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Original Paper

Personal Financial Planning and Cryptocurrency Attitudes: A Study of MBA Students

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Abstract

This study reports a survey of personal financial planning and cryptocurrency attitudes of ninety MBA students. The findings indicate that while most respondents feel that financial planning is both important and they are interested in developing a financial plan, very few feel that they have the necessary skills and knowledge to prepare their own plan. In addition, they indicated a strong preference for professional personal financial planning advice. The study also indicates that less than twenty-five percent have prepared a comprehensive personal financial plan. When asked to identify the one professional from whom they would seek advice, Certified Financial Planners® were the preferred resource. Implications for practice and education are presented.

Keywords: Financial planning attitudes, survey, financial planners, compensation

Introduction

Murphy and Yetmar (2010) presented the results of a survey of MBA students' attitudes about personal financial planning and their self-reported ability to prepare such a plan. MBA students were selected as surrogates for financially sophisticated decision makers. Significant changes have taken place over the past thirteen years and so it was decided to revisit the issues they address, as well as a few new ones.

Bitcoin, the first cryptocurrency, was released in 2009, about the same time that data was being collected for the Murphy and Yetmar 2010 paper. Cryptocurrencies have become more well known and this paper addresses perceptions about cryptocurrencies as investment vehicles.

In addition, financial literacy has become more important. The Organisation for Economic Co-Operation and Development (OECD) began surveying high school students' (15-year-olds) educational attainment in 2000 with the first Program for International Student Assessment (PISA) survey to measure students reading, mathematics, and science literacy every three years. In 2012 OEDC started to include financial literacy in their survey. As shown in Table 1, interest in citizens' financial literacy has become global. The United States' financial literacy assessment score has improved but lags behind that of other developed countries.

Table 1. World Ranking of Financial Literacy – PISA 2018 Financial Literacy Scores

Country	2018 Score	2015 Score
OECD Average	505	489
Estonia	547	
Finland	537	

Canada	532	533
Poland	520	485
Australia	511	504
United States	506	487
Portugal	505	
Latvia	501	
Lithuania	498	449
Russian Federation	495	512
Spain	492	469
Slovak Republic	481	445
Italy	476	483
Chile	451	432
Serbia	444	
Bulgaria	432	
Brazil	420	
Peru	411	403
Georgia	403	
Indonesia	388	

Data Sources: 2018 Data from National Center for Education Statistics. (2018)

2015 Data from U.S. Department of Education. (2017)

Several states have responded to the need for improved financial literacy by enacting legislation that requires the inclusion of financial literacy coursework at the high-school level. Table 2 provides a list of all fifty states and the District of Columbia and the status of financial literacy education in each state.

Table 2. Percent of Students by States with Mandatory High School Financial Literacy Coursework

State	**Percent of Students**
Mississippi	100.0%
Missouri	100.0%
Virginia	100.0%
Tennessee	99.7%
Alabama	99.6%
Utah	99.6%
Iowa	91.3%
North Carolina	89.2%
Oklahoma	47.1%

New Jersey	43.0%
Nebraska	42.8%
Kansas	40.8%
Wyoming	38.3%
Arkansas	34.6%
Wisconsin	33.5%
South Dakota	27.1%
Ohio	23.5%
Pennsylvania	16.2%
Maine	15.6%
Rhode Island	14.8%
Connecticut	14.7%
Illinois	13.9%
Maryland	12.5%
North Dakota	12.2%
Vermont	12.1%
Nevada	11.0%
Indiana	10.9%
Oregon	7.5%
Minnesota	6.9%
Montana	6.9%
New Hampshire	6.0%
Kentucky	5.5%
Colorado	5.4%
Delaware	5.0%
Massachusetts	5.0%
West Virginia	3.2%
Louisiana	2.7%
Washington	2.4%
Texas	2.2%
New York	2.0%
Michigan	1.7%
Idaho	1.4%
Arizona	1.0%
California	0.8%
South Carolina	0.8%

Alaska	0.6%
Florida	0.4%
New Mexico	0.4%
Georgia	0.0%
Hawaii	0.0%
Washington, D.C.	0.0%

Source: Ross, Jenna. (2022).

Only eight states currently have state-wide requirements for a personal finance course: Alabama, Mississippi, Missouri, Iowa, North Carolina, Tennessee, Utah, and Virginia. Naturally, the level of personal finance education is highest in these states. Ten states have begun the process of implementing a requirement. Florida, one of the states in transition to a required personal finance course, has offered the course as an elective. However, only 5 percent of students took the course. Ross (2022) estimate that only 9.3 percent of students, outside of the states which have currently implemented a required personal finance class, are required to take a such a course.

Table 3 identifies the states that have implemented financial literacy coursework at the high-school level, and the states that have passed such legislation and the implementation dates for those states.

Table 3. States with Mandatory High School Financial Literacy Coursework

State	Implementation Date
Alabama	In place
Florida	2027
Georgia	2025
Iowa	In place
Kansas	2027
Michigan	2028
Mississippi	In place
Missouri	In place
Nebraska	2024
New Hampshire	2023
North Carolina	In place
Ohio	2025
Rhode Island	2024
South Carolina	To be determined
Tennessee	In place
Utah	In place
Virginia	In place
West Virginia	2024

Data Source: Next Generation Personal Finance (NGPF). (2023).

If the financial literacy programs now in place have been effective, then we would expect to see a change from the initial Murphy and Yetmar (2010) study and perceptions 13 years later.

Economic uncertainty is also affecting financial planning perceptions. A 2022 survey by Age Wave, with Edward Jones and the Harris Poll of 11,000 individuals, including 5,000 retirees, indicated that only 37% of retirees describe their finances as fully on track. Current stock-market volatility, and inflation is affecting the balances of retirement accounts. This can be seen in the sudden downturn in the savings rate between 2020 and 2021. Figure 1 shows the annual savings rate as reported by the Federal Reserve Bank of St. Louis.

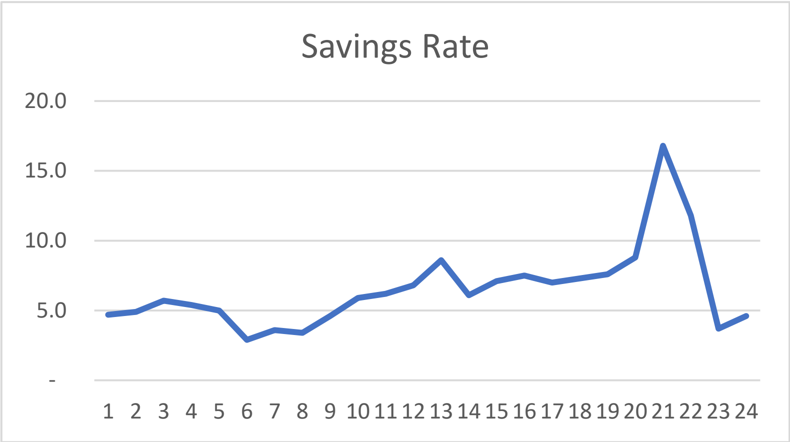

Figure 1. Savings Rate: 2000 – 2023 Percent by Year

Source: U.S. Bureau of Economic Analysis, (2023).

The Study

The purpose of this study was to measure the interest and capability of more financially sophisticated individuals to engage in personal financial planning and to identify reasons why individuals fail to plan appropriately. The study included the view of 90 MBA students, 63 from a metropolitan state university and 27 from a small private liberal-arts college who completed a financial planning questionnaire. Participants were informed that participation in the study was optional, that they would receive course points for participating, and that there were "no correct answers" to the questions on the instrument. A summary of the demographic data concerning the participants is presented in Table 4**.** While the results may not be generalizable to the population, one might expect that these educated individuals would be both more interested in personal financial planning and more capable of preparing their own plans.

Summary participant demographics are presented in Table 4 below. While the results may not be generalizable to the population as a whole, one might expect that these individuals would be both more interested in personal financial planning and more capable of preparing their own plans.

Table 4. Summary of Participants Demographics

		Percent		Percent
Number of participants	*n = 90*		*n = 206 **	
Female	41	45.6	104	
Male	49	54.4	102	
Mean age	28.8		29.1	

Highest education level				
Bachelor's degree	89	98.9	171	85.9
Master's degree	0	0.0	23	11.6
Doctoral degree	1	1.1	5	2.5
Mean years of work experience	7.7		6.5	
# employed in accounting or finance	27	30.0	25	12.25
Mean annual income (USD)	44,904		47,558	

* Data from 2010 study

Other than a decrease in the number of students in 2023, as compared to Murphy and Yetmar (2010), the other notable differences are a decrease in the number of graduate students who participated in the study. This may be attributable to the currently strong job market and a decline in the number of graduate students enrolling in MBA programs (Lake, 2022). A slight decrease in the mean annual income is noticed. The private liberal-arts college students attend the MBA program and receive tuition remission in exchange for working as graduate assistants or assistant coaches.

Attitudes about Planning

As in the previous study, subjects were specifically asked:

- whether they thought that preparing a personal financial plan was important,
- whether they were interested in preparing such a plan,
- whether they had time to do so, and
- whether or not they felt that they had the necessary skills and knowledge to prepare a financial plan.

The results of these four questions are summarized in Table 5 below.

Table 5. Financial Planning Interest and Knowledge

	Affirmative responses	Percent Yes	Affirmative responses*	Percent Yes*
Personal financial planning is important	73	81.1	156	75.7
Interested in personal financial planning	59	65.5	138	67
Have the time to prepare a personal financial plan	48	53.3	83	40
Have the skills and knowledge to prepare a personal financial plan	32	35.6	68	33

1 = Yes; 2 = No

* Data from 2010 study

There was a slight increase, from 2010 to 2023, in the perceived importance of preparing a financial plan. The percentages of subjects who felt that preparing a financial plan increased from 75.7 percent to 81.1 percent over that period. However, interest in actually preparing a financial plan decreased from 67.0 percent to 65.5 percent. This is notable given the increase in time available to prepare a financial plan. In 2023, 53.3 percent of the subjects reported that they had enough time to prepare a financial plan compared to only 40.0 percent in 2010. Clearly, time was not a factor in the decrease in interest in financial plan preparation. There was a slight increase in perceived knowledge about how to prepare a financial plan (35.6 percent to 33.0 percent in 2023 and 2010 respectively). There seems to be a disconnect between the subjects' feeling that financial planning is important and preparing a plan.

The mean score for the importance of preparing a financial plan was 2.539 (sd = 1.284) for the participants from the university in Ohio, a state that does not require a financial literacy course in high school. The mean score for students at the private, liberal-arts university in Virginia, a state that has required financial literacy education in high school, was 2.556 (sd = 0.718). A t-test indicated the means are statistically different and at moderately significant level (t = -0.073). The mean score to knowledge and ability to prepare a financial plan (mean = 1.667, sd = 0.226 vs. mean = 1.593, sd = 0.251 for Ohio vs. Virginia respectively) were not statistically different between the two participant groups.

Table 6, rather than reporting perceived importance, addresses the issue of completing a financial plan, or at least one of its components.

Table 6. Personal Financial Planning Components

	Number who had prepared component	Percent	Number who had prepared component*	Percent*
Comprehensive personal financial plan	22	24.4	69	33.5
Current year tax liability analysis and plan	7	7.8	24	11.7
Educational funding analysis	16	17.8	43	20.1
Estate plan	0	0.0	11	5.3
Insurance needs analysis	6	6.7	31	15.1
Retirement plan	2	2.2	39	19.0
Will	11	12.2	37	18.0

* Data from 2010 study

As shown in Table 6, although participants (see Table 5) reported that personal financial planning is important, few of the participants in the study have actually prepared at least one of the components of a comprehensive financial plan. In addition, although 35.6 percent (Table 5) reported that they had the knowledge to prepare a plan, only 24.4 percent (down from 33.5 percent in 2010) had prepared a comprehensive financial plan. Again, this begs the question, if subjects have the knowledge to prepare a financial plan and they reported that having such a plan is important, why don't they do it?

In relative importance, measured by plan component preparation, were:

1. Comprehensive financial plan
2. Educational funding analysis
3. Will
4. Tax liability analysis and tax plan,
5. Insurance needs analysis, and
6. Retirement plan.

None of the subjects reported that they had prepared an estate plan. This, and the high completion rate of educational funding analysis can probably be explained by the fact that all the subjects were enrolled in an MBA program. To them, the needs for an estate plan is probably too far distant in time to be salient, whereas, as graduate students, deciding how to pay for graduate school is at the forefront in their minds.

Attitudes about Planners

Participants were also asked to indicate whether they would develop their own personal financial plan or seek the assistance of another, and, if they were going to seek assistance, to whom they would turn. The results of these questions are summarized below in Table 7.

Table 7. Who would you Turn to Start a Financial Plan?

	#	Percent
Self	4	4.4
Financial planner	53	58.9
CPA	21	23.4
Attorney	8	8.9
Broker	2	2.2
Insurance agent	0	0.0
Other	2	2.2

A significantly lower number of participants that responded that they had the skills and knowledge necessary to prepare their own personal financial plan (n=32, or 35.6%) indicated that they would rely on their own skills to prepare their personal financial plan (n = 4 or 4.4%). The remainder (95.6%) indicated that they would seek assistance from a professional or another person. Although the accounting profession, through the AICPA, has developed an accredited personal financial planning designation (CPA/PFS) for its members, the majority (Table 8, 53.5%) of the respondents indicated that they would rely on a Certified Financial Planner®. Certified Public Accountants with the Personal Financial Planning (PFP) designation were selected by 38.9 (see Table 8) percent of the respondents. Certified Fund Specialists, Certified Life Underwriters, and Chartered Financial Consultants were selected by very few participants.

Table 8. From whom would you most Likely Seek Professional Financial Advice?

	2023	
	#	Percent
Certified Financial Planner	48	53.4
Certified Fund Specialist	3	3.3
Chartered Financial Consultant	3	3.3
Certified Life Underwriter	1	1.1
Certified Public Accountant credentialed as a Personal Financial Specialist	35	38.9
Other	0	0.0

The most important planner characteristic in both 2023 and 2010 (see Table 9), as indicated by the participants, was that the planner puts the client's needs first. This desire is consistent with the expressed desire by most of the respondents to work with a fee-only planner (See Table 9 below).

In 2023 the second most important planner characteristic, unlike 2010 when it was freedom to make product choices, was the client's perception that the planners were confident in their recommendations. This was followed by the desire that the planner demonstrate a high level of product familiarity. This implies that fee-only planners need to be as familiar with the products that they recommend as are commission-only planners. Fee-only planners often use no-load funds for plan implementation, products for which they do not receive a commission. Low transactions costs or the use of commission-free financial products ranked last in importance among the participants.

Participants ranked freedom of choice fourth in importance. Thus, it may be important for all planners to present clients with a menu of choices for plan implementation. Selecting several different funds, for example, with similar risk-return characteristics, time horizons, and letting the client make the final selection may help meet this perceived need.

Planner independence is an attribute often used as a selling point by Certified Public Accountant/Personal Finance Specialists. It appears that this independence may give them little competitive advantage in the marketplace. Clients appear to value the feeling their needs are being met and that the planner is confident more than planner independence.

Table 9. Planner Selection Criteria (Sorted from most to Least Important)

Criteria	Mean rank	SD	Mean rank**	SD
I want to know that the planner will put my needs first	1.84	1.00	1.78	1.61
I want to feel that the planner is confident in his/her recommendations	2.89	1.29	3.60	1.48
Planner's familiarity with products	3.26	1.64	3.08	1.59
I want to preserve my freedom of choice in product selection	3.61	1.66	3.37	1.30
I want to feel that my planner is independent	4.40	1.38	3.99	1.68
Reduced transaction costs	4.83	1.33	4.86	1.44

Note: *1 = most important to 6 = least important

** Data from 2010 study

When asked whether they preferred fee only, fee and compensation, or compensation only planners, the majority (61 or 67.8% vs. 127 or 61.7% in 2010) indicated that they preferred fee-only planners. Only seventeen participants (18.9%) indicated a preference for working with a commission-based planner while even fewer (12 or 13.3%) indicated that they would seek the advice of a fee and commission planner. Thus, although subjects ranked reduced transaction costs as the least important criteria for selecting a financial planner, they may perceive that fee-only planning leads to increased planner independence and reduced costs.

Table 10. Type of Financial Planner the Subjects would Use

	#	Percent	#*	Percent*
Fee only	61	67.8	127	61.7
Commission only	17	18.9	30	14.6
Both	12	13.3	49	23.7

*Data from 2010 study

Retirement and Investment

Participants were also asked to indicate if they participated in a retirement program and if their employer offered such a program. The U.S. Bureau of Labor Statistics (2021) reported that 68 percent of individuals in private industry had access to retirement programs through their employer and that 51 percent choose to participate. That availability rate (n=52, 57.8%) is less than the national average. However, the subjects were graduate students. On the other hand, their retirement program participation rate (n = 30, 57.7%) is greater than the national average. The participation rate has increased appreciably from 2010 from 46 percent to 57.7 percent. The first panel in Table 11 summarizes retirement program and investment activities.

Table 11. Work Retirement Program and Outside Investing

	#	Percent	Average	SD
Do you have a retirement program at work?	52	57.8		
If yes, do you participate in your work retirement program?	30	57.7		
Do you actively invest in your personal life, outside of work?	46	51.1		
Do you invest in cryptocurrency?	40	44.4		
If yes, what percentage of your portfolio is cryptocurrency?		25.9		
How well do you understand cryptocurrency?				
technology (1 – low to 5 – high)?			2.46	1.16
Do you view cryptocurrency as a medium of exchange (1)				
or investment (5)			3.09	1.58
Of the 50 subjects that did not invest in cryptocurrency, why?				
It is too risky	14	28.0		
I do not understand it well enough yet	27	54.0		
It is just a passing fad, and I do not invest in fads	9	18.0		
If the stock market declines, what would you do?				
Withdraw from the market	16	17.8		
Hold your investment and not invest in the future	8	8.9		
Hold onto investment and wait for the market to reach a new				
low and then begin to invest again	66	73.3		

About half of the subjects (n = 46, 51.1%) reported that they invest. Given the current stock market trend, the market closed down in 2022, (the year in which data for this study was collected) and had its worst performance since 2008 (Pound & Subin, 2022). Consequently, the participants' responses to the question about how they would respond to a market decline were informative. 73.3 percent (n = 66) reported that they would hold onto their investments and wait for the market to reach a new low and then start investing again.

Participants were also asked several questions about cryptocurrency. They were asked to indicate, on a scale of 1 to 5 where 5 indicated high, their level of understanding of cryptocurrency. The mean score of 2.46 (sd = 1.16) on a scale of 1 to 5 where 5 indicated high understanding shows that MBA students perceive that they have a less than average (score = 3) understanding. They were also indifferent (mean score = 3.09, sd = 1.58) about whether cryptocurrency is a medium of exchange or an investment vehicle. The 50 participants, 55.6 percent of the survey participants, who had not invested in cryptocurrency indicated that they did not understand it well enough to invest in it (n = 27, 54.0%), that they perceived it as being too risky (n = 14, 28.0%), or that it is just a passing fad (n = 9, 18.0%).

Implications for Practice

First, there appears to be a tremendous need for financial literacy education in America. While over eighty-one percent of the participants felt like financial planning is important, and almost sixty-six percent of them are interested in planning, only less than thirty-six percent felt like they have the necessary skills and knowledge to prepare their own financial plan. This also means that it is important for financial planners to explain complex financial concepts in ways that make them understandable. Financial planners can start to meet this need for financial literacy education by presenting public workshops and seminars. While useful marketing tools, the primary focus of these events should be educational.

In addition to a need for financial literacy education, there appears to be a very strong need for financial planning. The participants in this study are MBA students. This is a population that could be perceived as being more financially literate than average Americans. Nevertheless, less than twenty-five percent have developed comprehensive financial plans and only about two percent had prepared a formal retirement plan.

It appears, from the results of this study, that the Certified Financial Planner Board of Standards, Inc., and the CFP® professionals have done a much better job in educating the public about their services and qualifications. Over fifty-three percent of the participants in the study indicated that they would seek planning advice from a CFP®. About thirty-nine percent of the participants indicated that they would seek the advice of a CPA or CPA/PFS. This is surprising given that 23.4% percent of the participants indicated that they had established a professional relationship with a CPA. Thus, it appears that while just under a quarter of the participants view having a relationship with a CPA as important, the majority of them do not view their CPAs as potential providers of financial planning advice.

Very few of the respondents indicated that they would seek the advice of Certified Fund Specialists (CFS), Charted Financial Consultants (ChFC) or Certified Life Underwriters (CLU); designations frequently held by insurance professionals. It appears that both the insurance and public accounting professions have not had the same success in promoting members of their professions as personal financial planners.

It appears, from Table 9, that there is a perceived need by the respondents to feel that their financial planner will put the client's needs first. While some professionals may feel that this is the hallmark of "independence", the respondents placed much less importance on planner independence. Thus, it appears that planners, to foster client confidence, must act in ways that very clearly convey that message to their clients.

Future Research

One of the benefits of survey research such as this is that it raises questions that may indicate directions for future research. The authors have a few questions that may be addressed in the future, including:

1. There appears to be a disconnect between participants' perceptions of the importance of financial planning and engaging in the planning process. Future research should seek to identify the causes of this disconnect and recommend solutions for overcoming reluctance to plan.

2. This study was not designed to test the persistence of the information learned in a high school financial literacy course or the ability of individuals to apply that knowledge to real-life situations. Future research should address those two issues.

3. This study, as did Murphy & Yetmar (2010), found that participants prefer fee only to commission and fee-and-commission planners. The study did not address the underlying factors that drive this perception. The answer to this question should be particularly relevant to both commission and fee-and-commission planners.

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