors should use a multi-factor mean-variance efficient model supplemented by a financial advisor's measurement and use of a client's risk tolerance and preferences, as well as household and macroeconomic data and circumstances (Campbell & Viceira, 2002). It is the way in which these and other factors are ranked and weighed by financial advisors that ultimately shapes portfolio decisions and recommendations.

This study was undertaken for four reasons. First, to identify how financial advisors *rank* portfolio development factors when considering asset allocation decisions for clients. Second, to describe the way financial advisors *weigh* these factors when faced with a portfolio allocation decision. Third, to determine how consistent financial advisors are in their use of portfolio development factors across client scenarios, and fourth, to create a profile of financial advisors based on allocation recommendations. The remainder of this paper describes the conceptual background of the study, the methodology used to obtain and analyze the data, results related to the paper's purposes, and a discussion of findings.

Conceptual Background and Literature Review

Financial advisors tend to rely on one (or a combination of) three methodologies when developing asset allocation recommendations for individual investors: (1) heuristics, (2) mean-variance efficient models, and/or (3) professional judgement.

The first is the use of heuristics. A heuristic is a simplified model, such as the "100 – age" rule. Heuristic models help financial advisors simplify the decision-making process by eliminating factors that

are thought to be of minor importance or redundant. A heuristic model accelerates the analysis stage of the recommendation development process, but often at the expense of accuracy. For example, the "100 – age" rule fails to account for increasing longevity, financial capacity, or an investor's willingness to take risk. Instead, the rule is shaped by the assumption that as one ages the time remaining to recoup losses declines, making it important to preserve capital by shifting assets from risky investments to more price stable assets.

One important criticism of heuristic rules and models is that the concepts of returns and variation associated with assets tends to be underrepresented. This is the reason that researchers, such as Markowitz (1952), argued that financial advisors and investors should develop allocation decisions primarily based on mean and standard deviation data. What emerged from this line of thinking in the mid-20th Century was the second portfolio development methodological approach: mean-variance efficient allocation models. Consider a model with three asset classes: equities, fixed income, and cash assets. Equities are thought to offer high returns with correspondingly high variation in returns (i.e., standard deviation). Fixed income assets, such as corporate and Treasury bonds, offer lower returns and standard deviation. Cash provides still lower returns and variability of returns. Within a mean-variance efficient framework, cash is considered to be riskless over one period (Canner, Mankiw, & Weil, 1997). When these three assets are present, it is possible to estimate the efficient frontier, which provides an indication of the highest mean return given standard deviation. Campbell and Viceira (2002) explained the outcome associated with this modeling approach as follows:

> The striking conclusion of this analysis is that all investors who care only about mean and standard deviation will hold the same portfolio of risky assets, the unique best mix of stocks and bonds. Conservative investors will combine this portfolio with cash to achieve a point on the mean-variance efficient frontier that is low down and to the left; moderate investors will reduce their cash holds, moving up and to the right; aggressive investors may even borrow to leverage their holdings of the tangency portfolio, reaching a point on the straight line that is even riskier than the tangency portfolio. But none of these investors should alter their relative proportions of risky assets in the tangency portfolio" (p. 2).

This last point is known as the mutual fund theorem (Tobin, 1958) or the separation theorem (Cass & Stiglitz, 1970). While it remains true that risk seeking investors should allocate more of their portfolio assets towards riskier equities compared to a more risk averse investor who should allocate more assets toward lower risk or risk-free holdings, Tobin (1958) argued that the composition of assets

should be the same for all investors, regardless of risk tolerance, preferences, or other circumstances. Canner et al. (1997) reported that few investors actually follow the separation theorem. They called this the 'asset allocation puzzle.' Canner and his associates noted that financial advisors, at the time of their study, routinely recommended a higher ratio of bonds to stocks than is appropriate or necessary.

Normatively, the portfolios of all investors can be developed using a linear combination of assets, regardless of an investor's initial wealth level or other constraints (Dybvig & Liu, 2016). While this may be theoretically possible (and advisable), this does not appear to be what investors and their financial advisors do in practice. In their study, Canner et al. (1997) documented that few financial experts recommend allocations that match predictions made using the separation theorem. Nearly all financial advisors allocate increasing levels of assets to fixed income assets as an investor's risk tolerance declines—a procedure described in the theorem—but that the level of fixed income holdings generally exceeds optimality. Canner et al. attempted to explain this decision-making approach but were unable to fully justify the tendency by financial advisors to make the allocation process systematically more complicated than it should be in practice.

While the use of heuristic approaches to building asset allocation recommendations is rarely advocated, nearly all academicians continue to recommend the use of mean-variance models. Financial advisors, on the other hand, often employ a third methodology: professional judgement. The fact is that even within a mean-variance efficient framework, professional judgement comes into play frequently. Consider the way in which an investor (or his or her financial advisor) decides on an appropriate portfolio along the efficient frontier. Campbell and Viceira (2002) noted that this decision is almost always influenced by an investor's age, risk capacity (as measured by human capital and wealth), goal time horizon, and risk attitude. Carr (2014) and Nobre and Grable (2015) argued that there are other factors to consider, including an investor's past behavior, financial knowledge, risk perceptions and preferences, market expectations, and risk need or the level of return required to reach a financial goal. For those financial advisors who do not estimate an investor's utility curve, at a minimum, it is the way in which a financial advisor blends these factors together that shapes which portfolio on the efficient frontier is chosen.

The literature is relatively silent in explaining the most appropriate ways in which a financial advisor or investor should combine portfolio management factors as inputs into an asset allocation recommendation, let alone describing how financial advisors go about ranking or weighing factors. Given the realities that (a) nearly all financial advisors use professional judgement to one extent or another when developing portfolio recommendations and (b) many of the factors used by financial

advisors in qualitative estimations are also associated with inputs into mean-variance efficient choices, it seems appropriate to gain a better understanding of the way in which financial advisors conceptualize factors associated with the asset allocation process. An outcome associated with this study is to address this need in the literature.

Methodology

Data for this study were collected using an online survey that was distributed to financial advisors via email invitations distributed by the research team. A snowball sampling technique was then used to recruit additional participants. Specifically, initial participants were encouraged to recruit additional respondents. The survey was distributed during a two-month period during late spring 2017.

The survey consisted of questions that queried participants about their demographic and professional background. Over 200 financial professionals provided responses to the survey questions. Surveys that were started but not completed were removed from the database. In cases where some data were missing, missing values were imputed and used in the analyses. Table 1 shows the demographic and professional characteristics of participants.

Although the sample was not designed to be nationally or internationally generalizable, the participants did exhibit characteristics of what is generally thought to be a 'typical financial advisor.' The sample was comprised primarily of middle-aged men with a college degree level of education. The majority of participants were living in North America (i.e., United States or Canada) at the time of the survey; however, the sample included individuals working in Australia, Asia, and the United Kingdom. Methods of compensation among participants varied. Slightly more than one in four reported earning a combination of fees and commissions, with about one in five earning a salary. Less than three percent of participants reported charging hourly fees. The largest number of participants reported working in a financial planning firm. Approximately two-thirds of participants held the CFP® credential. The CLU® and ChFC®, both proprietary marks of the American College, were also represented in the sample.

Table 1. Sample Characteristics (N = 204).

	Mean (SD)	Frequency (Percent)
Gender		
Male		149 (73.0%)
Female		55 (27.0%)
Age	49.92 (11.00)	
Education		
High School		10 (5.2%)
Some College		34 (16.7%)
Associate's Degree		11 (5.8%)
Bachelor's Degree		63 (30.9%)

Graduate Degree		73 (38.2%)
Compensation Model		
Commission Only		20 (10.7%)
Fee Only		28 (15.0%)
Fee Based		29 (15.5%)
Hourly		5 (2.7%)
Fees & Commissions		53 (28.3%)
Salary		41 (21.9%)
Other		11 (5.9%)
Location		
Australia		3 (1.6%)
North America		117 (62.6%)
United Kingdom		12 (6.4%)
Other		55 (29.4%)
Type of Firm		
Bank/Trust Company		21 (10.3%)
Registered Investment Advisor		55 (27.0%)
Insurance Company		17 (8.3%)
Wire House/Brokerage		1 (0.5%)
Institutional		3 (1.5%)
Mutual Fund Company		8 (3.9%)
Financial Planning Firm		80 (39.2%)
Other		35 (17.2%)
Financial Risk Tolerance	7.27 (1.72)	
Economic Expectations	1.78 (.73)	
Years Providing Financial Advice	4.44 (.98)	
Professional Designations		
CFP®		138 (67.6%)
CFA®		4 (2.0%)
ChFC®		12 (5.9%)
CLU®		24 (11.8%)
Other		26 (12.7%)
Make Recommendations to Clients: Yes = 1		141 (77.5%)

Participants were first asked to rank order 12 factors that are generally thought to be important when determining how to allocate a client's investment portfolio (see Carr, 2012 and Nobre & Grable, 2015) independent of a portfolio or client context. When making their rankings, participants were asked to give what they believe to be the most important factor a score of 1 and the least important factor a score of 12. Ties were not allowed. Table 2 shows the rankings in order (highest to lowest) for the factors. The final rankings were based on the median rank response across the sample. For example, time horizon was ranked as the most important factor associated with allocating a client's investment portfolio. External and other factors were the least important. The portfolio development factors and rankings were used as a baseline for further analyses.

Table 2. Ranked Factors Relevant to Investment Portfolio Allocation.

Rank	Portfolio Development Factors
1	Time horizon for achieving financial goal.
2	Clients' need for liquidity.
3	Client's capacity to deal with a financial loss.
4	Client's level of risk needed to achieve financial goal.
5	Client's willingness to take financial risk (risk tolerance).
6	Client's financial knowledge.
7	Client's investment experience.
8	Client's history of holding positions when faced with a loss (risk composure).
9	Client's perception of the riskiness of the stock market.
10	Client's preference towards holding risk assets.
11	External factors (i.e., average equity return, average fixed income and cash returns, inflation, tax rates, etc.)
12	Other factors (Each of the following received one vote: age of client, client engagement in the planning process, client financial goals, tax implications, client priorities, client fears, client debt profile, and client body language.)

Portfolio Development Scenarios

Participants were then given information about several clients and asked to describe how they use the portfolio development factors shown in Table 2 when developing portfolio allocation recommendations. Specifically, participants were asked to indicate how important each factor was, in each scenario, when making a recommendation, and to recommend an appropriate asset allocation among equities, fixed income, and cash. For the purposes of this paper, data from two scenarios were analyzed.

Table 3 shows the narrative for the two scenarios. Also shown are the 12 portfolio development factors. The "scores" represent hypothetical answers provided by each client on a client data-gathering form. As an example, clients in both scenarios indicated that they perceived the stock market as not very risky (i.e., a score of 9 on a 10-point scale with 1 being very risky and 10 being not all risky). Client scores for each factor are shown in Table 3.

Table 3. Portfolio Development Scenarios.

	SCENARIO 1	**SCENARIO 2**
	Your client is a married couple. Partner 1 is 45 years old. Partner 2 is 57 years old. They are both employed professionally and have a high combined family income. They own their own home and have a net worth in excess of $1 million. They would like to build a retirement portfolio consisting of taxable and tax-advantaged investments.	Your client is a married couple. Partner 1 is 68 years old. Partner 2 is 66 years old. They are both retired. They own their own home and have a net worth of about $1.5 million.
Factor	***Score***	***Score***
Couple's perception of the riskiness of the stock market: (1 = Very Risky; 10 = Not at all Risky)	9	9
Couples' financial knowledge: (1 = Not at all Knowledgeable; 10 = Very Knowledgeable)	4	4
Couple's investment experience: (1 = Very Little; 10 = Extensive)	3	3
Couple's level of risk needed to achieve financial goal: (1 = Very Low; 10 = Very High)	3	3
Time Horizon for Achieving Financial Goal	20 Years	20 Years
Couple's Need for Liquidity: (1 = Very Low; 10 = Very High)	8	8
Couple's capacity to deal with a financial loss: (1 = Very Low; 10 = Very High)	9	9
Couple's willingness to take financial risk: (1 = Not at all Willing; 10 = Very Willing)	6	6
Couple's history of holding position(s) when faced with a loss: (1 Sell Immediately; 10 = Buy More)	2	2
Couple's preference for holding risky assets: (1 = Maximize Safety; 10 = Maximize Return)	2	2

Average equity return: 8%
Average fixed income yield: 2%
Average cash yield: 0%
Inflation: less to be less than 2%
Tax rates have been and will remain stable over time

Based on the information in each scenario, participants were asked to report how important each factor was, on a scale of 0 to 100, as an input into the development of a portfolio allocation recommendation for the clients. For example, someone who thought that a factor was not particularly important might report a score of 5 out of 100. The survey required each total scenario score, based on all factors, to sum to 100.

Participant responses, as shown in Tables 2 and 3, were analyzed using descriptive, bivariate, and multivariate statistical techniques, including *t* tests and discriminant analysis. The purpose of the tests was to determine how consistent participants were in using their ranking of factors when faced with a client scenario and to determine participants' level of consistency between scenarios. Another purpose was to describe the characteristics of those who were more likely to recommend an equity allocation above the sample average.

Results

An attentive reader will notice that the factor scores were identical across the two scenarios. The primary difference between the two scenarios was the age and employment status of the clients. In Scenario 1, the clients were saving for retirement, whereas in Scenario 2 the clients were already retired. In either case, both clients shared a portfolio-funding goal of 20 years.

Table 4 shows the average participant scores for the two scenarios. Each score represents a percentage weight for the factor. For instance, in Scenario 1, participants, on average, gave the client's perception of risk a weight of 5.72% in the asset allocation decision framework. In Scenario 2, risk perception was given a weight of 6.00%. The change in weighting is reported in the fourth column. The last two columns of Table 4 show the *t* test results comparing the weights for Scenario 1 and 2. Overall, participants were relatively consistent when developing their portfolio recommendations, but they were rarely perfectly aligned; this was surprising given that there were no substantive factor differences between the scenarios.

In general, participants in Scenario 2 tended to underweight factors related to client financial knowledge, risk need, and external factors, while they over-weighted liquidity need and other factors.

While time horizon was a dominant factor in both models, it appeared that participants were including some other factor(s) or client characteristic(s) in their allocation calculus.

Table 4. Average Scores for Each Portfolio Development Factor.

	Scenario 1	Scenario 2	Change	*t*	Sig.
Perception	5.72	6.00	-0.28	-0.95	0.342
Knowledge	8.00	6.84	1.16	4.47	0.001
Investment Experience	7.52	7.46	0.06	0.25	0.804
Risk Need	11.91	10.43	1.48	3.47	0.001
Time Horizon	14.95	14.31	0.64	1.47	0.144
Liquidity Need	13.44	14.38	-0.94	-2.48	0.014
Capacity	9.87	9.60	0.27	0.7	0.486
Risk Tolerance	6.82	7.38	-0.56	-1.04	0.298
Composure	8.06	8.28	-0.22	-0.81	0.421
Preference	6.89	7.76	-0.87	-1.64	0.103
External Factors	5.39	4.34	1.05	3.08	0.002
Other	1.66	3.32	-1.66	-3.34	0.001

Note: Columns may not sum to 100 due to rounding.

The notion that participants weighted factors differently between the two scenarios, even though the only substantive difference were the clients' ages and employment statuses, prompted a further evaluation of the data. Consider the correlation coefficients shown in Table 5. The coefficients point to some inconsistencies among the participants from one scenario to another. Given that the two scenarios were identical, it would be reasonable to hypothesize that the weights used by participants to guide the development of a portfolio allocation should have been effectively the same and consistent with the baseline ranked factors. This was generally true, but the effect size of the associations was lower than what some might expect. In the case of financial risk tolerance, the association was particularly weak, suggesting that the weighting of this factor between the two scenarios was inconsistent.

Table 5. Correlations for Weights of Factors between Scenario 1 and Scenario 2.

		Perception	Knowledge	Experience	Risk Need	Time Horizon	Liquidity Need	Capacity	Risk Tolerance	Composure	Preference	External Factors	Other
Perception	*r*	.385											
	Sig.	.000											
Knowledge	*r*		.675										
	Sig.		.000										
Experience	*r*			.538									
	Sig.			.000									
Risk Need	*r*				.616								
	Sig.				.000								
Time Horizon	*r*					.709							
	Sig.					.000							
Liquidity Need	*r*						.463						
	Sig.						.000						
Capacity	*r*							.275					
	Sig.							.008					
Risk Tolerance	*r*								.123				
	Sig.								.245				
Composure	*r*									.598			
	Sig.									.000			
Preference	*r*										.287		
	Sig.										.006		
External Factors	*r*											.751	
	Sig.											.000	
Other	*r*												.472
	Sig.												.000

Table 6 summarizes how participant rankings of portfolio development factors differed from Scenario 1 to Scenario 2, as well as from the original rankings. When asked to rank factors free of a specific client context, participants ranked the financial knowledge and financial risk tolerance of their clients relatively high. On the other hand, client risk composure and risk preference received higher rankings in practice. The rankings shown in columns three and four of Table 6 were based on the weights shown in Table 4.

Table 6. Original Factor Rankings and Rankings in Practice.

	Original Rank	Scenario 1 rank	Scenario 2 rank	In Practice …
Perception	9	10	10	Consistent
Knowledge	6	6	9	Less Important
Investment Experience	7	7	6	Consistent
Risk Need	4	3	3	Consistent
Time Horizon	1	1	2	Consistent
Liquidity Need	2	2	1	Consistent
Capacity	3	4	4	Consistent
Risk Tolerance	5	9	8	Less Important
Composure	8	5	5	More Important
Preference	10	8	7	More Important
External Factors	11	11	11	Consistent
Other	12	12	12	Consistent

Table 7 shows the average and median allocation recommendation, as well as the range of recommendations, for Scenario 1. The portfolio was slightly over-weighted towards equities, with approximately 10% of assets allocated to cash.

Table 7. Scenario 1 Portfolio Allocation Recommendations.

	Average	Average Ratio of Fixed Income to Equities	Median	Average Ratio of Fixed Income to Equities (Median)	Range
Equities	48.88	0.84	50.00	0.80	10.00 – 100.00
Fixed Income	40.97		40.00		0.00 – 75.00
Cash	10.15		10.00		0.00 – 50.00

Table 8 shows the same statistics based on Scenario 2 recommendations. Overall, participants reduced the exposure to equities, while increasing the amount allocated to fixed income assets. The cash allocation, at the median level, remained at 10%; however, on average, participants recommended a higher allocation of assets to cash compared to Scenario 1.

Table 8. Scenario 2 Portfolio Allocation Recommendations.

	Average	Average Ratio of Fixed Income to Equities	Median	Average Ratio of Fixed Income to Equities (Median)	Range
Equities	36.17	1.39	40.00	1.25	0.00 – 85.00
Fixed Income	50.28		50.00		0.00 – 100.00
Cash	13.56		10.00		0.00 – 100.00

The average fixed income to equities ratios shown in Tables 7 and 8 illustrates the significant shift towards fixed income assets in Scenario 2. As an aside, this type of shift is theoretically plausible within a mean-variance efficient environment. What is necessary, however, is that the shift towards fixed income assets should have been proportional. This was obviously not the case. The recommended fixed income holding was far above normatively appropriate levels in both scenarios. At a minimum, the allocation to fixed income should have been consistent across scenarios.

Table 9 shows the results from the *t* tests used to determine if the recommended allocations for Scenario 1 and Scenario 2 were different. A clear shift among participants was noted. The recommended allocation to equities in Scenario 1 was significantly greater than in Scenario 2. The allocation to fixed income and cash assets was significantly higher in Scenario 2.

Table 9. Statistical Differences between Scenario 1 and Scenario 2 (N = 203).

	Mean	**SD**	***t***	***p***
Scenario 1 Equities	48.88	12.68	55.06	.001
Scenario 2 Equities	36.17	11.11		
Scenario 1 Fixed Income	40.97	11.20	52.25	.001
Scenario 2 Fixed Income	50.28	12.15		
Scenario 1 Cash	10.15	6.79	21.34	.001
Scenario 2 Cash	13.56	9.02		

The results presented in Table 9 are perplexing. Participants should have arrived at an average and/or median allocation of assets that was statistically similar for the two scenarios (even if the

recommended allocations were not mean-variance efficient). This prompted a question as to why there might be differences. Participants were encouraged to make notes regarding other factors that they believed were important. These notes were used to obtain insights into the methodological thinking of participants who shifted away from equities towards fixed income and cash assets in Scenario 2. The following notes were representative of the comments provided for "other factors" for Scenario 2:

"A 20-year time horizon leads the clients to be 88 and 86, an age that may be a complicating significant factor."

"Lifestyle expenses—health."

"Mortality."

"Their health."

"Their age."

Taken together, it appeared that financial advisors, either objectively or subjectively, included age as a weighting factor in Scenario 2. The participants seemed to be following the somewhat controversial age-based allocation heuristic: $Allocation\ to\ Equities = 100 - Client\ Age$ Although such a heuristic is rarely recommended for day-to-day use, the results from this study certainly give the impression that this is what some financial advisors are doing in practice. Consider the recommended allocation to equities in Scenario 1. The clients in Scenario 1 were approximately 51 years of age. Participants recommended an equity allocation of ≈50%. In Scenario 2, the clients were closer to 67 years of age. Participants recommended an equity exposure close to 36%, which fits closely with the allocation heuristic.

It is important to consider again that the factor scores in the two scenarios were the same. Participants in the study were, apparently, making assumptions about the financial capacity of the clients based on age and employment status, rather than on the objective facts presented in the scenarios. Recall that in both client scenarios participants were told that risk capacity was very high. Given the same time horizon, and holding all other factors constant, the significant drop in the equity recommendation hints to the distinct possibility that qualitative evaluations and investment advisor preferences were driving the recommendations.

This does not mean that all participants were engaged in shifting allocation recommendations based on the age of the clients. A small number of participants exhibited consistency from one scenario to the other. Table 10 shows the univariate ANOVA results from a discriminant analysis that was conducted to identify the characteristics of participants who recommended an allocation to equities of at least 50% in both scenarios. For the purposes of the test, each of the variables (factors) shown in

Table 1 were included. Additionally, the ranking data from Table 2 were included as predictors of group membership (1 = recommended 50% or more in equities in both scenarios, otherwise 0).

As shown in Table 10, four characteristics described those who recommended a consistently high allocation to equities: age, type of employer, years providing financial advice, and ranking risk capacity. Specifically, those who were older with more experience, worked outside of a bank or trust company, and weighted a client's risk capacity as less important were more likely to recommend holding 50% of more in equites across scenarios.[3]

Table 10. Descriptive Factors of Those Who Allocated 50% or More to Equities in Both Scenarios.

	Less than 50% Equities (N = 153)	**50% or More Equities (N = 26)**	**Sig.**
Age	49.52	54.58	.025
Employer: Bank or Trust Company: Yes = 1	.14	.00	.045
Years Providing Financial Advice	4.39	4.88	.013
Ranking of Client's Risk Capacity	3.87	4.89	.021

Table 11 shows univariate ANOVA results from a similar discriminant analysis. In this case, group membership was based on recommending an *average* equity allocation of 50% or higher across both scenarios (1 = recommended an average of 50% or more in equities in both scenarios, otherwise 0). Similarities and differences from the preceding results were noted. Like the previous results, older and more experienced participants recommended more equities across the scenarios. Three new variables emerged in this analysis. The risk tolerance of participants was positively associated with recommending more equities. Being compensated in a manner other than through a salary was also associated with allocating more assets to equities. Finally, those holding the Chartered Life Underwriter (CLU®) designation were more likely to recommend equity holdings.

[3] Although these participants weighted risk capacity as less important (1 = most important), risk capacity was still ranked highly in terms of the 12 factors.

Table 11. Descriptive Factors of Those Who Allocated an Average 50% or More to Equities across Both Scenarios

	Less than 50% Equities (N = 145)	50% or More Equities (N = 34)	Sig.
Age	49.10	55.18	.003
Advisor's Risk Tolerance	7.09	7.91	.012
Years Providing Financial Advice	4.37	4.82	.012
Professional Designation: CLU® = 1.00	.10	.26	.013
Compensation Method: Salary = 1	.25	.09	.042

Discussion

The title of this paper describes a conclusion that emerged from the analyses presented here: do as I say, not as I do. When asked to rank portfolio development factors in a context-neutral environment, participants in this study—all professional financial advisors—ranked the following as being the most important: time horizon, liquidity need, risk capacity, risk need, and risk tolerance. These factors mirror what is generally encouraged in the finance and financial planning literature. Even among those who implement recommendations using mean-variance efficient models, the concepts of time horizon and risk tolerance, as well as other client preferences, are thought to influence the recommendation of a portfolio on the efficient frontier. In general, those with less time horizon and a low tolerance for risk should, holding other factors constant, hold less risky assets. Consider the case when a client's time horizon for goal achievement is constrained. When this happens, the client's exposure to equities for that particular goal, holding all other factors constant, should fall. This allocation approach is closely attached to the concept of risk capacity. As the time available to recoup potential losses is reduced, so should exposure to assets that exhibit greater price volatility. This has been a staple best practice of portfolio management for many years. Similarly, a client's tolerance for risk and ambiguity can be used as a constraining factor on portfolio risk. Those with an elevated risk tolerance should, holding other factors constant, be able to withstand the emotional consequences associated with greater equity exposure. Liquidity and risk need tend to move in opposite directions. As a client's liquidity need rises, so should exposure to fixed income and cash assets. Conversely, as the risk need increases, the allocation to these assets should fall. Unless an advisor is using a pure mean-variance efficient model that includes an estimate of utility curves, it is, to some extent, a financial

advisor's professional judgement that is used to balance these factors in the calculation and recommendation of a portfolio allocation.

A curious finding emerged from this study: while financial advisors ranked portfolio development factors in a way that generally matches what has been taught in academic publications (e.g., Carr, 2014), they shifted their rankings when faced with identical situations in which one or two elements of the scenario were different. This resulted in portfolio recommendation changes that were both inconsistent and in contrast to the separation theorem. In the context of this study, participants exhibited a preference for basing asset allocation recommendations on a person's age and employment status rather than on objectively measured factors or within the bounds of a mean-variance efficient model. This appears to be an almost unconscious bias. Recall that participants were allowed to indicate specific other factors that they use when developing portfolio recommendation. Of the more than 200 participants, less than a handful specifically noted that age was such a factor; however, in practice, age certainly appeared to be the dominant factor shaping the portfolio recommendation.

The use of the age heuristic as a guide to portfolio allocation recommendations may be the result of a lack of clear guidelines financial advisors can use to appropriately blend the factors thought to be associated with allocation choices. Although numerous normative mean-variance models have been proposed, there have been few attempts to provide tools that describe how portfolio development factors should be combined to arrive at an appropriate portfolio allocation recommendation. Much of what does exist promotes the notion that an advisor should use his or her professional judgement in conjunction with conversations with clients. Of the models that do exist, few have been widely adopted or empirically tested. For example, Carr (2014) developed a model that provides objective weights for use when combining portfolio factor scores, but to date, his model has remained under-referenced. A team of researchers working in Canada did publish a model that includes many of the factors described in this paper. The model, as described by Brayman, Finke, Bessner, Grable, Griffin, and Clement (2015) is shown below:

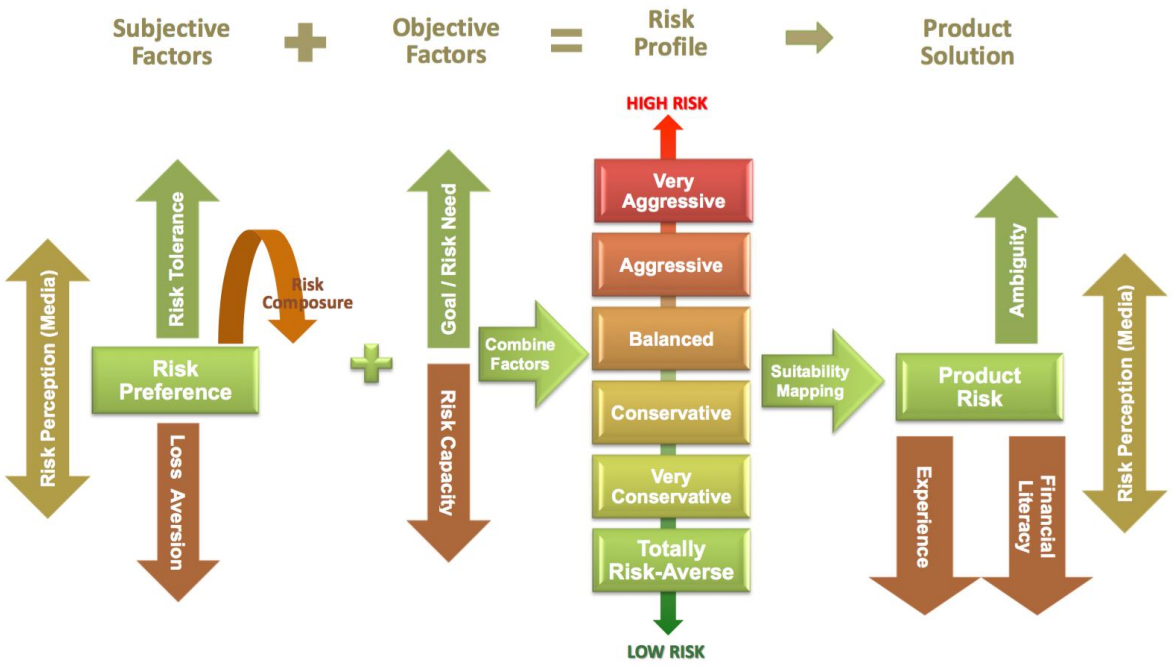

Figure 1. Model Describing How to Combine Portfolio Development Factors (source: Brayman et al., 2015).

While the model illustrated in Figure 1 does include each of the factors described in this paper, the model does not explicitly indicate how a financial advisor should weight each factor. This was not the authors' intention when they published the model. Their goal was to describe the decision-making process. In the model, the darker arrows (⬇) indicate the need to dampen risk within a portfolio. For example, if a client is more risk averse than risk seeking, the allocation should be skewed towards lower risk assets. Alternatively, the green arrows (⬆) indicate an opportunity to nudge portfolio recommendations towards more high risk and return assets. For instance, as a client's risk need increases so might the allocation to equities, holding other factors constant. To date, this model stands out as the most descriptive representation of what a financial advisor should consider when evaluating a client's situation in the context of developing portfolio allocation decisions.

It is important to note that the results from this study do not, and should not be used to, indicate that the participants in this study did anything unusual or incorrect. The primary takeaway is this: participants in this study (a) shifted their allocation recommendation when presented with nearly identical case scenarios, and (b) the shift in recommendation was based not on a dramatic re-weighting of factors, but the use of the age heuristic and/or other unspecified client characteristics (e.g., employment status).

Whether the age heuristic is appropriate within a portfolio allocation framework remains a subject of debate. On the one hand, some might argue that age serves as a proxy for both time horizon and risk capacity, and as such, should be "the" dominant factor driving portfolio recommendations. On the other hand, some might say that the use of age as a determinant of a portfolio allocation misrepresents the value of this personal characteristic. Is it universally true that because someone is older that they no longer have the capacity (or that their capacity is falling) to deal with a monetary loss? The answer is obviously 'no.' Similarly, the use of employment status as a proxy for risk capacity is problematic. Income from employment is not always the best indicator of risk capacity. The capacity issue is a separate factor that can be measured objectively using risk management and cash flow/net worth ratios. Some might then argue that age and employment status and risk tolerance are inversely related, and because of this, age or employment status should be used as an indicator of client's risk attitude. Again, there is mixed evidence to support this particular notion (Grable, 2016). The opposite may be true. As people age they gain experience and knowledge. These factors may actually work to increase someone's tolerance for risk. Additionally, a retiree may have more financial knowledge and experience than someone who is young and working. This helps explain why the use of the age heuristic, described as $Allocation\ to\ Equities = 100 - Client\ Age$, is rarely recommended beyond references in trade publications and basic articles designed to facilitate financial literacy among consumers.

This leads to a concluding observation. The shift toward fixed income assets across the sample and the two scenarios, may be representative of what Canner et al. (1997) called the 'asset allocation puzzle.' Given the 20-year time horizon in both scenarios, a greater exposure to equities would have been expected. So, who was more likely do provide this type of recommendation? It turns out that older more experienced financial advisors were apt to recommend an asset allocation that more closely matched normative mean-variance guidelines. There was some evidence to suggest that they also under-weight a client's risk capacity in favor of other factors, such as time horizon.

In summary, this paper adds to the literature in four ways. First, the results highlight the way financial advisors rank portfolio development factors when considering asset allocation decisions for clients. In a scenario free context, a client's time horizon emerged as the primary factor shaping asset allocation decisions. Second, the findings show how financial advisors weigh portfolio allocation factors. It appears that financial advisors shift the importance of certain factors based on their subjective interpretation of the client's situation. This tendency seems to coincide with the age of the client. Given the two equivalent scenarios, financial advisors over-weighted fixed income assets to equities for the older client. This suggests that in addition to professional judgement, financial advisors use allocation

heuristics, such as the “100-age” rule, more than one might expect. Third, results show that financial advisors are somewhat inconsistent in their use of portfolio development factors across client scenarios. Finally, findings suggest that older financial advisors with more experience do a better job of matching asset allocation recommendations to normative portfolio guidelines as described in mean-variance optimization models.

Although the results of this study are noteworthy, it is important to acknowledge relevant limitations. To begin with, the data used in this study were exploratory, and as such, results are not necessarily nationally or internationally generalizable. Additionally, it is possible that a selection bias was present in the data. This may have occurred based on the online nature of the survey and the length of the questionnaire. Some financial advisors may have opted out of the survey process or may not have received an invitation to participate, which could have skewed results. Issues related to endogeneity may also be present. While attempts were made to account for the primary factors associated with portfolio decision making, it is possible that one or more key variables were omitted or unobserved. Even so, the data and findings do offer a unique insight into the way financial advisors rank and weigh portfolio allocation factors. Additional research is needed to determine whether a model can be developed to help financial advisors and investors blend these factors in a way that maximizes optimality.

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