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AN EVALUATION OF THE PRINCIPAL-AGENT PROBLEM BETWEEN FINANCIAL
ADVISORS AND THEIR CLIENTS

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ABSTRACT

The purpose of this document is to explore the principal-agent problem that exists between financial advisors and their clients. My thesis is that there is an inherent principle-agent problem in the financial services industry that is often exploited. As a result, the current relationship between financial advisors and their clients must be reevaluated. By looking at quantitative methods of evaluating a principal-agent problem and applying it to the world of financial services, it is clear that there are alternatives to a financial advisor that would be better for the retail investor. Due to this fact, a new contract is required to mitigate the principal-agent problem. To create this new contract, I have analyzed the texts of Adam Smith and Immanuel Kant and have drafted their philosophies to better illustrate the actual role of the financial advisor. By adjusting the role of financial advisor to become similar to that of a teacher, and restructuring their payment incentives, the principal-agent problem is lessened and utilizing a financial advisor becomes a more appealing option for the retail investor.

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Chapter 1

The Financial Services Industry

The financial services industry has had a bad reputation for much too long.

Negative portrayals in media, the ups and downs of the business cycle, and salesman-like brokers claiming they can make you rich quickly, all contribute to the undesirable perception of the financial services industry. Just the idea of dealing with some people in the financial services industry is enough to put some would-be investors off from entering the markets entirely. This is a big problem as properly investing in the markets is one of the most effective ways to get returns on your money; however, some are simply too unsure or untrusting of what the industry actually is. The main problem I will focus on regarding the financial services industry is the principal-agent problem between financial advisors and their clients. Essentially, the relationship between advisor and client is flawed and in need of a contract revision. To make this case, I will use quantitative analysis to define the principal-agent problem and then through analysis of the philosophies of Adam Smith and Immanuel Kant, I will offer a potential solution. However, before I look further into the problem, I must seek a clearer picture of the financial services industry as a whole.

According to the government website SelectUSA, the financial services industry, “accounted for 7.9% (or \$1.24 trillion) of the US gross domestic product in 2012.” The industry itself is comprised of many different parts including, banking, asset management, insurance, and venture capital. Banking is what the average person is most familiar with in the United States.

This sector of the industry supports the world's largest economy by offering a source of credit to businesses and individuals. Technically when an individual deposits their money in a bank they are participating in the financial services industry. Asset management is more involved than banking, and is also where I choose to focus the majority of my time when trying to solve the principal-agent problem. Asset management is characterized by investments. An individual can invest in many different assets such as stocks, bonds, and other securities. There are many different forms and strategies when dealing with asset management which is often why individuals are so confused when it comes to what to do in this sector. Insurance is another more common form of the financial services industry, and is best characterized as a protection from risk. The United States insurance sector is one of the largest in the world. Finally, the venture capital sector of the financial services industry is characterized by investing in emerging companies which cannot yet get a bank loan or trade publically. This sector is known for having high risk and is the oldest in the world. While it is important to understand how each of these sectors operates and contributes to the financial services industry as a whole, I will focus my concentration on the asset management sector.

I chose to focus primarily on asset management because I believe that this sector faces the most criticism and has the most room for improvement. As I mentioned earlier, there are many different forms of asset management, more commonly known as investment management. The main reason why there are so many different investment managers is that there are so many different investment strategies. For example, mutual fund companies such as Vanguard offer bundles of stocks to provide the individual investor with a more diversified portfolio. As a provider of mutual and index funds, Vanguard would then be considered an investment manager. Another form of an investment manager, and the one I will focus on the most, is the financial

advisor. Financial advisors work for a company such as a bank and take on clients to manage their money. These clients, otherwise known as retail investors, (I will use the two interchangeably) will give the money that they want to invest to their financial advisors. The financial advisors then possess fiduciary responsibility or the contractual obligation to act in the best interest of their client (“FINRA RULES”). The advisors will then work to best invest the money of their clients in exchange for some form of compensation.

The two most prevalent forms of compensation are either “assets under management” based or “per transaction” based. The former is the most common form. Essentially in assets under management, the advisor will receive a percentage of the entire assets that they invest for their clients. The per transaction compensation model is just how it sounds, every time the advisor decides a change in the asset allocation is needed, there is a fee for every transaction made (“FINRA RULES”).

The model then is not too complicated. There is simply an exchange of money for the benefit of services. The question then is why so many people are dissatisfied with this sector of the financial services industry? The answer is the principal-agent problem. To clarify, the principal-agent problem is caused by the misalignment of interests when a principal hires an agent to act on their behalf. In the case of the financial services industry, the retail investor would be considered the principal, and the advisor would be the agent (I will also use client and principal interchangeably, as well as financial advisor and agent). There is often a misalignment of interests between a financial advisor and his or her client. An advisor is a fiduciary, and therefore obligated to act in the best interest of their client which for the most part involves holding long positions in stocks. However, if the advisor is compensated per transaction the advisor has a personal interest in making more and more transactions because they would be

getting more compensation. This practice is actually called “churning” and is much more common than one would expect.

The example above just reinforces the idea that there is a problem between advisor and client relations which must be addressed. In order to best address this issue, it is important to look at models of the principal-agent problem and fit one to the financial services industry.

Chapter 2

The Principal-Agent Problem: Financial Advisor Model

The principal-agent problem between advisors and clients is an enormous topic of discussion in the financial services industry. Accusations that financial advisors mismanage money or do not meet the returns they promise their clients lead to an extremely untrusting environment. However, unsatisfied retail investors are not necessarily proof that the contract between advisor and client is flawed. In order to determine whether or not the advisor-client relationship is inherently flawed, it is necessary to create a method of analyzing this relationship. The method I will use to better understand how the principal-agent problem affects the contracts between financial advisors and their clients will be to create a model that fits their relationship.

I believe that the journal article *Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design* by Bengt Holmstrom and Paul Milgrom provides a great system of testing advisor-client relations. In this journal article, Holmstrom and Milgrom look at the effectiveness of incentives in agent performance and propose that under certain circumstances a linear model can be used to explain the principal-agent problem. Their model is as follows:

Agent Utility/Wage (CE- Certainty Equivalent): $CE = \alpha^t \mu(t) + \beta - C(t) - \frac{1}{2} r \alpha^t \Sigma \alpha$

Principal Utility/Wage: $CE = B(t) - \alpha^t \mu(t) - \beta$

Joint Surplus: $B(t) - C(t) - \frac{1}{2} r \alpha^t \Sigma \alpha$

*Where the agent chooses an effort level $t = (t_1, \dots, t_n)$

$\mu(t)$ = an incentive function agreed upon between principal and agent on compensation given agent output t

$\alpha(t)$ = the unit of utility transferred given effort t , which is transferred via the incentive function $\mu(t)$

β = Base compensation without any incentives

$C(t)$ = The personal cost to the agent to work at effort level t

$B(t)$ = Benefit the principal receives from the agent's work

r = the agent's risk aversion

$\alpha^t \Sigma \alpha$ = the variance of the agent's income

Essentially the agent's utility is comprised of incentives provided they work a certain effort level, plus their wage apart from any effort exerted, minus the cost of exerting that effort, minus a risk premium that is assumed from exerting effort.

The principal's utility is similar in that it is the benefit received from the agent's work given an effort level t , minus the incentives paid to the agent, minus the base price of the agent.

The joint surplus is simply the utility created from the agreement between the principal and agent, minus the cost to the agent given the effort exerted, minus the risk premium that must be assumed because of the additional effort exerted.

I believe that Holmstrom's and Milgrom's linear models are a good representation for the relationship between a financial advisor and his or her client for several reasons. The first reason is that there is a clear incentive payoff that the advisor receives in the form of commission. It is also more common that the commission growth is linear as they simply take X number of basis points from the assets under management of the client. This incentive payoff is the $\mu(t)$ term in

the equation. Their base wage could be taken as \$0, which also makes sense in a commission based industry as the firm the advisors work for will often not provide a salary. The α term, representing utility transferred, would be most closely associated with the money transferred between the advisor and client. The terms outlined in the linear equation by Holmstrom and Milgrom transfer very effectively to the advisor-client relationship.

However, there are two changes which I will be making in the model to make it better resemble the advisor-client relationship. I believe that the $B(t)$ term should be split into two parts, a $n(t)$ term representing the annual return the client receives from their portfolio, and $b(t)$ term representing additional benefits the client receives from services such as financial planning for retirement. The division of the overall $B(t)$ will better highlight the difference between different advisor options while maintaining the linear model that Holmstrom and Milgrom created.

Also, I will be including a risk premium term in the principal's utility function. This term will be characterized by a $\frac{1}{2}Rr\alpha^2$ term. I chose this term because it resembles the variance in advisor income outlined in Holmstrom and Milgrom's linear equation. In their equation the variance of the income was normally distributed around a base α . I chose to have a similar term; however the utility lost will depend upon a variance in the client's risk aversion r , instead of the variance of income α . I assume that clients will have a normally distributed risk aversion, centered on a base level r . While traditional principal-agent relations would have the agent assume the risk, there are different financial advisor options which place risk on the retail investor. The R in the risk premium term represents the "perceived riskiness" of the different types of financial advisors. A high R would be characterized by the fraction of the risk which would be perceived to be on the individual. If there is no advisor to help guide the individual

investor, the investor bears all of the risk and therefore R would be high. The more involved an advisor is in the process, the more at ease the client feels. This effectively lowers the R variable by lowering the amount of perceived risk on the individual. The equation for the principal's utility would then be:

$$CE = [n(t)+b(t)] - \alpha^t \mu(t) - \frac{1}{2} R \alpha^t \Sigma r$$

This equation will be useful in analyzing the current relationship of financial advisors and their clients, as well as provide a structure for how the ideal contract should be. This equation also lends itself to rather straightforward comparisons between different advising methods.

Chapter 3

Advisor Options and Modern Portfolio Theory

With the model that I have established in Chapter 2 in place, analyzing the problem between advisors and clients becomes easier to picture. In order to determine if the contract between advisors and clients is in need of revision, I believe that it would be worthwhile to look at alternatives that a retail investor would have to using a financial advisor. If it is possible to prove that under certain conditions the benefit to the retail investor while utilizing one of these alternatives would be greater than the benefit would be from using a financial advisor, then it would be safe to say that the advisor-client relationship is in need of revision. I make this claim because if the majority of people could receive more benefit from another option, then the financial advisor would not be meeting their fiduciary responsibility of acting in their clients' best interests. In order to analyze the advisor-client relationship I have chosen to look at three advising options: No-Advisor (NA), Robo-Advisor (RA), and Financial Advisor (FA). The definition of each advising option is listed below.

1. No-Advisor: This option would entail not using any type of financial advisor and making the portfolio management decisions individually. This method would be characterized by the individual using the John Bogle and Burton Malkiel strategy of investing in index and mutual funds for long term returns. The returns that the individual receives from this style of investing is the $n(t)$ term in the equation. A high $n(t)$ would mean that the individual would be receiving a lot of benefit from their portfolio investments. The $n(t)$ term can also be negative, indicating that the individual has lost money through their portfolio. This method requires very little oversight and has minimal fees associated with it. This is represented by the advisor fee term, $\alpha^t \mu(t)$, being very small. While there are still fees based on the transactions made, they

are a fraction of what the price would be otherwise. The drawback of this method is that there is no additional benefit of financial planning aside from portfolio management. The additional benefit would be the $b(t)$ term, so in the case of not utilizing an advisor, $b(t)=0$. Also, the individual essentially bears all the risk of the investments personally as there is not someone assisting them along the way. Essentially, the individual could have less peace of mind as there is not a “professional” supporting them. This would mean that depending on the individual’s risk aversion, the $\frac{1}{2}R^2r\alpha^2\sigma^2$ term could be very high. Since the R in this option is high because of the amount of risk on the individual, if the individual was very risk adverse, (high r), this term would increase, making this option less attractive. A smaller r would make this option much more attractive as it would counteract the large R variable.

2. **Robo-Advisor:** This is a new type of advising strategy that is gaining in popularity. Essentially the “robo-advisor” is a computer based advisor that offers suggestions on how to run a well-diversified portfolio based on modern portfolio theory. Modern portfolio theory, more commonly referred to as the Efficient Market Hypothesis is a theory assuming that markets are rational and that it is difficult if not impossible to pick individual stocks to generate long term returns. While I will discuss the Efficient Market Hypothesis more in a later section, it is important to note that the way the robo-advisor utilizes it is to create a diversified portfolio to ensure stable long term returns. This means that the $n(t)$ term in the equation is positive and stable in the long run. Another benefit of using a robo-advisor is that there are comparatively small fees associated with it. In this way, the $\alpha^2\mu(t)$ term remains small compared to the financial advisor. The risk aversion term $\frac{1}{2}R^2r\alpha^2\sigma^2$ is also lessened because of the smaller R variable. Since the robo-advisor provides some consultation with the client, they have a “professional” backing their choice, which lessens their risk. The downside of this option is that

there is still little help in the financial planning side. This means that the $b(t)$ term is smaller than it would be if the advisor was an actual person, but it is still larger than not using any type of advisor.

3. **Financial Advisor:** This method is characterized by higher fees with more elaborate coverage. This is demonstrated by the $\alpha^t \mu(t)$ term being significantly larger than the other options. Most advisors still follow the Efficient Market Hypothesis by diversifying the portfolio enough to mitigate risk and provide more stable long term returns. The benefit of having a human advisor over a robo or no-advisor is that they continually update their investments through fundamental analysis. Despite this fact, the portfolio management benefit they provide to their clients $n(t)$ is not significantly higher than the other advisor types. To provide additional benefits to their clients, advisors will often offer financial planning for things such as retirement or college savings. These additional benefits are characterized by a high $b(t)$ variable, which not many other alternatives can provide. The other benefit is that the R term lessens the risk aversion term, as having a physical human advisor lowers the perceived risk of the individual investor.

These three investor choices are not the extent of options available to the retail investor, but they represent the three most popular options. Before I compare the three using the equation I proposed in Chapter 2, I need to further explain how each of the strategies affects each variable in the equation. To do this, I must explain the ideas behind modern portfolio theory and how each advisor utilizes this theory.

Advisors and Modern Portfolio Theory

When comparing these types of advisor options, it is important to first understand the concept of modern portfolio theory and the work of Burton G. Malkiel. His work in, *A Random Walk Down Wall Street- The Time-Tested Strategy for Successful Investing* greatly expands the idea of what benefit financial advisors actually provide.

In *A Random Walk Down Wall Street*, Malkiel outlines the Efficient Market Hypothesis (EMH). There are three forms of this hypothesis: the **weak**, **semi-strong**, and **strong form**.

The “**weak**” form of the hypothesis is that publicly traded assets such as stocks reflect all past publicly traded information. This means that an individual cannot predict future performance by analyzing the past performance of the asset. This idea is the basis of the “random-walk” theory, meaning that prices do not follow any sort of pattern so it is difficult if not impossible to predict future stock performance.

The “**semi-strong**” form of the hypothesis is that the prices of all publicly traded assets reflect all past public available information regarding the asset as well as adjust rapidly to reflect new information. The result of this is that as soon as any information is revealed regarding a particular stock, (ex. proposed merger, change in management, etc.) the price of the stock adjusts immediately to reflect the change in information, leaving very little time to capitalize on any arbitrage opportunities.

The “**strong**” form of the hypothesis asserts that the price of all publicly traded assets reflect all past public AND non-public information regarding the asset. This lends a lot of power to the market, and leaves absolutely no opportunity for arbitrage.

While the Efficient Market Hypothesis is just a theory, it has helped shape the recent trends in portfolio management. Due to the Efficient Market Hypothesis, most advisors follow

modern portfolio theory and invest in diversified portfolios for smaller but more stable returns over the long term. Malkiel believed very strongly in this principle, and it has a significant impact on the principal-agent problem.

Portfolio Management Benefit $n(t)$

Malkiel makes the claim that markets at the very least are semi-strong efficient as they react almost instantaneously to any outside shock. This claim carries a great deal of significance. If markets are indeed semi-strong, then professional advisors are no better at selecting a portfolio of stocks to invest in than the average investor. So what does this mean for the linear principal-agent problem model?

If Malkiel is correct in his conclusions, then the average investor can produce the same returns as a professional in the long run. No one well diversified portfolio of stocks is better than the other over a long period of time. The average retail investor can do just as well as a robo or financial advisor at creating their portfolio. This means that the $n(t)$ term in the linear models would be constant for the three different advisors (No-Advisor, Robo-Advisor, and Financial Advisor) for each level of output t . This is where the difference between the three types of advisors becomes more apparent.

With $n(t)$ established as constant for all advisors and all levels of output, consider the other constraints that I have previously outlined. The constraints concern the other variables that change in the principal-agent problem equation that I outlined in Chapter 2. Once again the equation I am referencing is:

$$CE = [n(t)+b(t)] - \alpha^t * \mu(t) - \frac{1}{2} * R * r * \alpha^t \Sigma r$$

The many variables in the equation above allow for a lot of fluctuation when comparing the different types of advisors. The equation becomes simpler since it has been established that $n(t)$ is constant for all advising types. The α term is also constant between advisors, and the r term varies between each individual investor. The only variables in the equation then are $b(t)$, $\mu(t)$, and R . The following three variable constraints make it simpler to compare the three advising options.

1. The first constraint is the $b(t)$ variable or the additional benefits that advisors can offer outside of portfolio management. The $b(t)$ variable is relatively straight forward, and is just the benefits such as retirement planning that different forms of financial advisors can offer their clients. The most benefit comes from a human advisor, and the least would be from not using an advisor at all. The constraint can be written as:

$$\text{Financial Advisor } b(t) > \text{Robo-Advisor } b(t) > \text{No-Advisor } b(t)=0$$

otherwise expressed as $b(t)_{FA} > b(t)_{RA} > b(t)_{NA} = 0$

2. The second constraint involves the fee compensation structure variable $\mu(t)$. The fee's associated with the different levels of advisors increase the more involved the advisor is with their client. This would mean that the no-advisor option would have the lowest fees, financial advisors would have the highest, and robo-advisors would be in-between the two. To better illustrate this :

$$\text{No-Advisor } \mu(t) < \text{Robo-Advisor } \mu(t) < \text{Financial Advisor } \mu(t)$$

A simpler way to represent this is $\mu(t)_{NA} < \mu(t)_{RA} < \mu(t)_{FA}$

3. The third variable constraint involves the fraction of “perceived risk” that the retail investor assumes while using a financial advisor. This term is essentially a

weight to represent the peace of mind that comes from using a financial “professional”, and either amplifies or dampens the risk aversion of the retail investor (r). To illustrate, an individual with risk aversion r , using a financial advisor would lose less utility than the same individual without an advisor because they have the peace of mind that they have a “professional” endorsing their investment decisions. For this reason, the R term is lowest for the financial advisor and highest for the no-advisor option. This means that:

$$\text{No-Advisor } R > \text{Robo-Advisor } R > \text{Financial Advisor } R.$$

$$\text{This can also be expressed as } R_{NA} > R_{RA} > R_{FA}$$

The three variable constraints provide us with varying conclusions based on several criteria. Logically, the principal (retail investor) should choose the outcome which gives him or herself the greatest utility. Given these constraints, the only time the principal will choose the financial advisor is when:

$$\text{A. } b(t)_{FA} > | \mu(t)_{NA} + \frac{1}{2} R_{NA} * r * \alpha^t \Sigma r - \mu(t)_{FA} |$$

$$\text{B. } [b(t)_{FA} - b(t)_{RA}] > | \mu(t)_{RA} + \frac{1}{2} R_{RA} * r * \alpha^t \Sigma r - \mu(t)_{FA} |$$

These results are fairly expected and can be explained in English without much complication. The principal will choose to use a financial advisor as opposed to the other options if the additional benefits that they receive from using the advisor are greater than the cost of using the financial advisor minus the opportunity cost of other possible options. Under these conditions, there does not seem to be much of a principal-agent problem between advisors and clients because they can provide additional benefits that other advisor options cannot cover. However, when looking at research concerning benefits that advisors provide their clients along with the effort they put in (t), the equations change. The $b(t)$ variable may not fluctuate as much

between the different advisor types as most people believe. If the $b(t)$ variable became a constant, then the principle-agent problem equation would change dramatically.

Additional Benefits $b(t)$

The journal article *Performance Pay and Top-Management Incentives*, by Michael C. Jensen and Kevin J. Murphy offers some insight into the performance of top managers based on their compensation. The article essentially highlights the principal-agent problem, and how to mitigate it using variable compensation based upon effort. Jensen and Murphy's results found that paying workers based on performance is statistically significant in motivating employees to perform better at more repetitive jobs but is less effective at motivating workers in more creative roles. For example, if a worker is tasked to a job involving manually moving stone, and they are paid by the total weight of stone they move, the workers statistically will work harder to gain the additional benefit. However, if a worker is tasked to paint a portrait and their pay is based on the satisfaction of the object of the portrait, they are less likely to work harder than they would have if they were paid a set price. Jensen and Murphy discovered that CEO compensation and the performance of their companies is closer in significance to the former, as the CEO's job is more complicated than just a repeated task.

With Jensen and Murphy's conclusion as backing, I make the claim that financial advisors are not adequately motivated to work hard enough to provide the additional benefits to their clients. Financial advisors are essentially CEO's of their own book of business and as such they are less susceptible to performance based pay. I reason that the small t provided to $b(t)_{FA}$ would result in only a marginally better benefit than $b(t)_{RA}$. If $b(t)_{FA} \approx b(t)_{RA}$ then the conditions

under which a person would choose to use a financial advisor are limited even further. It then becomes that the robo-advisor would be the best option unless the client is very risk adverse and as such would be much more comfortable using a human advisor. Even this situation is constrained as the reluctance to use the robo-advisor would have to be at least double the utility lost due to the advisor fees under the parameters I have outlined in the principal-agent problem equation. These equations demonstrate the extent of the principal-agent problem as it exists between advisors and their clients. Without proper motivation to assist their clients, it is not in the client's best interest to use a financial advisor with the other options available to them.

Chapter 4

Creating A New Contract

Now the principal-agent problem finally comes to light. There are clearly circumstances when the client would be better off not utilizing an advisor. Given the constraints that I outlined in Chapter 3, it appears that the vast majority of retail investors would be better off utilizing another investment aid other than financial advisors. Clearly, the current contract that financial advisors have with their clients is in need of revision.

This brings about the second question that needs to be answered: given that the contract between financial advisors and their clients needs to be renegotiated, what should the contract look like to make financial advisors comparable to the other alternatives? As demonstrated earlier that it is difficult if not impossible to increase the $n(t)$ portion of the client's utility equation, the advisor must find a different way to allow for clients to choose them over competitors. The best way to do this would be to either increase the additional benefit given to clients via $b(t)_{FA}$ by providing benefits such as retirement planning, or to lower the fees associated with having an advisor via $\mu(t)_{FA}$. However, I do not believe that a principal-agent problem such as this can be remedied by simply changing the way the advisors are compensated. At the heart of the problem are the advisor-client relationship and the misalignment of interests. I argue that in order for financial advisors to be a more viable option there needs to be a change in the very role of the advisor and the expectations that come with that role.

As this restructuring would require a very significant change in the advisor-client relationship, it is important to plan what this relationship should ideally look like. This is an extremely important question, and one that cannot be answered quantitatively.

Before rushing into an answer for this question, it is essential to consider the foundations of the advisor-client relationship. The first aspect to consider is that this transaction at its very core is economic in nature. The retail investor could be considered a consumer of goods and the financial advisor would be a producer of those goods. An economic relationship, especially an ongoing one, has certain expectations associated with it. For example, through the act of paying a professional to act on my behalf I have the right to expect that the professional would perform better at that action than I would myself. As discussed in Chapter 3, this is a problem as financial advisors cannot always deliver in this regard.

The second aspect to consider in the advisor-client relationship is the idea of roles and duty. To clarify, the role of an advisor should carry with it expectations and obligations. Financial advisors do hold themselves to certain obligations, mainly their fiduciary obligation to act in the best interests of their clients. However, this obligation may not properly align with the role of an advisor. If the advisor was truly acting in the best interest of their client, they would make the client self-sufficient, independent of an advisor.

These two aspects of the advisor-client relationship are important to consider when figuring out how the ideal contract would look. In order to shed some light on economic relations and the concept of duty I have chosen to look specifically at the work of philosophers Adam Smith and Immanuel Kant. These philosophers have contributed volumes to the fields of economics and ethics respectively and through a synthesis of their ideas I can formulate what the ideal contract would look like between a financial advisor and his/her client. Before I use their

philosophies to shape a new contract, I must first review each of their individual philosophies and provide background and reasoning for why their teachings are so relevant.

Adam Smith

Adam Smith is widely considered, “the father of modern economics” and his work *The Wealth of Nations* written in 1776 was truly revolutionary for its time. In his work, Smith introduces such ideas as “the invisible hand” which guides the free market and the relationship between a producer and a consumer. Smith wrote that, “The interest of the consumer must be the ultimate end and object of all industry and commerce”. This idea not only reaffirms why the contract should seek to maximize the client’s utility, but also gives a specific goal for the advisor.

The Wealth of Nations also offers some insight into the relationship between advisor and client and how it should affect their working contract. At the heart of the interaction between advisor and client is a bartering based transaction between services. The clients who seek the help of a financial advisor have a wide breath of occupations and desire to exchange what they have earned for the skills that the advisor has. This is the nature of the division of labor that allows for contemporary society to thrive. A construction worker is able to exchange the money that he or she has earned for the service of a financial advisor. This division of labor brings about the economic relationship between the advisor and client, and details what should be expected from the contract. Smith states that there are three reasons why there would be a division of labor,

First, to the increase of dexterity in every particular workman ; secondly, to the saving of the time which is commonly lost in passing from one species of work to another ; and, lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many. (Smith, Chapter 1)

These three aspects of the division of labor offer some insight into what should be expected of the financial advisor. The first aspect of the division of labor, “to the increase of dexterity in every particular workman” would be the most applicable to the current relationship between advisor and client. To clarify, the main reason someone would seek the guidance of a financial advisor would be because they do not have the financial knowhow to make the right decisions themselves. However, as demonstrated in chapter 3, the portfolio management benefit n(t) that the advisor provides to their client would not be any better than if the client chose their own compilation of assets to invest in. This further demonstrates the flawed nature of the relationship between an advisor and their client.

The Wealth of Nations offers another insight into the principal-agent problem of a financial advisor, and that is in what value the advisor actually provides to their client. Smith makes the claim that labor is the real equalizer in comparing a price of an asset. Smith states that “The value of any commodity ... is equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of the exchangeable value of all commodities," (Smith, Chapter 5). What this means then is that the true value of an asset is how much an individual would have to work to attain it. This is bad news in the case of the financial advisor as it is already proven through the Efficient Market Hypothesis that an individual can do just as well in portfolio management as a professional. This means that an individual would not have to work very hard to achieve the same result as a financial advisor, effectively lowering the

fees an advisor should charge to their client. As advisors still charge relatively large fees to their clients, this highlights another problem in the advisor-client relationship.

Not only does Adam Smith offer some insight into why the relationship between advisor and client is flawed in *The Wealth of Nations*, but he details what the ideal relationship should look like in his other work, *The Theory of Moral Sentiments*. While *The Wealth of Nations* is Smith's most quoted work, it would be remiss to exclude excerpts from his earlier work *The Theory of Moral Sentiments* written in 1759. In this work, Smith makes claims on what drives someone to act in the benefit of another person. His idea of "mutual sympathy" reasons that sympathizing with another human being and helping them is one of the greatest pleasures there is. While the ideas in *The Theory of Moral Sentiments* do not directly indicate how the contract between an advisor and his/her client should be, it does suggest the attitude an advisor should have when it comes to taking on clients.

In Part I Section I Chapter II of *The Theory of Moral Sentiments*, Smith explores the idea of mutual sympathy. Smith claims that sympathy is essential in any sort of friendship, and I would make the claim that it is necessary between a financial advisor and their client. Smith notes that, "It is to be observed accordingly, that we are still more anxious to communicate to our friends our disagreeable than our agreeable passions, that we derive still more satisfaction from their sympathy with the former than from that with the latter". What this indicates is that friends are most sympathetic with the negative emotions that their companions feel. I sympathize more with my friend who has lost their job than my friend who has just won the lottery. I believe that this offers great insights into what the ideal relationship between advisor and client should look like. The advisor should have sympathy for their client in their times of distress and not seek to take advantage of them. This would include acting in the best interest of their client and creating

a contract that maximizes their client's utility. In this way, the advisor is supporting their client in their time of need instead of taking advantage of them. Clearly, Adam Smith has a lot to offer while establishing the ideal relationship between advisor and client.

Immanuel Kant

Immanuel Kant's ethical philosophy compliments some of the ideas that Smith raised in his works. Kant created a new form of ethical valuation known as Deontological ethics or Deontology. This version of ethics has a heavy focus on "duty" and doing what is expected of oneself. One of the best examples of Kant's Deontological ethics is his *Groundwork of the Metaphysics of Morals*, written in 1785. *The Groundwork of the Metaphysics of Morals* is Kant's first major dive into moral philosophy, and provides some insight into relationships and goodwill.

Kant's work on ethics is extremely conceptual and can sometimes have difficulty translating over into reality, but I believe the ideas he proposes in *The Groundwork of the Metaphysics of Morals* has a lot to offer the principal-agent problem between financial advisors and their clients. One of the main points that Kant makes regarding ethics is his emphasis on "the good will". Kant claims that, "A good will is not good because of what it effects or accomplishes, because of its fitness to attain some proposed end, but only because its volition, that is, it is good in itself" (Kant, 4). To clarify, Kant believes that something is good only when it is not a means to achieve something else. For example, I can desire knowledge for the sake of being knowledgeable and this is in a sense "good will". However, if I desired knowledge for the sake of fooling the unknowledgeable into doing something undesirable, then my pursuit of

knowledge would not have good will. I believe that the concept of good will is essential in the advisor-client relationship. Kant argues that it is unethical to not act within the good will. As such, in order for financial advisors to have an ethical relationship with their clients, they must act within the good will and treat their clients as an end in itself and not as a means to some other material. In their new role, the advisor must seek to assist their client for the sole purpose of helping their client. If the advisor were to seek out additional clients in order to increase their own personal gain, then this is an immediate violation of the good will. This idea frames the type of motivation the financial advisor should have when entering into a relationship with their client.

Another important aspect of Kant's Deontological ethics is shown through Kant's *Categorical Imperative*. There are three foundations of the categorical imperative:

1. Act only according to that maxim by which you can also will that it would become a universal law.
2. Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end.
3. Every rational being must so act as if he were through his maxim always a legislating member in a universal kingdom of ends.

While the language is definitely dated, Kant's *Categorical Imperative* offers a lot of insight into what a relationship between an advisor and their client should look like. It further emphasizes the need to treat the client as a person and not as a "means" to some other thing such as money. The heavy focus on duty and doing what is expected of oneself also brings forth a question of identity and roles. What should be the obligations and expectations of advisors? Kant would argue that this is an essential question when constructing a contract between an

advisor and client because ethical behavior on their part is based almost entirely on their duty to their clients.

While Kant's philosophy is important, it can be difficult to translate to reality. The nineteenth century philosopher Francis Herbert Bradley expands on Kant by providing a more solid tether between deontological theory and the practical world. Bradley not only comments on the deontological view of duty, but on the view of duty with regard to relationships in society. In Bradley's *Ethical Studies*, written in 1876, Bradley makes the claim that,

To know what a man is...you must not take him in isolation. He is one of a people, he was born in a family, he lives in a certain society, in a certain state. What he has to do depends on what his place is, what his function is, and that all comes from his station in the organism (Bradley, 157).

This statement may not seem like much, but it frames the idea of one's personal duty in society. The idea that what a man, "has to do depends on what his place is" brings about the idea of society forming the role of the individual. Essentially, society decides collectively what the role of each individual occupation should be. Bradley even goes so far as to call society an "organism" as if it were one living being composed of its many individual parts. The role of each individual then is similar to that of a cell in the human body, designated a specific purpose for the benefit of all.

The idea that society decides what the roles and responsibilities are for the individual has a lot to offer the relationship between a financial advisor and their client. The most significant point it makes is that the responsibilities and expectations of the advisor are determined by their clients. In the same way I expect a doctor to heal me when I am ill, I expect my financial advisor to look out for my financial well-being and keep me on the right path. I believe that this

illustrates a pretty significant problem between the advisor and client because the financial services industry has such a terrible reputation for not putting their clients first. This is an enormous ethical dilemma as the clients are the ones who should be defining the purpose of the advisors. Since the advisors are able to take advantage of their clients, it is evidence that the clients do not know enough about the financial services industry to accurately define the advisor role. Clearly, there needs to be a change.

Chapter 5

The Ideal Role of the Financial Advisor

The philosophies of Smith and Kant bring about several important realizations when it comes to the creation of a new contract. The first is that to determine whether or not an advisor is ethical in their relationship with their client depends greatly upon how the advisor identifies its professional role. To clarify, the advisor has an image of what their role is in their head.

According to Kant they are acting ethically when their behavior is in line with the obligations and expectations that align with the image they have for themselves. The problem then is that the client's image of an advisor may not align with the image the advisor has of itself. So which image of an advisor is the correct one?

Smith actually comments a bit on what he believes the role of the advisor should be by outlining some of their obligations. Knowing the obligations of a role can help further define what the relationships in that role should look like. As Smith said that, "The interest of the consumer must be the ultimate end and object of all industry and commerce", it would be safe to assume that Smith would argue the advisor's role should have an obligation to the client to act in their best interest. The problem is that the current contract has this obligation already in the form of fiduciary responsibility. This presents just another argument for why there must be a change in the contract between financial advisors and their clients. The fiduciary responsibility assumed by the advisors presents a clear obligation which is often not met. In fact, the evidence that most retail investors would be better off not utilizing a financial advisor proves that an advisor cannot act in their clients' best interest because their best interest would be to not use an advisor! Kant

would then make the claim that the relationships between advisors and clients are unethical because advisors are not able to meet their categorical imperative. Clearly then the obligations and roles of the advisors are flawed and need to be redefined.

The new role of the advisor is incredibly important because it shapes their obligations. The way advisors interact with their clients has a direct effect on the principal-agent model outlined in Chapter 2, and changing the relationship could change any of the variables involved in that equation. Ultimately, changing the role of the advisor could mitigate the principal-agent problem and make an advisor a more viable option for the retail investor. With so much riding on this new identity, the question becomes what should it actually look like?

Determining the ideal relationship between advisor and client is speculative at best. Comparing the advisor role to other occupations with similar obligations should help narrow down the possibilities for what the relationship could potentially look like. For this reason, my hypothesis is that the role of an advisor should be similar to that of a teacher. To clarify, the role of an educator has similar obligations to that of a financial advisor. An educator has a responsibility to their students to give them the best education available and prepare them for challenges they may face later in life. Teachers are often motivated then by the well-being and success of their students. I draw clear parallels then between an educator and a financial advisor. If the advisor takes on the identity, obligations, and motivations of that of a teacher then they have a much better relationship with their client. They would be able to put the client's interests at the forefront of their motivation and at the same time fulfill their categorical imperative. Doing this would result in a much more ethical relationship between advisor and client.

Chapter 6

The New Contract: Satisfying the Principal-Agent Problem

Given that the ideal role of a financial advisor should mirror the obligations and duty of an educator, it is important to explore what this would look like in a practical sense. I would argue that the main difference would be that the advisor would never assume fiduciary responsibility, in that they do not actually control the assets of their client. To illustrate, the client would remain in complete control in how they allocate their funds, and the advisor acts as a guide. It is similar to the Chinese proverb, “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime”. The advisor would not take their client’s assets and invest them, but instead advise on the best way they should invest. While this is definitely an enormous change in the role of the advisor, the end result is a significantly better advisor-client relationship and a mitigated principal-agent problem.

This new role brings up the question of what services the advisor will actually provide and how they will be compensated. Essentially the services that the advisors will give the clients will be informative, aimed at increasing their financial literacy and making them more self-sufficient. By assuming the role of an educator, advisors no longer actually manage their clients’ money and therefore would not be eligible for the assets under management approach to compensation. In their new contact assets under management would have to be replaced by a more “pay per service” structure. This structure would be characterized by a single time fee for advice given which could be scaled depending on the size of the portfolio in question. For example, if a retail investor is wondering how to best diversify their portfolio to maintain low

risk in retirement, they could approach an advisor and pay a single fee and have that done. If in one year they decide to reinvest their earnings they can choose to return to that advisor or try another approach. The main difference is that the assets always remain in control of the retail investor, and the advisor acts primarily as a guide.

This restructuring would also solve the principle-agent problem that I originally outlined. Under the conditions that I had already outlined the only time a person would choose to utilize a financial advisor would be when:

$$A. b(t)_{FA} > | \mu(t)_{NA} + \frac{1}{2} R_{NA} * r * \alpha^t \Sigma r - \mu(t)_{FA} |$$

$$B. [b(t)_{FA} - b(t)_{RA}] > | \mu(t)_{RA} + \frac{1}{2} R_{RA} * r * \alpha^t \Sigma r - \mu(t)_{FA} |$$

Under the original constraints the compensation term $\mu(t)_{FA}$ would have been much larger than both $\mu(t)_{RA}$ and $\mu(t)_{FA}$. If the contract were to change from the assets under management structure to a pay per service with the sole intent on education, then $\mu(t)_{FA}$ would be reduced dramatically. What this essentially does is open up financial advising as a possibility to many more people who are less risk adverse. The benefits that the financial advisors provide to their clients would stay the same, but with a lower cost, there is a significantly greater margin for people to choose a financial advisor over either the robo-advisor or not using an advisor at all. To illustrate this, imagine that $b(t)_{FA} = | \mu(t)_{NA} + \frac{1}{2} R_{NA} * r * \alpha^t \Sigma r - \mu(t)_{FA} |$. If the $\mu(t)_{FA}$ was smaller, this would force the $\frac{1}{2} R_{NA} * r * \alpha^t \Sigma r$ term to lower as well in order to maintain the equilibrium. It is easy to observe then that only variable that changes in that term is the r variable representing the retail investor's risk aversion. In order for that entire term to lessen, the r term must lessen too. This demonstrates how changing the incentive structure and relationship between advisor and client allows for less risk averse people to utilize financial advisors as a viable option. While there will still be some who choose an option other than the financial

advisor, the relationship between advisor and client will be much more ethical than it was before as it addresses the primary concern in the principal-agent problem.

Realistic Practicality and Possible Criticisms

The conclusion that I have come to would face several challenges while changing over from theory to reality. The biggest problem that I could see is that the financial advisor profession has been around for over a century, and their role has not altered too greatly. While the government may enforce new regulations that change the type of investment practices financial advisors use, it would be extremely difficult to change the advisor client relationship through legislation. The advisor's change to an educator role would develop slowly, and would most likely begin by companies offering this type of advisor as another option for their clients. There would then be a change to the educator advising option once the clients recognize this option as better than other advisor choices.

I believe that the Vanguard Group is the closest thing in the modern day financial services industry that fills the role of an educator. Vanguard was founded by Efficient Market Hypothesis champion John Bogle, and he implemented a strategy of providing low costs to clients by allowing them to invest in mutual funds. The funds are kept by Vanguard and make portfolio management very simple. The client can choose which funds to invest in, and therefore has more choice than they would have with other financial advisors. However, Vanguard does not focus on increasing the investor's financial literacy and could provide better benefits to their client such as college or retirement planning. While it may not be perfect, Vanguard is a step in

the right direction for the financial services industry, and has already succeeded in acquiring over \$3.0 trillion assets under management since its founding in 1975 (“Mutual funds, IRA’s...”).

I would also like to address some potential criticisms that others may have with my conclusion. The first critique that some may find with my reasoning is that I have generalized all financial advisors into one group when in fact each financial advisor runs their book of business in their own way. While this is true, I believe that there are enough similarities between financial advisors to create an ideal form of the modern financial advisor. To clarify, while there are many differences between advisors, the different aspects have some commonalities which are the same. I liken this to the idea of asking a thousand people to picture a horse in their minds. Each individual will without a doubt have some variation of a horse in their mind that differs from every other person’s image of a horse. However, the similarities between the many different images create the “ideal form” of a horse. In this way, I have created the “ideal form” of a modern day financial advisor. The ideal form is not perfect, and in need of major reconstruction, but it is simply a culmination of the similarities across all financial advisors. I admit there are advisors who act more in the interests of their clients than others, and there may even be some advisors who can generate better returns for their clients than others. However, when I consider all of the advisors in the industry, I need to consider the ideal form in order to make accurate criticisms and analysis.

The other criticism that I could see other’s arguing is how I structured the principal-agent problem equation. I chose to base my equation off of the model used by Holmstrom and Milgrom because of their success in using it for other principal-agent problems and its linear nature made it simple to compare the different types of advisors. However, some could argue that their equation would not fit the relationship between an advisor and their client. Often there

are many factors that contribute to choosing an advisor and they are often not quantifiable. One factor could be ease of accessibility or recommendations from a friend. There are thousands of different reasons why one could choose a certain advisor type over another. While some would say leaving out these exterior variables would alter the equation, I would argue that this is once again an ideal model. Each one of these exterior variables would have a different weight based upon the client's preferences. Including the varying preference variables would make the equation unnecessarily complicated. By limiting the equation to variables that are essential to the advisor-client relationship I streamlined the comparisons and made a more efficient model than it would have been if I included more complex terms.

I believe that while these two criticisms bring up valid arguments, the foundation of my reasoning is solid. First, through quantitative analysis, I developed a model for comparing different financial advisors. Upon comparison, I made the conclusion that the relationship between financial advisors and their client's is in need of revision. Next, I hypothesized what the relationship between the advisor and client should look like by analyzing the philosophical works of Smith and Kant. Finally, I made the conclusion that the ideal role of the financial advisor should resemble that of an educator. By assuming the role of an educator, the financial advisor would adjust their relationship with their client in a way that it would solve the principal-agent problem and open up the financial advisor as an option for more retail investors. While this change may take time, it would restore the reputation of the financial services industry and benefit the lives of countless investors.

BIBLIOGRAPHY

1. "FINRA Rules." *Financial Industry Regulatory Authority*. N.p., n.d. Web. 31 Oct. 2014.
<http://finra.complinet.com/en/display/display.html?rbid=2403&element_id=607>.
2. Bradley, F. H. *Ethical Studies*. Oxford: Clarendon, 1927. Print.
3. Davis, James H., F. Schoorman, and Lex Donaldson. "The Distinctiveness of Agency Theory and Stewardship Theory." *The Academy of Management Review* (n.d.): n. pag. *JSTOR*. Web.
4. Grossman, Sanford J., and Oliver D. Hart. "An Analysis of the Principal-Agent Problem." *Econometrica* 51.1 (1983): 7. Web.
5. Holmstrom, Bengt. "The Firm as an Incentive System." *The American Economic Review* 84.4 (1994): 972-91. *JSTOR*. Web. 04 Feb. 2015.
6. Holmstrom, Bengt, and Paul Milgrom. "Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design." *Journal of Law Economics & Organization*, Vol. 7, Special Issue: [Papers from the Conference on the New Science of Organization, January 1991] (1991): 24-52. *JSTOR*. Web. 07 Feb. 2015.
7. Jensen, Michael C. "Performance Pay and Top-Management Incentives." *Journal of Political Economy* 98.2 (1990): 225-64. *JSTOR*. Web. 04 Feb. 2015.
8. Kane, Libby. "Robo-Advisors Vs. Financial Advisors: Which Is Better For Your Money?" *Business Insider*. Business Insider, Inc, 21 July 2014. Web. 26 Jan. 2015.
9. Kant, Immanuel, and James W. Ellington. *Grounding for the Metaphysics of Morals*. Indianapolis, IN: Hackett Pub., 1981. Print

10. Lowenstein, Roger. *When Genius Failed: The Rise and Fall of Long-Term Capital Management*. New York: Random House, 2000. Print.
11. Malkiel, Burton Gordon. *A Random Walk down Wall Street: The Time-tested Strategy for Successful Investing*. New York: W.W. Norton, 2003. Print.
12. Madden, Edward H. "Commonsense and Agency Theory." *The Review of Metaphysics* (n.d.): n. pag. *JSTOR*. Web.
13. Mill, John Stuart, and David Spitz. *On Liberty*. New York: Norton, 1975. Print.
14. "Mutual Funds, IRAs, ETFs, 401(k) Plans, and More | Vanguard." *Mutual Funds, IRAs, ETFs, 401(k) Plans, and More | Vanguard*. N.p., n.d. Web. 11 Apr. 2015.
15. Namazi, Mohammad, and Ehsan Kermani. "An Empirical Investigation of the Relationship between Corporate Ownership Structures and Their Performances (Evidence from Tehran Stock Exchange)." *Journal of Finance and Accounting* 1.1 (2013): n. pag. Web.
16. Nyberg, Anthony J., Ingrid Smithey Fulmer, Barry Gerhart, and Mason A. Carpenter. "Agency Theory Revisited: Ceo Return And Shareholder Interest Alignment." *Academy of Management Journal* 53.5 (2010): 1029-049. Web.
17. Parks, Judi Mclean, and Edward J. Conlon. "Compensation Contracts: Do Agency Theory Assumptions Predict Negotiated Agreements?" *Academy of Management Journal* 38.3 (1995): 821-38. Web.
18. "Rise of the Robo Advisors? | Attain Capital Managed Futures Blog." *Attain Capital Managed Futures Blog*. N.p., n.d. Web. 26 Jan. 2015.
19. "SelectUSA." *The Financial Services Industry in the United States*. N.p., n.d. Web. 24 Jan. 2015.

20. Smith, Adam, Edwin Cannan, and Max Lerner. *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: Modern Library, 1937. Print
21. Smith, Adam. *The Theory of Moral Sentiments*. Oxford: Clarendon, 1976. Print.
22. Stroh, Linda K., Jeanne M. Brett, Joseph P. Baumann, and Anne H. Reilly. "Agency Theory And Variable Pay Compensation Strategies." *Academy of Management Journal* 39.3 (1996): 751-67. Web.

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EDUCATION

Penn State, Schreyer Honors College and Smeal College of Business *State College, PA*
Bachelor of Science in Finance *2011-Present*
Bachelor of Arts in Professional Philosophy
Minor in Economics
Writing Honors Thesis in Business Ethics regarding the Principal-Agent Problem

WORK EXPERIENCE

RBC Wealth Management *Conshohocken, PA*
Financial Advisor Intern *Summer 2014*

- Drafted client strategy proposals to be used in targeted marketing campaigns
- Managed client database to improve communication between advisors and clients

Uplifting Athletes, Inc. *Harrisburg, PA*
Financial Analyst and Business Plan Author *Fall 2012*

- Forecasted financial statements from 2012 to 2017
- Worked in a team of seven to write the Uplifting Athletes, Inc. professional business plan

Lake Naomi Club *Pocono Pines, PA*
Head Sailing Instructor & Lifeguard *Summers of 2007- 2013*

- Managed a team of 10 instructors to teach more than 150 children and adults sailing fundamentals
- Coordinated and spoke at events such as barbeques, picnics and sailing award ceremonies

LEADERSHIP AND EXTRA CURRICULAR ACTIVITIES

Organizations and Affiliations

Penn State Triathlon Club- President *2013-2014*

- Organized club races and represented Penn State Triathlon on a national level
- Negotiated with sponsors for monetary and nonmonetary donations

Delta Kappa Epsilon- Homecoming Chairman *Fall 2014*

- Planned brotherhood involvement in competitions throughout Homecoming week

Athletics

Competitive Triathlete and Ironman Finisher *2008-Present*

- Competed in the 2014 Collegiate National Triathlon Championships
- Completed Louisville Ironman in 11 hours 37 minutes *2014*

Volunteer activities

THON- Largest student run philanthropy in the nation: Benefits children with cancer *2011-Present*
• Delta Kappa Epsilon- THON Chair *2013*

- Motivated brotherhood to raise over \$30,000 for charity
- THON Committee Member-Entertainment Committee *2011-2012*
 - Created advertisement videos that were played THON weekend

- THON Committee Member- Rules and Regulations Security Leader *2012-2013*
 - Managed over 40 committee members to ensure spectator safety THON weekend

AWARDS & CERTIFICATIONS

Penn State University President's Freshman Award *Spring 2012*

Ayn Rand Writing Contest Semi Finalist *Spring 2010*

National Council for the Teachers of English Writing Contest Award Recipient *Fall 2010*