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FINANCIAL ADVISOR'S AND INDIVIDUAL INVESTOR'S INTERESTS: IS THERE A CHANCE FOR A WHITE FLAG AND A PEACEFUL COEXISTENCE?

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INTRODUCTION

The Beardstown Ladies Case

A group of 16 old women from Beardstown, Illinois –population 6200- created during the 80's a club called *The Beardstown Business and Professional Women's Investment Club*. They used to meet and study the financial performance of many public companies in order to decide how to invest their common fund (created through their savings).

The club was a component of the National Association of Investors Corporation (NAIC), an organization of investment clubs, and it became since 1992 one of its most important members.

A remarkable aspect of this club is that it never asked for the help of a financial advisor.

The Beardstown Ladies featured on TV in 1992(1) because of their brilliant financial performance and after a short while they were hosted again in the same show. This second time they were asked to reveal their annual return. To this purpose the club bought the NAIC Accounting Software and received permission to use it at their bank, since they didn't own a computer. When data were entered and read, a total of 23,4% had been realized on average in the last 10 years, i.e. 8,5% above the S&P500 stock market index during the same time span.

This was the threshold for a spectacular success which lasted from 1992 to 1998. They became financial gurus, they even wrote a book called *The Beardstown Ladies Common Sense Investment Guide*(2). They were also welcomed at the Washington University, whose Auditorium contained 1500 people who had made reservations to hear the Ladies speak.

In 1998 Shane Tritsch, a journalist for Chicago magazine, became suspicious because of a fine-print disclaimer -on the copyright page of Investment Guide- which read: "This "return" may be different from the return that might be calculated for a mutual fund or bank ".

After investigation of an independent audit, it came out that the mean annual return over those 10 years was 9,1%, i.e. 6% less than the average S&P500 index. The 23,4% was referred only to the last 2 years. The Club readily apologized publicly for the mistake which was corrected by the media. The ladies didn't do anything to save their

(1) *This Morning*- CBS channel.
(2) still available on Amazon.
(3) *Time* magazine published an article under the tongue-in-cheek headline "Jail the Beardstown Ladies".

reputation, they didn't even try to emphasize the years in which they had beaten the stock market.

This was the end of the unbelievable success of the Beardstown Ladies phenomenon. The public opinion towards them suddenly turned from very positive to very negative, even if their mistake was not based on a malicious, premeditated falsehood, but on an inadvertent one. Due to the disappointment of people and media the example of the virtues of self-reliance, disciplined saving and thrift they represented, vanished.

Quoting Michael Edesses[(4)]:

> If they had been more artful, more wordly, more knowing, more cunning in the ways of the investment advice industry, they could have come out smelling like a crafty rose.[(5)]

This sharp criticism can represent the starting point of this dissertation, whose purpose is to investigate whether a financial advisor is actually able to pursue his client's interests which consist mainly in portfolio value enhancement. It goes without saying that Michael Edesses has a very bad opinion about the financial advice industry, whose members he considers as boasters who are able to hide their selfish behaviour through some wise devices.

Is Edesses's statement a flight of fancy or a reality that is still hidden under the sand, waiting for some diggers to find it out?

(4) Michael Edesess, (Ph.D.) is an economist and mathematician, he has worked as an independent consultant to institutional investors, and he was a founding partner and chief economist of the Lockwood Financial Group until its sale to The Bank of New York in September 2002.

(5) Michael Edesses: "The Big Investment Lie" (2007, 14)

ABSTRACT

This dissertation is focused on the analysis of the financial advisor's ability to add value to an individual investor's portfolio.

In Chapter 1 first of all there is a description of the pros and cons deriving from hiring a IFA, whose prerogative turns out to be the maximization of his own profits, as a result of a conflict of interests with his client. A further implication is that the most successful financial advisors are those who are able to get their client's trust, instead of those exhibiting a better knowledge of financial markets and products. The result is that, supporting Michael Edesses's standpoint, a financial advisor tends to be not only useless, but even detrimental when it comes to value creation for an individual investor.

In order to boost empirically these results, Chapter 2 and Chapter 3 deal with the statistical and econometric analysis –discussed in a paper published in 2009- of a set of data collected both from a large German discount brokerage firm and from *destatis*. In contrast with the picture painted by simple descriptive statistics, econometric analysis, which corrects for the endogeneity of the choice of having a financial advisor, suggests that the latter is usually associated with older and wealthier investors, whose results tend to be worse than those of other comparable investors who don't recur to the financial advice industry.

Chapter 4 is focused on answering the question in the title of this dissertation. The most evident contribution of a financial advisor should be the ability to compensate for illiteracy which is widely spread in financial markets and which is usually associated to younger and poorer investors. This objective can become effective in practice only through a stark intervention by institutions, who should impose requirements and liabilities arising from an eventual bad performance by the financial advisor. In recent years, as a response to the last financial crisis which was at the basis of a whole systemic bottleneck, involving even the real market, some actions have been taken against misconduct in financial markets, thus stricter regulations have been introduced in financial advice industry, too. An eventual efficiency of this intervention will become evident in the years to come, so it is for posterity to judge whether there can be a white flag and a peaceful coexistence between financial advisor's and individual investor's interests.

CHAPTER 1
THE FINANCIAL ADVISOR & THE BIG INVESTMENT LIE

1.1. MAIN TASKS OF A FINANCIAL ADVISOR

Professional financial advisors may assist private clients or institutions such as businesses or corporations to set and achieve financial goals. Just to provide an example, an individual may face the issue of deciding how to allocate funds among house purchase, saving for retirement, children's college expenses, and so on.

The first task accomplished by an advisor is to prioritize these goals, determining what is realistic and what is most important. The next step is to choose how to allocate money to reach the previously chosen objectives: this is done through the creation of a dollar figure and the development of an investment plan to reach the dollar figure.

Finally an advisor should select the right moment and the most appropriate financial instruments to satisfy his client's needs. The best strategy is to invest in multiple different vehicles to achieve portfolio diversification, in order to reduce the risk associated with any investment.

A professional advisor may work for a brokerage firm which sells shares or for an independent wealth management agency. Other times he may decide to work as a self-employed, rendering services on a private basis.

As mentioned before, one of the most recurring concerns of individuals is the creation of a retirement plan, which implies a deep knowledge of budgeting, forecasting, taxation, asset allocation, and financial principles and products. Through the use of financial calculators it is possible to establish the percentage amount of income – in relation with taxes, expected inflation and investment returns- to reach a minimum balance by the age of retirement. The financial advisor should then decide how to allocate savings to maximize the return in compliance with the client's preferences on risk.

For instance, if a client is risk-tolerant and/or has long-term goals, the advisor may suggest more volatile investments with potential greater risk and return like stocks, mutual funds and unit trusts.

If instead a client is more risk-averse and/or has short-term goals, the advisor should privilege the money market instruments or short-term bonds, since they link to a lower return a higher degree of stability and less probability of losing principal capital.

1.2. PROS AND CONS OF HIRING A FINANCIAL ADVISOR

In the last years the high sophistication of financial markets has imposed on households a greater burden to actively manage their personal finances. Many studies prove that individuals are financially illiterate (Lusardi and Mitchell, 2007), lack information (Guiso and Japelli, 2006) and possess behavioural biases (Kahnerman and Tversky, 1979; Huberman et al. 2007). Financial advice may compensate for these deficits in many ways.

As a starting point, a financial advisor has access to economies of scale for what concerns information search and acquisition processes. For common individuals it would be in fact much more expensive in terms of money and time to collect information; moreover sources used may be of lower quality, causing suboptimal investment decisions. Thus professional financial advice should be a solution to gain access to better information and improve the portfolio performance (Peress, 2004).

Another potential contribution consists in providing investment recommendations that outperform the market. From an academic perspective posing such a question is especially interesting as it asserts that professionals possess informational advantage, and thus, this challenges the efficient market hypothesis. There are controversial opinions around this issue. Womack (1996) analyzes the stock "sell" and "buy" recommendations of 14 major US brokerage firms, finding out that professionals display ability in both stock picking and market timing. The value added by these recommendations can completely cover the costs of searching the needed information, since the securities Womack observes move in the same direction as predicted by the analysts, both in a 3-day time period and in the post-recommendation period, thus granting abnormal returns. In a similar study, Desai and Jain (1995) examine the investment advice of the "Wall Street Superstar" money managers, who participate in the *Barron*'s[1] Annual Roundtable. They find out that even if recommendations of money managers earn superior returns within a period of 14 days, in the longer holding term, i.e. 1 to 3 years, these average abnormal returns go to zero. On the other hand, Karabulut (2010) claims instead that the involvement of a financial advisor does not attain to a superior dynamic asset allocation, and his results prove that an IFA doesn't have the ability to forecast correctly the future market realizations. Indeed self-directed

[1] Barron's is an American weekly newspaper covering U.S. financial information, market developments, and relevant statistics. Each issue provides a wrap-up of the previous week's market activity, news reports, and an informative outlook on the week to come.

customers who tend to follow a simple rule of thumb (namely 100-age rule[2]) display better timing skills than their peers who act on the recommendations of professionals.

Furthermore individuals use to behave irrationally and deviate from the ideal investment strategy (i.e. Campbell, 2006; Calvet et al. , 2006), causing losses in welfare and utility. Evidence that financial investors avoid this kind of mistakes is provided for instance by Shapira and Venezia (2001) who prove that disposition effect[3] is less usual among professionals. Also Feng and Seasholes(2005) claim in another study that trading experience and financial sophistication can efficiently limit the investors' biases.

A financial advisor can also contribute to overcome the non-participation phenomenon, by either smoothing the information asymmetries or eliminating the misperception as to stock market (Kramer, 2009). Nevertheless Karabulut (2010) finds no evidence of a significant positive effect of financial advisors on the participation rate.

Finally, a financial advisor may encourage a client to do cross-border investments, thus moderating the home bias (Kang and Stulz, 1995).

Nevertheless advisory service implies also both direct and indirect costs which can to different extents offset all the previously discussed benefits.

The direct costs can be of two different types: commissions or fees.

When advisors are hired by big firms -the Goldman Sachs and Merrill Lynches of the world- they are allowed to use their facilities and to obtain information from other professionals working for the same firm (i.e. analysts, brokers and so on). Moreover they can use the firm's name when marketing products, thus earning prestige and credibility. All this comes at a cost: the advisor has to guarantee a part of revenues to the firm itself.

Assume a client hires an advisor who works for a well-known brokerage firm: when the manager suggests an investment to the investor, he earns x basis points as a commission. He must then give a percentage of these x basis points (say 10%) to the firm for which he works. Thus the common interest of the advisor and of the firm is to maximize trading in order to increase as much as possible commissions and, as a consequence, earnings. This implies that the advisor cares no more about the needs of his client, thus making him buy or sell excessively (technically this behaviour is called churning) or not respecting his profile of risk tolerance. This conflict of interests

[2] To figure out the right mix of shares and bonds, using a general rule of thumb can be helpful: stock quotient equals 100 minus your age, while bonds one is represented by your age.

[3] The trend to sell winning stocks too early and losing stocks too late.

between clients on one side and advisors on the other is at the core of the indirect costs of the financial advice industry, i.e. the agency costs, which are caused by the fact that goals on the two sides are not aligned. Sometimes it might happen that investments that pay higher sales commissions to the advisor are chosen even if a less expensive alternative may be available. This incentive problem is known as misselling (Inderst and Ottaviani, 2009). In the last years many scandals have happened in the UK -misselling of mortgage endowment or precipice bonds- and in Germany –Lehman "certificates" misselling- and they have caused many losses to private investors, thus underpinning the concern of misselling.

Many experts think that a fee based compensation is a solution to the agency problem, because it gives incentives to the financial advisor to make investment decisions in line with the clients' needs, instead of decisions that maximize the commission earned.

There are different structures for setting the fees: usually they consist in charging a percentage of the total amount invested. Other could privilege a performance-based fee. This latter option should be the best one, since interests are aligned and the fee based advisor earns more when the portfolio performs better. Typically advisors earn about 1.0% to 1.5% per year to make the investment decisions for the clients.

By the way, the definition "fee based" requires a further explanation, since otherwise it might become misleading. A fee based compensation is typical of brokers, who might receive commissions together with fees.

A "fee-only" financial advisor[4] is instead compensated only by the client, through a combination of hourly, financial planning and asset management fees. He can't accept bonuses, awards, rebates, commissions, finder's fees or other forms of compensation deriving from a client's commitment to implement the individual's plan recommendation. These strict rules should help the client realize both long- and short-term goals and simplify the monitoring of accounts.

[4] as defined by the review material for the Certified Financial Planner exam and the national Association of Personal Financial Advisors.

1.3. WHEN THE CONS CAN OFFSET COMPLETELY THE PROS: THE BIG INVESTMENT LIE

Up to now we defined the figure of the advisor, his main tasks, the pros and cons of the advice service, and we underlined how a fee-only based compensation may solve the conflict of interests which can otherwise be detrimental to the interests of an investor.
Then, if the solution is so easy, why does Michael Edesses define the financial advice industry as a

> "total and demonstrable failure", for which "customers pay far, far more than they will ever pay for medical advice and treatment, or for the services of a lawyer, or for any other professional advice and assistance they will ever get"?[5]

According to his point of view financial advisors add features to the basic investment commodity in order to oblige customers to pay more for them. Edesses uses a metaphor to explain easily this concept: a computer store sells a printer at a very low price, claiming that you can conclude a good bargain if you buy it, but then you have to pay a further $15 for a cable to make the printer work. In fact given that competition pushed the printer price too down, the seller has to find an alternative way to earn profits. The problem with financial advice is that this worthless service costs thousands, hundreds of thousands, even millions of dollars. It is as if you were sold a $10 million mainframe which is useless for your purposes, even if you had asked simply for a $499 laptop. This is not so wrong in a market economy, where the company tries only to sell whatever product in order to maximize its profits. The problem according to Michael Edesses is that the customer is not doing what he is supposed to do, i.e. minimize costs. People will search online for hours the best airfare offer in order to "save $50, but they will not realize they are losing $50000 in worthless investment advice and management"[6]. He claims[7] that in recent years, as mounting evidence proves the inefficiency and unworthiness of the financial advice sector, the exorbitant fees imposed by money managers have risen, not decreased.

[5] Michael Edesses: "The Big Investment Lie" (2007, 15)

[6] Michael Edesses: "The Big Investment Lie" (2007, 18)

[7] and this is the punchline of this essay, what is going to be proved analytically through an empirical survey and case study.

So why do customers continue to pay these fees? According to Edesses the reason is that they are so taken in by the *Big Investment Lie* that they seem almost totally inattentive to costs.

Hence, the advisory service's value lays essentially in advising the customer to make a long-run commitment to a diversified stock portfolio. This easy advice is usually complicated by other requirements like risk assessment, asset allocation, style allocation, and selection of mutual funds or separately managed investments, together with the continuous claim that "sophisticated" models and softwares are used to obtain suitable recommendations. These are strategies used to make the whole process more sound, thus more valuable. The problem is that the aim is not only to make people listen to a good advice (i.e. diversify the portfolio) more easily, but also to make them think that elaborating this suggestion is more complicated than it is, thus more expensive.

Moreover the way in which fees are charged can be misleading, since it makes people think that these costs are negligible, as they look smaller than they actually are. To this purpose one of the most efficient strategies consists in stating the expenses as a percentage of the account invested.

Many investors are usually inattentive to costs even because they wrongly assume that they will be for sure lower than the value of the advice. Nevertheless this is not always the case. To show this, Edesses compares two investors, John and Mary. Each has $250000 to invest. Neither one will touch the money for thirty years until they are retired.

John doesn't know very much about investing, so he hires a financial advisor, while instead Mary invests 80% in total market index funds purchased from one low-cost index fund provider and 20% in a Vanguard intermediate bond fund. The former is invested 70% in domestic U.S. stock and 30% in an international fund.

Let's assume that John has a risk tolerance which is similar to Mary's, so his manager will allocate his portfolio in an analogous way with respect to the weight of stocks and bonds (probably the investment vehicles will be different and the advisor will choose a higher number of them).

Before fees and taxes, Mary and John will get more or less the same return over 30 years, say 8% per year. Nevertheless, when accounting for all the expenses the difference in performance will be astonishingly huge.

Mary's total annual fees will be fifteen basis points (0.15%) per year. Taxes will be something more than 0.5% per year.

John's fees will be about 1.2 to 2.8% higher and even his taxes will range between 0.1 and 1.7% more than Mary's.

Results are summarized in the following table[8]:

	After Fees ($ thousands)			After fees and taxes ($ thousands)		
	John's	Mary's	Difference (%over John's)	John's	Mary's	Difference (%over John's)
HIGH-END FEES AND TAXES	$1,092	$2,413	$1,321,000 (121%)	$568	$2,064	$1,496,000 (263%)
MID-RANGE FEES AND TAXES	$1,351	$2,413	$1,062,000 (79%)	$872	$2,064	$1,192,000 (137%)
LOW-END FEES AND TAXES	$1,720	$2,413	$693,000 (40%)	$1,428	$2,064	$636,000 (45%)

Table 1.1

After fees and taxes the return for Mary will be between 45% and 263% larger than John's, with a mid-range of 137%.

Usually the high fees paid to advisors are part of a circular mechanism, based on the fact that clients pay them a lot, so managers become wealthy. Since they are wealthy, customers think they are expert and knowledgeable. As they are expert and knowledgeable, they are paid a lot.

According to Michael Edesses, sometimes finding better ways to collect fees comes first in business, even before the concern of how to improve or to make the product. It can even completely replace the consideration of whether the product is worth anything.

This may sound somehow excessive, but there is literature confirming that the main goal for a financial advisor may become at some point to attract more and more clients, leaving aside the improvement of his actual skills in finance.

This is what emerges in a guide for financial advisors written by Scott West and Mitch Anthony: "Storyselling for financial advisors" (2000).

As they explicitly say, an advisor's success with clients

> doesn't hinge on being a better analyst but rather on being a better storyseller, and a master of the metaphor. Individuals will no longer tolerate being left in the dark, and they will gravitate to the advisors who excel in illuminating and communicating. [9]

[8] Michael Edesses: "The Big Investment Lie" (2007,59)

[9] Scott West and Mitch Anthony: "Storyselling for financial advisors" (2000, VIII-Preface)

In their book they examine attentively the strategies to make advisors more reliable from a client's perspective. Part one has an emblematic title, i.e. "How to put half of your client's brain to sleep", which sounds like a kind of confirmation of Edesses's theory. Advisors are paid so much not because they actually add a lot of value to a portfolio, but because they are skilled strategists, able to conquer the clients' trust through some wise tactics. The book analyzes many of them, starting from the way to speak to the type of speech to be used in order to catch the investors' attention. The authors underline many times that the use of images, analogies and metaphors is very important to get a customer's trust. There are also chapters dedicated to strategies of penetration of three so called "desirable markets" (proposed in part three), i.e. markets which offer high potential profits to the wealth manager:

- the Affluent market, where investable assets are $250000 or greater;
- the Mature market, for over 60-year-old people;
- the Women's market.

What emerges since the very first chapter is that using as a strategy to convince customers too many statistics, facts and charts, is counter-productive. What an advisor should develop is not an encyclopaedic knowledge and a deep financial experience, but mainly the ability to use both parts of the brain, since in this way he has "twice the odds of winning the account"[10]

What does it mean?

West and Anthony suggest that an exclusively analytical and scientific approach in explaining and selling investments has a half-brain appeal and that it can be detrimental to the advisor's interests, because it strengthens the use of jargon, which tends to confuse and intimidate potential customers. A successful storyseller knows how to relate complex investment strategies and products to matters his clients can understand through the use of the phrase "it's kind of like".

As an example, one of the authors of the book (say Mr. A) meets an executive of a growing software company (say Mr. B) at an airport. When hearing that Mr. A works in the financial advice industry, Mr. B complains about that sector, underlining the fact that all those kinds of companies use the same charts, the same statistics, the same pitches. That makes impossible for a customer to know what is right for himself.

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[10] Scott West and Mitch Anthony: "Storyselling for financial advisors" (2000, 3)

As an answer to this critics, Mr. A uses a topic which at first glance confuses Mr. B[11]: he introduces a hypothetical opportunity to buy an exclusive condo on the lakefront, where there are only two units left. One is on the top floor where there is an inspiring panoramic view, and the other one is on the bottom floor from where it is possible to escape easily and fast in case of fire. Then the question is: "Which one do you think you'd buy, Mr. B?"

After a moment of hesitation, Mr. B says: "I want the view. I'll take the risk. For me, it's about the view."

When listening to Mr. A's explanation of the reasons behind the weird question, Mr. B gets excited because of this revolutionary and easy approach.

In the selling field, analysis, number crunching, logic and organization (located in the left part of the brain) play a necessary role, which by the way constitutes at most about 10 to 20 percent of the critical mass necessary for sales success. The other 80 to 90 percent comes from right-hand functions, like people's skills, which play primary role in sales realm. These skills consist in the ability to sense, listen, communicate, solve problems intuitively, innovate and use humour.

Storyselling focuses on influencing the right side of the client's brain, because that is "where decisions get made, where people picture and buy into what advisors sell"[12]. This technique privileges completely the brain science that demonstrates how to engage the whole brain in a presentation and double its impact.

Ned Hermann in his book "The Whole-Brain Business Book", proposes a chart called "Our Four Different Selves" that shows the different shades of personality from the two sides of the brain (Figure 1.1):

- our rational self
- our safekeeping self
- our experimental self
- our feeling self

[11] actually it was a metaphorical way to understand the level of risk tolerance of Mr. B.

[12] Scott West and Mitch Anthony: "Storyselling for financial advisors" (2000, 12)

Figure 1.1

What people most want according to West and Anthony is to be illuminated and approached on a personal basis, not to be directed to volumes of numbers, statistics and small print. They want a specific program for their unique circumstances, even when they are not so unique from a professional's perspective.

Being persuasive is a prerogative, experience and deep knowledge are at the second place.

This is confirmed even through another study by David J. Mullen Jr. introduced in his book "The Million-Dollar Financial Advisor". The author interviewed and knew directly for years, watching their best practices from a front-row seat, 15 professionals who exemplify through their figure what it takes to be at the very top in this field. They come from a diversity of backgrounds, representing different genders, ages, races, and locations. They have their offices located in all parts of the U.S., from the Southeast to California, and from New York to the Rocky Mountain West and Midwest. Five of the most successful advisors are located in the Southeast and Midwest, dispelling the notion that the largest population centres produce the most successful advisors. They practice in a broad range of locations, from large metropolitan areas to smaller cities.

The results are that the average age is 52, with the youngest being 38 and the oldest 64. There is no correlation between the quantity of business done and their age or experience level. Their average length of service in the industry is 26 years. The average

age for starting the business is 25 years old. The majority went to public, state-sponsored undergraduate colleges or universities. Only two out of 15 continued their education with graduate school, and both are MBAs.

Most of them come from modest beginnings and have no special circumstances beyond themselves that account for their success. Their business (i.e. the profits they had realized) at the end of 2008 ranged from $2 million to $15 million, with the average being $5 million[13]. The assets under management ranged from $500 million to $4 billion, with the average being $1 billion. The ratio between the individual level of business and the assets they control is a measure of the velocity rate and on average it is 0.50 basis points (100bp equal 1 percent). The velocity rate is also referred to as ROA[14], or return on assets. The top advisors with fewer total relationships show a lower velocity rate, because the size of each relationship is bigger, so as a percentage of assets it generates less business.

The number of relationships that each advisor worked with directly range from 20 to 200, with the average number being 80 clients. There is a correlation between the size of the markets and the number of relationships the advisor works with: the smaller the market, the more relationships the top advisor maintains. The minimum size relationship ranges from $500,000 to $100 million, with the average minimum being $1 million. In smaller market the minimum size is less than in the larger markets. In some cases even clients with less assets are accepted.

Top advisors are focused on marketing and on the acquisition of new assets and client relationships that meet their minimums, regardless of the economic outlook. In 2008 the range of new assets brought in spanned from $25 million to $400 million, with the average being $50 million[15]. Most of the advisors state that $50 million in new assets was their goal, and that goal was usually met.

What generally emerges from this study is that these top advisors are not very knowledgeable (only 13% are graduated) and that experience is not a key feature of their success, since it is not correlated to the amount of business they are able to do. Notwithstanding they realize big profits because –as the same Mullen says- they are master relationships builders. They spend the vast majority of their time

[13] Most of the advisors work in team, but only the individual level of business was taken into account.

[14] Most of the advisors work in team, but only the individual level of business was taken into account.

[15] the $400 million has been taken out of the average calculation because it would have distorted the averages.

communicating, socializing and being with affluent clients and prospects. This is an empirical proof of the importance of the left-hand brain in the financial advice field, further confirming Edesses' s position that sometimes fees collection comes first in business. In the literature analyzed all the explanations provided to new wealth managers concern how to improve their own revenues, more than the performance of the client's portfolio.

1.4.FEELING-BASED STRATEGIES AS A FURTHER PROPELLANT OF THE BIG INVESTMENT LIE

After this discussion only one remark can be highlighted to complete Edesses's theory, i.e. not only sophisticated theories –linked to the use of the right-hand part of the brain- but also ability to involve emotionally the clients –left-hand part of the brain- play a capital role in spreading mounting trust (which as a consequence is at the basis of mounting fees) in this sector. This is at the core of what Edesses calls the Big Investment Lie. "The advisor of the future may be equal parts Peter Lynch[16]and personal coach", as wrote Olivia Mellon in the *Investment Advisor* magazine.

[16]Peter Lynch (born January 19, 1944) is a Wall Street stock investor. He is currently a research consultant at Fidelity Investments. Lynch graduated from Boston College in 1965 and earned a Master of Business Administration from the Wharton School of the University of Pennsylvania in 1968.

CHAPTER 2
"FINANCIAL ADVISORS: A CASE FOR BABYSITTERS?": STATISTICAL ANALYSIS

2.1. BACKGROUND

After having described in general the figure of the financial advisor, the next aim is to verify empirically if the conclusions reached in the previous part have some roots in the actual financial situation.

To this purpose this chapter deals with the statistic results exposed in a discussion paper published in 2009 by Andreas Hackethal, Michalis Haliassos and Tullio Jappelli, all working at the Centre for Economic Policy Research (CEPR). The title is quite emblematic and the reason why it has been chosen becomes clear in Chapter 3, where the problem is faced from an econometric perspective, which controls for many variables that bias the statistic results discussed instead in this chapter.

Finally in Chapter 4 the theoretical speculation of Chapter 1 will be compared to the more technical Chapters 2 and 3 in order to get more general conclusions.

2.2. THE DATA SET

Administrative information from a large German discount brokerage firm is merged together with regional data in order to examine the financial portfolio performance.

The data set encompasses 32,751 randomly selected individual customers observed over 66 months (January 2001- June 2006), and it allows comparisons between self-managed and run by, or in consultation with, an independent financial advisor (IFA).

Every account considered was opened before January 2001 and it was kept until June 2006. When a customer owned more than one of them, these multiple accounts were grouped to form a unique one.

Information about each customer was collected when they opened the account and updated in the course of time. It concerns:

- date of birth
- gender
- marital status
- profession (including status, i.e. employed or self-employed)
- zip-code
- nationality

- self-reported security trading experience in years

The accounts of people below 18 were dropped.

Here are the results of the sample characteristics according to some of the previous categories:

Control variable	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. of all accounts
Male	0.793	0.674	0.778	0.100	0.416
Married	0.480	0.464	0.478	0.000	0.500
Employed	0.865	0.834	0.861	1.000	0.346
Self-Employed	0.129	0.158	0.132	0.000	0.339
Experience	7.335	9.161	7.562	3.900	6.211
18≤Age≤30	0.047	0.042	0.046	0.000	0.210
30≤Age≤40	0.260	0.119	0.242	0.000	0.428
40≤Age≤50	0.344	0.269	0.335	0.000	0.472
50≤Age≤60	0.195	0.229	0.199	0.000	0.399
Age≥60	0.154	0.341	0.178	0.000	0.382

Table 2.1

Let's put in evidence some results:

- 77.8% of accounts owners were male;
- 47.8% were married;
- 86.1% were employed, while 13.2% were self-employed, 0.7% were public servants, retirees, housewives or students;
- the majority aged between 40 and 50 years old (33.5%), followed by those who aged between 30 and 40 (24.2%), between 50 and 60 (19.9%), then those over 60 (17.8%), finally a small percentage between 18 and 30 (4.6%);
- as highlighted in the previous chapter, the most relevant IFA accounts tend to exhibit higher percentages of women participation and old people,[17] thus supporting the idea that these are two high desirable markets for IFAs;
- average trading experiences as of January 2001 was 7.56 years. For each sampled customer account, all trades and all monthly position statements over the entire

[17]over 60-year-old people who run a portfolio through the help of an IFA are more than twice those who run the account by themselves.

observation period were considered. Trading records indicate type (i.e. sale, purchase, dividend payment, etc.), currency, trading channel (e.g. internet, telephone, fax, etc.), and execution date.

The majority of advisors earned front loads or performance based fees, which usually amounted from 100 to 200 basis points on clients with an account volume of more than $50,000, and were in the neighbourhood of 200 basis points[18] for smaller accounts.

Of this average 200 basis points, 30 were destined to the bank as a reward for transaction fees, account maintenance, and front loads. The remaining 170 basis points were usually left to the IFA. These costs were promptly subtracted from the return on the portfolio, thus providing a more fair computation of the return on the financial portfolio.

In some cases the loads were instead forwarded to the clients and the IFAs received a flat fee as a percentage of the account volume. Since this flat fee was not granted from the bank, it couldn't be neither observed nor taken in consideration when computing returns and/or other measures of performance net of costs.

To get an idea of the average composition of the portfolios in the account of the brokerage firm, (encompassing even owners aging less than 18) consider the following chart:

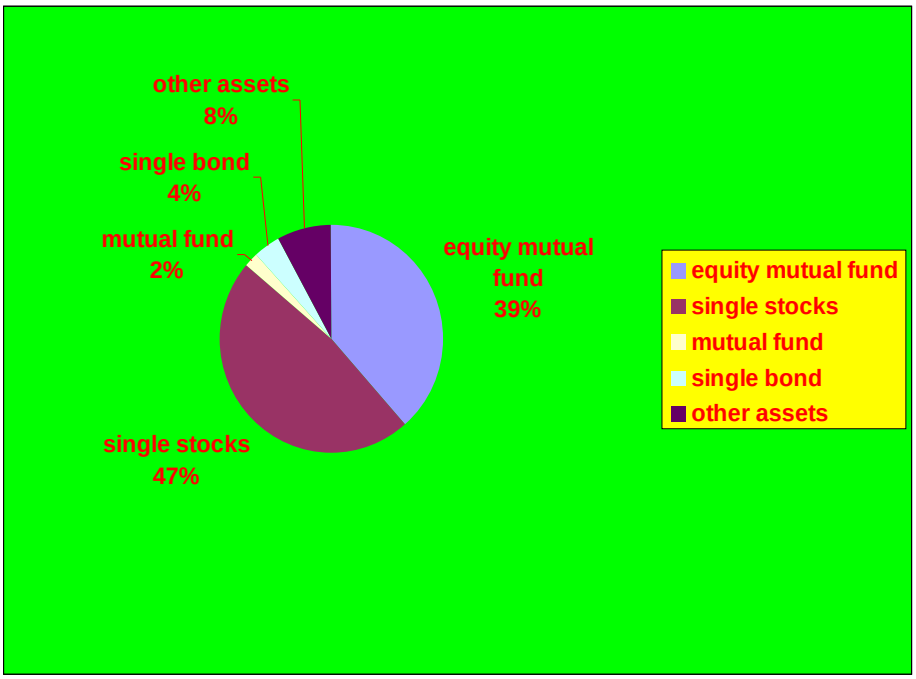


Figure 2.1

[18] although they could be as high as 300-500 basis points, due to front loads and kick-backs from mutual funds.

The administrative data set includes also a variable that indicates whether a given brokerage customer was also client of an IFA who registered with that same brokerage firm. This has a double meaning:

- an IFA who works for a brokerage firm accentuates the turnover rate, causing the previously discussed churning mechanism, which favours the sale of some products offered by the brokerage firm for which he/she work;
- These registered IFAs first solicited clients by offering their advisory services (or were approached by clients themselves) and then assisted their clients in opening an account with the brokerage firm.

Of the customers in the sample, 12.7% consult IFAs registered with the brokerage firm. It is not possible to infer whether the others consult outside advisors, but this sounds quite unreasonable, since it would imply paying full brokerage fees and commissions (because they are not incorporated in the commissions paid to the brokerage firm).

To correct any eventual bias caused by endogeneity of the decision to consult with an IFA, some regional instruments are used in a second data set retrieved from the *destatis*[19] files of the German Statistical Office. *destatis* provides a broad set of structural data on about 500 German regions. These data concern:

- size of region in square kilometres;
- population per region;
- total disposable income per region and disposable income per capita per region;
- fraction of college graduates and average voter participation in communal, state and federal elections per region.

The system of zip codes is more fragmented in Germany than the regional grid of *destatis.* Customers were classified assuming that all the zip-codes in the same *destatis* region share the same structural characteristics.

This second data set was completed with the use of the number of bank branches per *destatis* region, acquired from a commercial data provider.

Here all the results of this second data set are summarized:

[19] The Federal Statistical Office of Germany (German: Statistisches Bundesamt, shortly Destatis) is a federal authority of Germany. It is a part of the Federal Ministry of the Interior of the Federal Republic of Germany. The Office is responsible for collecting, processing, presenting and analysing statistical information concerning the topics economy, society and environment. The purpose is providing objective, independent and highly qualitative statistical information for the whole public. About 2780 staff members are employed in the departments in Wiesbaden, Bonn and Berlin.

Instrumental variable	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. of all accounts
Log Account volume in 2001	9.854	11.119	10.015	9.897	1.344
Bank Branches, per Capita	0.186	0.176	0.185	0.079	0.186
Log Income in Region, per Capita	9.826	9.835	9.827	9.824	0.136
Log Income in Region	15.455	15.361	15.443	15.339	0.869
Voter Participation	0.784	0.786	0.784	0.785	0.029
Pop. With college degree	0.258	0.248	0.256	0.247	0.080

Table 2.2

2.3. RETURN AND RISK

At first glance it might seem easy to evaluate the skills of an IFA. One should be happy when the advisor produces positive results, increasing the initial capital invested. This is for sure an important condition, nevertheless it is not sufficient.

To go deeper into this concept, let's assume there are two different investors, A and B. They both start a five-year investment and, at the end on the fifth year, A's portfolio return is 50%, while B's return is 25%. It looks like A is better off than B. Actually, if the investors had for instance to withdraw the capital after 4.5 years, the situation might be completely different. A might get a 15% interest rate, while B 22%. In this second circumstance, one should conclude that B is better off than A.

Through this example it is possible to highlight that a portfolio performance should be evaluated not only considering the amount of return, but also the risk borne, which should be compatible with the preferences of the investor.

A financial asset is risky because the future price is not predetermined, but it may assume different values, each one associated to a given probability of occurrence. In the same way, even the investment in that specific financial asset is risky, because its performance depends on that of the asset. The higher the uncertainty around the future value of the investment, the higher the risk level. The volatility resides in the fact that the expected price is different from the actual one. It is important to account both for the probabilities of having a return different from the expected one and for the amount of the spread.

To make things easier, the higher the spread between minimum and maximum price an asset may assume, the higher the standard deviation of the expected return.
The risk on a portfolio depends on the risk of the single assets composing it and on their reciprocal correlation.
In the following paragraphs the analysis of the return and risk on self-managed portfolio and those run by an IFA accounts will be proposed. To this purpose the CAPM -with associated portfolio variance computation- and the concept of downside risk will be discussed. Even if with missing data, some intuitions on the issue of persistence will be discussed, too. Finally there will be a paragraph dedicated to the turnover and volume of trades and to the diversification of the portfolios, key issue in order to invest efficiently, i.e. to decrease the level of risk for a given return.

2.4. RATE OF RETURN MEASUREMENT

When there are no cash inflows and outflows until the maturity date, the rate of return for the period going from t_o to T is found through the following formula:

$$R(t_0,T) = \frac{V(T) + D(T)}{V(t_0)} - 1 \qquad \text{Equation 2.1}$$

Where

$V(t_0)$ is the initial value of the portfolio;

V(T) is the value of the portfolio at maturity;

D(T) is the sum of all the dividends or other compensations received during the period from t_0 to T.

To compare investment having different maturities one should convert their corresponding returns to a common temporal basis, which is usually the year. In order to do this, the following equality is used in case of simple interest regime:

$$1 + R_A(t_0,T) = 1 + R(t_0,T)\tau \qquad \text{Equation 2.2}$$

Where

$R(t_0,T)$ is the interest rate valid in the fraction τ of year;

$R_A(t_0,T)$ is the return on an annual basis.

Consequently we have that:

$$R_A(t_0,T) = R(t_0,T)\tau \qquad \text{Equation 2.3}$$

In case of compound interest Equation 2.2 becomes:

$$1 + R_A(t_0, T) = (1 + R(t_0, T))^{\tau} \qquad \text{Equation 2.4}$$

Thus the rate on the annual basis becomes:

$$R_A(t_0, T) = (1 + R(t_0, T))^{\tau} - 1 \qquad \text{Equation 2.5}$$

This simple regime does not hold when the investment is subject to inflows and outflows, as for example when dealing with open mutual funds.

There are two different approaches when facing this issue. The first one, i.e. the Time Weighted Rate of Return (TWRR), is neutral with regard to the above mentioned cash flows and it is used by the Global Investment Performance Standards (GIPS) to compare the performance of different funds.

When instead an investor wants to know the growth rate of his investment in a specific fund, the Money Weighted Rate of Return (MWRR) is preferred, because it takes into account all the investment and/or disinvestment decisions taken by the investor in the sub periods between t_0 and T and which have a huge impact on the final result of the portfolio performance.

To see how these indexes are different, let's consider a simple investment example and compute both the TWRR and the MWRR.

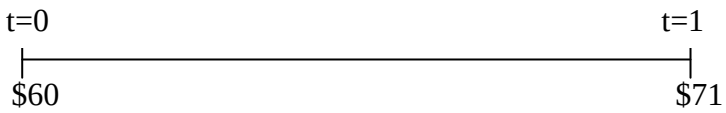
Let's assume there is an investor that takes the following investment decisions:

- at t=0 he buys one stock at $60;
- at t=1 he buys another stock at $70 and gets a dividend of $1;
- at t=2 he sells both at $75 each. No dividend is paid out.

Finding The TWRR means finding the growth rate in each sub period from t=0 to t=2.

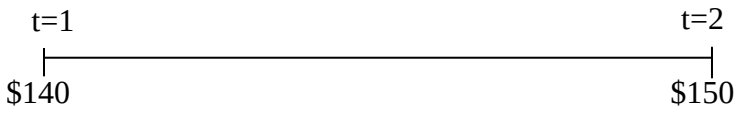
In order to do this, we have to define the balance at the beginning and at the end of each intermediate period.

For what concerns period t=1, the beginning balance is $60, while the end one is $70 (as the share appreciated) plus $1, which is the dividend. So we have



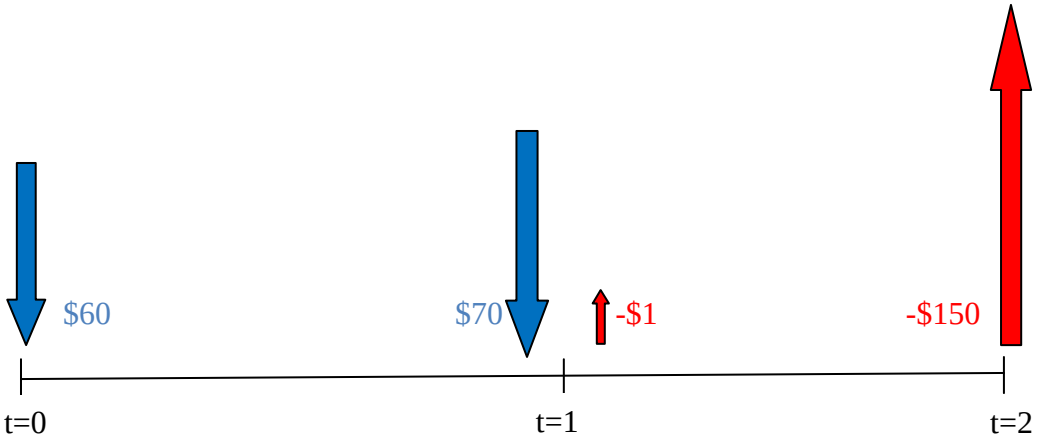
For what concerns period t=2, at the beginning the balance is $70x2 (as another stock is bought). The dividend is not reinvested into the second period, because it was already paid to the customer, so it is not accounted. The balance at the beginning of the second

period is $70x2, while at the end it becomes $75x2, as both of the stocks are resold at an appreciated rate.



During the first period the growth rate is $(71/60)= 1.183 so it is 18.3%.
During the second period it is instead $(150/140)= 1.071 so it is 7.1%.
To find the TWRR of the overall period a geometric mean of the growth rates in each sub period should be computed, and in this case it is the square root of 1.183x1.071.
So the TWRR is 12.6%.

When dealing with MWRR the aim is to find the Internal Rate of Return (IRR) of the account. In this method the cash flows are treated as some forces exercised on a balance, which is maintained by the IRR. So if ↑ stands for cash outflow and ↓ stands for cash inflow, then we have:



To find the MWRR, the cash flows should be summed up following the formula to compute the IRR:

$$60 + \frac{70-1}{1+IRR} + \frac{-150}{(1+IRR)^2} = 0$$

So the MWRR is 9.4%.

Differently from the TWRR, the MWRR doesn't require the knowledge of the portfolio balance during all the intermediate periods. So intuitively the results obtained using the former instead of the latter index will be more and more different when the

heterogeneity of returns realized by the fund in the sub periods increases. Moreover the two indexes diverge also when the cash flows show an irregular trend.

Since the objective in the discussion paper is not to compare different mutual funds, but to measure the performance of a portfolio, the computation of the MWRR is more appropriate. However in this case a method easier than the IRR, i.e. the Dietz's simple method, is used. It assumes a constant growth rate over a period in which observations of the returns are accomplished. The Dietz's formula, based on the idea of calculating an approximation of returns over periods and linking the results, was developed by Peter O. Dietz[20]. The idea is to split the cash flows into two parts and assign the pieces to the beginning and to the end of the period. Thus half of the cash flow is added to the beginning value and half is subtracted from the ending value.

The midpoint Dietz formula is

$$r = \frac{EV - \frac{C}{2}}{BV + \frac{C}{2}} - 1 \qquad \text{Equation 2.6}$$

where

C = sum of all the cash flows during the period

EV= ending value of a fund

BV= beginning value of a fund

By rearranging equation 2.6 we get:

$$r = \frac{EV - BV - C}{BV + \frac{C}{2}} \qquad \text{Equation 2.7}$$

This formula has been used in order to find the monthly portfolio return in the sample under analysis:

EV→ $V_{p,\,t}$ = market value of portfolio p at the end of month t

BV→ $V_{p,\,t-1\rightarrow t}$ = market value of portfolio p at the beginning of month t

C → $P_{p,\,t-1\rightarrow t} - S_{t-1\rightarrow t} + E_{t-1\rightarrow t}$ where

$P_{p,\,t-1\rightarrow t}$ = market value of all purchases (fees included) between t and t-1

$S_{p,\,t-1\rightarrow t}$ = market value of all sales (fees included) between t and t-1

$E_{p,\,t-1\rightarrow t}$= cash proceeds from dividends, coupons received from t and t-1

[20] Dietz proposed this formula in his Columbia University doctoral dissertation entitled "Evaluating the Investment Performance of Noninsured Pension Funds", from which three publications appeared

So the formula becomes in our specific case:

$$r = \frac{(V_{p,t} - V_{p,t-1\to t}) - (P_{t-1\to t} - S_{t-1\to t} + E_{t-1\to t})}{V_{p,t} + \frac{(P_{t-1\to t} - S_{t-1\to t} + E_{t-1\to t})}{2}}$$

Equation 2.8

Even if data which were into the 1st or 100th percentile were dropped (because they most likely represented some mistakes), it was possible to save the clients' profile.

This formula was used by considering first all the customers together, then by splitting those same customers in two groups, i.e. those whose investment choice was followed by an IFA, and those who chose on a non-advised basis.

The monthly returns were then averaged and the general results were the following:

	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. Of all accounts
Log returns	-0.801	-0.439	-0.755	-0.614	0.916
Returns	0.449	0.645	0.470	0.541	2.499

Table 2.3

Monthly returns are 30% higher in the case of IFA account, thus giving at first glance room to say that the IFA adds value to prospective customers.

Here is the distribution of monthly returns (percentage value) of both self-managed and run by an IFA portfolios.

Figure 2.2

It is evident how in the case of IFA accounts more mass is concentrated towards the center and higher end of the distribution, indicating a better performance.
The next step is to verify if this better result corresponds also to a higher risk profile, because this would imply that the IFA doesn't add value to the portfolio.

2.5. THE CAPM

In order to investigate this issue, the Capital Asset Pricing Model will be introduced (CAPM).
According to this model the expected return of a given portfolio depends on the return on the market portfolio, which is a description of all the assets available in the market with weights proportional to their relative capitalization.
The following is its general equation:

$$r_{p,t} - r_{f,t} = \alpha_p + \beta_p (r_{M,t} - r_{f,t}) + \varepsilon_{p,t} \qquad \text{Equation 2.9}$$

where:

$r_{p,t}$ = return on the risky portfolio at time t

$r_{M,t}$ = return on the market portfolio at time t

$r_{f,t}$ = return on the risk-free asset at time t

α_p = Jensen's alpha, which should be equal to zero to avoid arbitrage

β_p = σ_{pm}/σ_m^2, a measure of the sensitivity of the sensitivity of portfolio p to the market

$\varepsilon_{p,t}$ = the random error, i.e. uncorrelated with the market, with zero mean.

The β_p can be computed as a weighted average of the betas of the single assets composing the portfolio. This means that every asset in the portfolio is subject to a different degree of risk which depends on its correlation with the market portfolio.
Since the market portfolio is a theoretical concept, some proxies are used. In the discussion paper under analysis the *MSCI World Index* was used.
As the risk-free asset by definition should have zero volatility, the factors of risk in the previous equation are β_p, ε and the premium r_M over r_f, .
Thus the total variance associated with the investment is:

$$\sigma^2_{r_{pt}-r_{ft}} = \beta_p{}^2 \sigma^2_{r_{Mt}-r_{ft}} + \sigma^2_{\varepsilon_{pt}} \qquad \text{Equation 2.10}$$

This total variance is composed by the sum of a systematic component and an unsystematic one. The first part of risk is caused by the correlation of the portfolio p with the market portfolio. The importance of β_p stands in the fact that it measures to

what extent the risk on the market portfolio creates effect on the portfolio under analysis.

To make this concept more clear, a practical example may help a lot: assume β= 1.1, i.e. the investor's portfolio has a higher risk than the market's one, since β "amplifies" any change in the return (and the variance as a consequence) of the market portfolio. If the market portfolio returns increases by Δ=10% →βΔ= 1.1x10%=11% → the portfolio goes up by 11%, i.e. 1% more than the change in the market portfolio.

The same reasoning holds true when Δ is negative. If it is for instance -10%, the total effect on the investor's portfolio would be -11%.

Here are the results of the computations of all the elements of risk -previously described- relative to the sample under analysis:

	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. of all accounts
Variance of portfolio returns	0.100	0.063	0.095	0.092	0.039
Unsystematic risk	0.050	0.040	0.049	0.046	0.021
Beta	1.289	0.843	1.233	1.272	0.387

Table 2.4

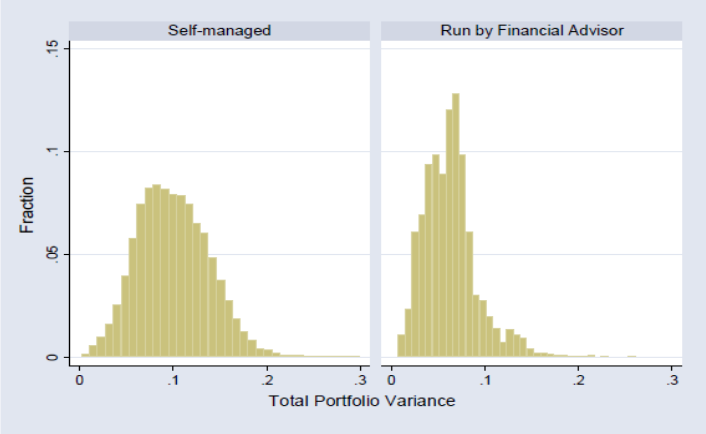


Figure 2.3

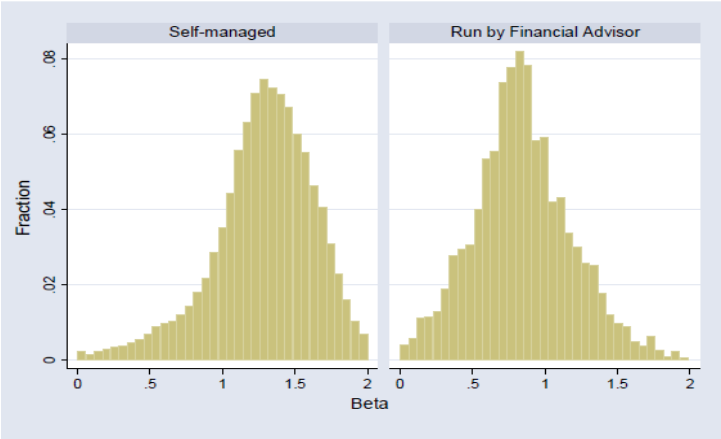


Figure 2.4

Figure 2.5

Accounts run by IFAs have a beta which amounts to 2/3 of that of those which are self-managed. Not only the systematic component, but also the unsystematic one is lower in case of IFA accounts. This implies that an advisor promotes a better diversification, which is the main reason why the idiosyncratic part of risk is smaller. If the distributions are observed, one can notice that the betas, the overall risk and the unsystematic component are all more symmetric and less skewed in the case of IFA account.

What emerges through this first analysis is that the increase in portfolio return caused by a wealth manager doesn't come at the cost of accepting a higher risk.

2.6. JENSEN ALPHA

A fund which is able to select systematically assets with specific positive results will tend to originate historical series of positive returns characterized by $\varepsilon_p>0$ because the portfolio performance will be higher than that in the equilibrium, thus the return will be on average better than that of the market portfolio.

This effect is captured in the CAPM equation by the term α, which is known as Jensen alpha.

A positive value of this intercept indicates that the fund is able to outperform the market and it might become the cause of arbitrage opportunities.

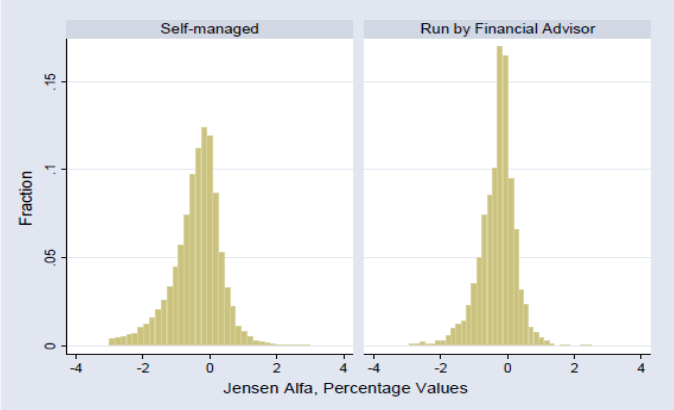


Figure 2.6

The results shown in this histogram highlight how accounts run by IFAs exhibit an α which is more concentrated around zero than those which are self-managed.

Moreover they tend to be higher as summarized in the next table:

	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. Of all accounts
Jensen alpha	-0.475	-0.316	-0.455	-0.303	-0.878

Table 2.5

Even if α is in both cases negative, its value is very close to zero and it is higher in the case of an IFA account, confirming again that financial advisors add value to an investment.

2.7. PERSISTENCE

What would be interesting to observe is whether the higher returns on portfolios run by IFAs show some levels of persistence. The easiest way to define persistence is in terms of temporal return series.

One can say that there is persistence if the portfolio which in a given time period (say one quarter) shows a higher(lower) return than the self-managed one (considered as a benchmark) exhibits again higher(lower) return in the next period.

Usually a cross-section regression is used to this purpose: the sample is divided in two parts, the first one with elements from 1 to v (in this case all the IFA accounts), the second one from v+1 to N (all the self-managed accounts). The number of periods is T= 66 (the number of total months).

To understand it better, a simplified table may be useful. It will be assumed that

- there are 3 IFA accounts,
- 3 self-managed accounts,
- T=2
- N=6

	IFA1 r	IFA2 r	IFA3 r	Mean IFA r	Self-man.4 R	Self-man.5 R	Self-man.6 R	Mean self-man. R
Month 1	$r1_1$	$r2_1$	$r3_1$	$\bar{r}_1$	$R4_1$	$R5_1$	$R6_1$	$\bar{R}_1$
Month 2	$r1_2$	$r2_2$	$r3_2$	$\bar{r}_2$	$R4_2$	$R5_2$	$R6_2$	$\bar{R}_2$

$1 \rightarrow v = 1 \rightarrow 3$ $\quad$ $v+1 \rightarrow N = 4 \rightarrow 6$

Table 2.6

Define as $\bar{r}_1 - \bar{R}_1$ the excess return of IFA accounts with respect to self-managed account during the first month and as $\bar{r}_2 - \bar{R}_2$ the excess return in period 2. The following cross-section regression can thus be run:

$$\bar{r}_2 - \bar{R}_2 = \beta_0 + \beta_1(\bar{r}_1 - \bar{R}_1) + \varepsilon \qquad \text{Equation 2.11}$$

A positive β stands for the presence of persistence.

In the case under analysis the time periods are T=66, so the regression should be repeated 65 times, in order to test all the possible combinations made up of two subsequent periods. Since the discussion paper does not provide all the monthly data[21] it has not been possible to run such a regression.

What can be done is try to find the probability of the presence of persistence.

Lo (1995) argues that it is not easy to find a persistence evidence.

Let's define as follows a successful investor in a given period, i.e. one that beats a benchmark portfolio b:

$$k_{it} = 1 \quad \text{if} \quad r_{it} > r_{bt}$$
$$k_{it} = 0 \quad \text{if} \quad r_{it} < r_{bt}$$

If there are T periods a manager's performance can be measured as the sum of periods in which he gets a return higher than the benchmark portfolio.

$$k_i = \sum_{t=1}^{T} k_{it} \qquad \text{Equation 2.12}$$

The sum of all the successes is a measure of the probability to beat the market. If the investor has no special skills this probability should be 50%, i.e. half the odds of outperforming the market. This means that if there are T periods, the probability to beat the market in period 1 is independent from that of beating it in period 2, and so on. So the overall probability to have a success in all the T periods is given by:

$$P(k_i = T) = 0.50^T \qquad \text{Equation 2.13}$$

Now let's relax the assumptions. We claim first of all that the investor can be more or less skilled, so p can be any value between 0 and 1, meaning of course that a higher p stands for deeper financial knowledge. Moreover we don't analyze only the case in which the individual beats the market portfolio in all the subsequent periods (k is not always equal to 66), but we rather compute the probability of generic number k of successes (with k running in our case from 1 to T=66). So equation 2.13 becomes:

[21] and they are neither available on the CEPR site.

$$P(k_i = k) = \binom{T}{k} p^k (1-p)^{T-k}$$ Equation 2.14

The reason why a client hires an IFA lies in the fact that he should exhibit higher skills than a common individual, so we assume that for him ½ ≤ p < 1. The following matrix shows the overall probabilities over 66 months to beat the market portfolio k times (choosing several reference values of k, i.e. 66, 60, 55, 50 and so on, as can be read in the columns of the matrix) for some specific values of p in the probabilities subset we considered. The binomial distribution in Equation 2.14 provides then the following results:

	number of successes over 66 trials						
probability of success in each trial		66	60	55	50	45	40
	0,5	1,35525E-20	1,23137E-12	1,45565E-08	1,15931E-05	0,001207	0,02242
	0,6	2,28025E-15	1,81887E-08	2,8315E-05	0,002969628	0,040718	0,099591
	0,7	5,97683E-11	3,36494E-05	0,00575127	0,066224974	0,099696	0,026772
	0,8	4,01735E-07	0,008911402	0,102876693	0,080012714	0,008136	0,000148
	0,9	0,000955005	0,163274142	0,032687054	0,000440865	7,77E-07	2,45E-10

	number of successes over 66 trials							
probability of success in each trial		35	30	25	20	15	10	5
	0,5	0,086824	0,074765157	0,01421739	0,000551062	3,63705E-06	2,86E-09	1,21E-13
	0,6	0,050789	0,005759386	0,000144225	7,36147E-07	6,3982E-10	6,62E-14	3,69E-19
	0,7	0,001499	1,86632E-05	5,13124E-08	2,87553E-11	2,744E-15	3,12E-20	1,91E-26
	0,8	5,58E-07	4,69308E-10	8,71523E-14	3,29883E-18	2,12622E-23	1,63E-29	6,75E-37
	0,9	1,6E-14	2,33859E-19	7,53117E-25	4,94345E-31	5,52544E-38	7,36E-46	5,28E-55

Table 2.7

As we can see the probabilities estimated are quite low, so they cast doubts about the fact that even a high skilled investor (i.e. with p=0.9) can be able to beat the market systematically.

2.8. SEMI-VARIANCE AND DOWNSIDE RISK

Some experts think that it is important to observe the negative part of a distribution of returns as the main component of risk. A measure of this is the semi-variance, which is the average of the squared deviations of values that are less than the mean:

$$SV = \sqrt{\frac{\sum_{t=1}^{T} (\min(0; (r_t - \bar{r})))^2}{T-1}} \qquad \text{Equation 2.15}$$

When the aim of an investor is different from that of reaching the average return, it is better to substitute the mean with another value, which represents his target.

For instance if he invests in a bond which offers a return of 6% annually, what he fears the most is not the fact he will get a rate lower than that, but that his capital is reduced, i.e. he earns a negative return. The target in this case is not the mean (6%), but 0%. This is the so called downside risk. Which can be assessed through the downside deviation. Here is the formula:

$$DD = \sqrt{\frac{\sum_{t=1}^{T} (\min(0; (r_t - r_T)))^2}{T-1}} \qquad \text{Equation 2.16}$$

When the target is equal to the mean, then the semi-variance and the downside risk coincide.

2.9. LOWER PARTIAL MOMENTS (LPM)

The method used in this research to quantify the downside risk is that of the lower partial moments, developed by Bawa. It consists in the sum of all the spreads between a given target return and the returns below it (i.e. from -∞ to the target) to the power n (i.e. the order of the moment) times the probability of having each of these lower returns. So:

$$LPM = \sum_{x=-\infty}^{\tau} P(X = x)(\tau - x)^n$$

where τ is the target.

What has been found is that the probability of losses and of big losses are lower for an IFA account than for a self-managed one, confirming that an advisor adds value to the portfolio, moreover the probability mass is spread between 0.3 and 0.4 while that of self-managed accounts between 0.4 and 0.5.

	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. of all accounts
Prob. Return<-5%	0.451	0.401	0.445	0.446	0.065
Prob. Return<0%	0.479	0.447	0.475	0.469	0.058

Table 2.8

Figure 2.7

2.10. FREQUENCY OF TRADES, PORTFOLIO TURNOVER AND SHARE OF DIRECTLY HELD STOCKS

	Mean of self-managed accounts	Mean of accounts run by IFA	Mean of all accounts	Median of all accounts	St. dev. of all accounts
N. of trades/'000 account volume	0.444	0.319	0.428	0.113	1.265
Turnover rate	0.041	0.089	0.047	0.020	0.086
Share of directly held stocks	0.588	0.211	0.540	0.575	0.373

Table 2.11

Let's introduce now the concept of portfolio turnover, which indicates how often a fund manager buys and sells assets within a mutual fund, and thus how long the average asset is held within the fund. It is equal to the lesser of purchases or sales for a year, divided

by the average total assets during that year. If a fund has 100% turnover, it means that it holds stocks for one year, if instead the turnover is 50%, then assets are held for 2 years. The higher the turnover, the more rapidly the shares are traded. This matters because it implies transaction costs which usually are not reported in the fund operating expenses ratio. If these costs overcome the benefits, then even if returns are positive, the investment should not be undertaken. Monthly turnover has been computed in this paper dividing the combined transaction value of all purchase transaction for a given month by the average of beginning-of-month and end-of-month account volume.

What we observe in this case is that the turnover rate is higher for the IFA accounts, result that might be explained in different ways. From one point of view, this fact can reflect a superior information owned by the advisors, who try to time the market. However since the efficient market hypothesis casts serious doubts on this possibility, it seems more plausible to assume that the advisor has an incentive in trading some shares, as a result of the conflict of his interests with his client.

Figure 2.9

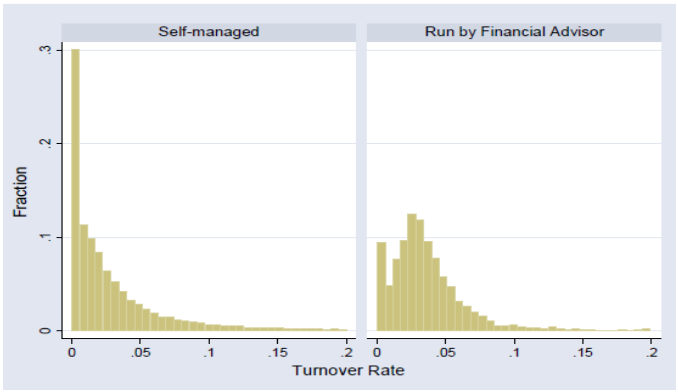


Figure 2.10

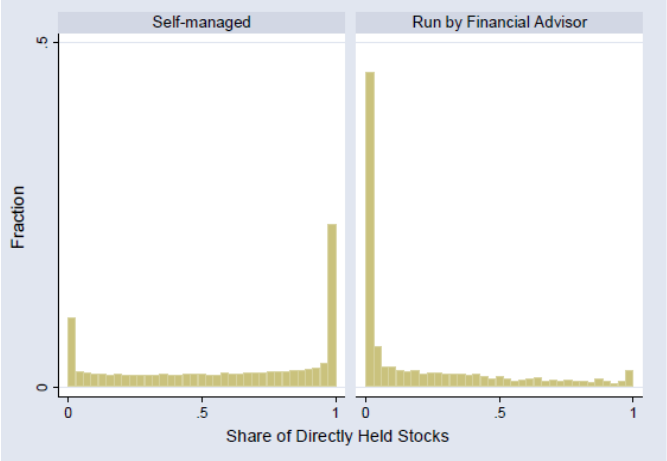


Figure 2.11

When looking at figure 2.10, the self-managed accounts exhibit a turnover rate which is more and more squeezed approaching zero, while in the case of IFA accounts it is more uniformly spread between 0 and 1%.

Looking at figure 2.9, it is possible to infer that the number of trades standardized by account volume tends to be more clustered to zero in case of IFA accounts, result which is also confirmed by the data in table 2.11, as IFA accounts show 28% less than those self-managed for what concerns number of trades. An explanation is that IFAs in this sample earn commissions based on the volume of the transactions, not on the frequency and/or amount, so they tend to trade more seldom but with higher volumes, thus earning more consistent commissions.

Finally diversification is more evident in the IFA accounts, since the percentage of directly held stocks is 20% (compared to 60% of self-managed funds), highlighting the fact that IFAs try to provide incentives to buy mutual funds.

The analysis of the portfolio performance offers huge evidence of higher return and lower risk when a financial advisor is hired. Thus it seems that all the discussion in the first part of this essay has no connection with the actual empirical situation.

The limit of a statistic analysis is that it doesn't take into account all the factors that can influence a given outcome. It simply registers the results without considering the differences in the elements composing the sample. This limit is overtaken through an econometric study which helps determine whether the better performance of IFA accounts is due to the IFA himself or to the type of clients he deals with.

CHAPTER 3
"FINANCIAL ADVISORS: A CASE FOR BABYSITTERS?": ECONOMETRIC ANALYSIS

3.1 THE CAUSALITY EFFECT IN ECONOMETRICS

James H. Stock and Mark W. Watson in the first chapter of their book "An introduction to Econometrics" say that if different econometricians are asked what econometrics is, they might answer in different ways. One may believe that it is the science of testing economic theories. A second might think that it is a set of tools to forecast future values of economic variables, such as firm's sales, stock prices or the overall growth of the economy. Another may say that it is the link between real world data and mathematical economic models. A fourth one may think it is the science which uses historical data to make quantitative recommendations in government and business.

All these answers are plausible and, broadly speaking, econometrics is the science and art of using economic theory and statistical techniques to analyze economic data. One of the branches where it is most used is finance.

Econometrics is usually based on the very simple concept of a correlation or, better, a causality between two phenomena. This means that if there are two conditions, say A and B, an experiment is carried out to realize whether and how the presence of B can cause the presence of A. Here is a very simple example:

- A= number of cigarettes smoked in a country
- B= cost of cigarettes in that same country

Question: Does a change in B have a causal effect on A? Is it positive or negative?

A causal effect exists when movements in B (independent variable, regressor) are associated to movements in A (dependent variable, regressand) for any given element i in the sample, assuming also that both of them show a constant trend, i.e. a positive (an increase in A causes an increase in B) or a negative (an increase in A causes a decrease in B) correlation.

If instead this second condition is violated, causality does not exist and A and B are said to be uncorrelated.

In order to collect relevant data usually a randomized experiment is carried out. Randomization is important to ensure that every observation i is not correlated with the others in the sample, in order to study properly the phenomenon. If for instance there were propensity to choose only countries from the East or the West of the world, this would bias the results, since there may be cultural differences between the two parts which influence smoke habits.

In the paper under analysis the first econometric problem concerns the determination of an eventual causal effect of some clients' characteristics on the choice of having an IFA. The regression model used is based on the probit function, which helps determine the magnitude of the change in the probability of the regressand occurrence given a Δ change in the regressor.

Generally speaking, if X is the regressor and Y the regressand, then:

$$Pr(Y=1|X)= \Phi(\beta_0+\beta_1X) \qquad \text{Equation 3.1}$$

The regressand may assume only two values:

- 1 indicates Y's occurrence.
- 0 indicates that Y doesn't occur.

β_0 and β_1 don't have an intuitive interpretation, because they are coefficients plugged into the standard normal distribution (Φ), so the only way to measure the impact of a Δ change in X on the probability of Y's occurrence is by first computing the cumulative distribution function in X and in X+ Δ, then considering the difference of these two probabilities:

$$Pr(Y=1|X+\Delta)- Pr(Y=1|X)= \Phi(\beta_0+\beta_1(X+\Delta))- \Phi(\beta_0+\beta_1X) \qquad \text{Equation 3.2}$$

The only intuitive interpretation of β_1 is that when it is positive X has a positive effect on the probability of Y's occurrence, and vice-versa.

Since every measure is linked to an error term, in order for the error to be negligible it must have zero mean and be uncorrelated with the regressor, otherwise there would be a problem called omitted variable bias.

This may happen when a variable contained in the error is correlated both with the regressor and the regressand.

In the example of the cigarettes one of the omitted variables is a measure of the country's wealth, like GDP/capita. The amount of wealth is positively correlated with the price level a government can decide to set but it is also positively correlated with the

number of cigarettes a consumer can afford, influencing the average number of cigarettes smoked in that country. Thus the regression is biased unless all the factors in the error which have impact on the regressors are included in the OLS estimate.
The probit regression function with many regressors has then the following equation:

$$Pr(Y=1|X_1,\dots X_N)= \Phi(\beta_0+\beta_1X+\dots.+ \beta_NX_N) \qquad \text{Equation 3.3}$$

When the increase in the probability of Y=1 must be tested with respect to an increase in a generic X_i, keeping all the other N-1 Xs fixed, the reasoning is the same as in the one-factor model, just treating all the N-1 Xs as constant.

$$Pr(Y=1|X_1,\dots X_i+\Delta,\dots X_N)- Pr(Y=1|X_1,\dots X_i,\dots X_N)= \Phi(\beta_0+\beta_1X_1+\text{-}\dots\beta_i(X_i+\Delta)+\dots \beta_NX_N)- \Phi(\beta_0+\beta_1X_1+\dots\beta_iX_i+\dots\beta_NX_N) \qquad \text{Equation 3.4}$$

The problem faced in the discussion paper is to decide whether IFAs are connected with younger and less experienced investors, who ask for help to avoid mistakes caused by luck of both knowledge and financial experience. The alternative is that advisors are matched to wealthier, older investors, who ask for an IFA to improve their earnings on big-size investments or to save valuable time.
The first regression run has then this equation:

$$Pr(IFA=1|Ml,Mr,Emp,S.Emp,Exp,A1,A2,A3,A4)= \Phi(\beta_0+\beta_1Ml+\beta_2Mr+\beta_3Emp+\beta_4S.Emp+\beta_5Exp+\beta_6A1+\beta_7A2+\beta_8A3+\beta_9A4) \qquad \text{Equation 3.5}$$

Where:
- IFA is a dummy variable which equals 1 when an advisor assists the investor, 0 otherwise;
- Ml and Mr are dummies referring respectively to gender and marital status, thus they are equal to 1 when the investor is a man (Ml=1) and/or he is married (Mr=1);
- Emp and S.Emp are dummies that refer to the fact that the investors are employees or self-employed. When they are both zero, it means that the investor is in a third category (composed by 0.7% of the sample), i.e. that which encompasses public servants, retirees, housewives or students[22].

[22] as one can read at page 7 of the discussion paper. This category has been omitted to avoid perfect multicollinearity.

Finally, A1, A2, A3, A4 are dummies referring to these correspondent groups of ages (The group encompassing 18<Age≤30 has been dropped to avoid multicollinearity):

- A1= 30<Age≤40
- A2= 40<Age≤50
- A3= 50<Age≤60
- A4>60

The following table shows the results that can be found applying equation 3.4. The original coefficients of the regressions have been omitted in favour of the marginal effect of each variable on the regressand. In this way the interpretation becomes more linear and intuitive.

Note. Asymptotic standard errors corrected for clustering at the zip code level are reported in parenthesis.

The determinants of having the account run by a financial advisor: Probit estimates			
	(1)	*(2)*	*(3)*
Male	-0.060*** (12.77)	-0.066*** (14.81)	-0.069*** (15.67)
Married	-0.018*** (4.74)	-0.015*** (4.17)	-0.019 (5.02)
Employee	0.035 (1.62)	0.038* (1.94)	0.038** (1.96)
Self-employed	0.064** (2.31)	0.046* (1.83)	0.048* (1.92)
Experience	0.003*** (10.80)	0.000 (1.17)	0.001 (1.44)
30<Age<=40	-0.035*** (3.51)	-0.035*** (3.88)	-0.033*** (3.51)
40<Age<=50	0.014 (1.34)	-0.012 (1.31)	-0.010 (1.01)
50<Age<=60	0.057*** (4.97)	0.003 (0.34)	0.004 (0.39)
Age>60	0.143*** (11.12)	0.037*** (3.49)	0.039*** (3.36)
Log Account Volume in 2001		0.059*** (41.51)	0.060*** (38.76)
Bank Branches per Capita			-0.005 (0.27)
Log Income in Region			-0.009** (2.27)
Voter Participation			0.049 (0.40)
Population with College Degree			-0.197*** (3.95)
Observations	28631	28631	28264

Table 3.1

The original beta coefficients are all statistically acceptable, even if some of them have a very small effect. The level of significance is expressed by the number of stars, i.e. three stars stand for significance at 1% level, two stars at 5% level, one star at 10% level.

Let's interpret the figure in table 3.1. Considering the first regression, for example, one year of further experience accounts for only 0.3% probability more to hire an IFA, so 10 years increase this probability by 3%, which is a tiny result.

Being married has a negative impact on the choice to have an advisor, i.e. lowers it by less than 2%.

Employees show higher propensity than self-employed investors to ask for an IFA.

Two important results concern age and gender: the odds of having an IFA account increase with age, peaking almost 15% for over 60-year-old people, further women have more propensity to ask for IFA's service. This confirms that Mature and Women markets offer good perspectives for the brokerage industry, as claimed in Chapter 1[23].

Since wealth can be a factor which causes omitted variable bias, one of its proxies has been included in the second regression of table 3.1, i.e. the log account volume of each investor in 2001, which is the amount of savings deposited at the brokerage firm at the beginning of the observation period.

Wealth might be connected mostly with age, because the older an investor is, the higher the quantity of money he saved and he can invest.

In fact even if the effect per se of wealth on the probability of choosing an IFA is very low (marginal effect is 0.059%, as the logarithmic term expresses a percentage elasticity with respect to the regressand), the coefficients which are most responsive in this new regression are those relative to the age. In particular if we compare the effect of age in regressions (1) and (2) we can notice how the marginal contribution on the probability of the regressand occurrence is reduced when a measure for account volume in 2001 is introduced. This means that this factor tended to bias upwards the coefficient of the same variables in regression (1), situation which is plausible if we consider that increasing age is associated with increased quantity of savings level, thus higher probability to hire an IFA, as claimed above.

Also experience shows some correlation with wealth, since its coefficient loses significance when moving from (1) to (2).

Other control variables which can bias the results when omitted from the regressions can be the number of bank branches per capita, the log income in the region, the voter participation and the fraction of population with college degree. All this information concerns the features of the region where the client is located, and it is obtained through their zip codes.

[23] Chapter 1, page 6.

These variables are then included in the third regression of the table and what is more evident is that even if the own clients' characteristics have the same incidence on the final choice (as the coefficients on the variables in common in both the regression (3) and (4) remain almost completely unchanged), these new regional variables have some effects on the overall probability of IFA=1 which is different from that estimated though the previous regressions.

The most influent factor is education: an increase in the fraction of population with a degree decreases by 1/5 the probability of hiring an IFA.

Another remarkable result concerns wealth in region, as it is negatively correlated with the regressand, perhaps because in richer areas IFAs are not proportional to the number of people who can afford them, so it is more difficult to have one, due to higher competition. A similar issue was discussed in the first section of this essay through the survey by Mullen who asserted that it is not always the case that the best business is done in the biggest markets[24]. He proved that sometimes it is easier to build up longer relationships in smaller ones.

The general results in this part highlight how wealthier and older investors tend to hire IFAs since perhaps they have a lower elasticity to the costs implied by the financial advice industry.

Once having assessed who most uses IFAs , other regressions may be run to explore the performance controlling for clients' characteristics, which is what was claimed as missing at the end of the statistic analysis. Results are exposed in the next tables:

[24] Chapter 1, page 10.

Table 3.2

The determinants of Log Returns, Jensen Alpha, Portfolio variance and Beta. OLS estimates					
	Log Returns	Alfa	Portfolio Variance	Beta	Unsystematic Risk
Financial Advisor	0.298***	0.044***	-0.029***	-0.393***	-0.006***
	(22.23)	(3.14)	(39.42)	(47.94)	(12.47)
Male	-0.122***	-0.118***	0.008***	0.056***	0.005***
	(10.78)	(10.69)	(16.67)	(10.91)	(17.93)
Married	0.040***	0.035***	-0.004***	-0.017***	-0.002***
	(3.52)	(3.17)	(7.79)	(3.78)	(8.41)
Employee	-0.159***	-0.135***	0.006**	0.056*	0.002*
	(3.23)	(3.14)	(2.38)	(1.82)	(1.85)
Self-employed	-0.197***	-0.187***	0.010***	0.076**	0.005***
	(3.83)	(4.10)	(3.91)	(2.46)	(3.90)
Experience	0.014***	0.010***	-0.001***	-0.005***	-0.000***
	(16.62)	(12.09)	(15.05)	(13.43)	(9.89)
30<Age<=40	-0.022	-0.014	0.004***	0.048***	0.001**
	(0.80)	(0.52)	(3.93)	(4.33)	(2.11)
40<Age<=50	-0.059**	-0.067**	0.006***	0.057***	0.002***
	(2.11)	(2.47)	(5.65)	(5.15)	(3.15)
50<Age<=60	-0.017	-0.047	0.005***	0.047***	0.002***
	(0.58)	(1.63)	(4.28)	(4.01)	(3.15)
Age>60	0.097***	0.015	-0.001	-0.019	0.000
	(3.34)	(0.51)	(0.54)	(1.59)	(0.55)
Log Account Volume in 2001		0.060***	-0.004***	-0.023***	-0.003***
		(13.21)	(20.25)	(12.31)	(24.34)
Constant	-0.646***	-0.880***	0.126***	1.421***	0.071***
	(12.46)	(14.60)	(40.62)	(40.23)	(41.03)
Observations	28631	28631	28631	28631	28631
R-squared	0.03	0.02	0.15	0.17	0.08

Table 3.3

The determinants of probabilities of Low Returns, Trading Frequency, Turnover, and Diversification. OLS estimates					
	Less than 5%	Less than zero	Number of trades	Turnover	Share of Direct stocks (Tobit Estimates)
Financial Advisor	-0.041***	-0.026***	0.113***	0.057***	-0.485***
	(25.90)	(20.17)	(6.59)	(15.57)	(42.63)
Male	0.012***	0.009***	0.188***	0.017***	0.089***
	(14.13)	(10.72)	(14.99)	(15.13)	(14.01)
Married	-0.004***	-0.003***	0.005	0.001	-0.034***
	(5.37)	(4.71)	(0.33)	(1.00)	(6.40)
Employee	0.021***	0.018***	0.040	0.002	0.104***
	(4.28)	(4.53)	(0.85)	(0.44)	(3.18)
Self-employed	0.028***	0.025***	-0.027	-0.003	0.152***
	(5.76)	(6.18)	(0.55)	(0.82)	(4.55)
Experience	-0.001***	-0.001***	-0.006***	-0.001***	-0.008***
	(13.78)	(13.87)	(5.46)	(10.78)	(17.76)
30<Age<=40	0.004**	0.001	0.022	0.004	-0.000
	(1.96)	(0.52)	(0.60)	(1.63)	(0.02)
40<Age<=50	0.009***	0.005**	0.065**	0.007***	0.038***
	(4.44)	(2.57)	(1.77)	(3.17)	(2.61)
50<Age<=60	0.008***	0.004**	0.077**	0.011***	0.038***
	(3.61)	(2.12)	(2.07)	(4.68)	(2.61)
Age>60	-0.000	-0.000	0.037	0.004	0.043***
	(0.06)	(0.24)	(0.89)	(1.56)	(2.83)
Log Account Volume in 2001	-0.005***	-0.003***	-0.156***	-0.002***	0.005**
	(14.00)	(11.48)	(21.85)	(6.00)	(2.51)
Constant	0.469***	0.492***	1.791***	0.051***	0.421***
	(82.03)	(100.33)	(22.70)	(9.12)	(10.89)
Observations	28631	28631	28631	28631	28631
R-squared	0.10	0.06	0.03	0.05	

All the regressions re-examine the measures of return and risk (considered in the first section) controlling for the clients' profiles (gender, marital status, IFA or self-managed account, and so on). In this way the results can be more reliable and realistic. In general it seems like an IFA increases returns and Jensen alpha and decreases the level of risk as well, since the coefficients on portfolio variance, beta, unsystematic risk and downside risk are all negative.

3.2 THE SIMULTANEOUS CAUSALITY BIAS

At this point one may think that there are no substantial reasons to doubt that IFAs add value to the investment portfolio.

The problem is that the estimates done so far risk to be biased, since the important assumption discussed at the beginning of this chapter, i.e. the causality effect, seems undermined in all the previous regressions.

Causality implies that B causes effects on A, but this condition must be univocal.

It is true that IFA has a causal effect on the portfolio performance (i.e. IFA→ ↑portfolio performance) but also the opposite can be verified (i.e. ↑portfolio performance→ IFA). When the portfolio performs very well the investor gets wealthier and this, as argued before, may increase the propensity to ask for financial advice. Further, being wealthier means becoming more indifferent to the costs, i.e. affording IFA more easily. At this point an investor values the costs of an advisor reasonable with respect to time saved and other eventual benefits perceived, so a good performance influences an increase in wealth which in turn causes the choice to hire an advisor.

Generally speaking, every time that there is simultaneous causality in both directions, the OLS regression picks up both effects, so it becomes biased and inconsistent.

Simultaneous causality usually leads to a correlation between the regressor and the error term.

To investigate this point let's first of all write down the two regressions which show simultaneous causality in a simplified and general form:

$$Perf_i = \beta_0 + \beta_1 IFA_i + u_i \qquad \text{Equation 3.6}$$

$$Pr(IFA_i = 1 | Perf_i) = \Phi(\gamma_0 + \gamma_1 Perf_i + v_i) \qquad \text{Equation 3.7}$$

(for every i in the sample)

Where:

- IFA_i is a dummy variable which equals 1 to indicate IFA occurrence, 0 otherwise;
- $Perf_i$ is a general measure of performance (like Jensen alpha, return, variance and so on)
- u_i and v_i are the errors of the regressions.

u_i encompasses factors which influence the performance of the portfolio and that should be uncorrelated with IFA_i. This holds true as long as there is no simultaneous causality bias. If instead this situation arises, Equation 3.6 fails its purpose of correctly describing the effects of an IFA on $Perf_i$.

In fact in Equation 3.7 the error $u_{i,}$ through Equation 3.6 directly influences the probability of having an IFA.

So in order to account for this simultaneous causality effect we plug Equation 3.6 in 3.7:

$$Pr(IFA_i=1|Perf_i)=\Phi(\gamma_0+\gamma_1 (\beta_0+\beta_1 IFA_i+u_i) +v_i)$$

Simultaneous causality arises any time that not only the regressand, but also the regressor is endogenous, dynamics which is quite common in economics when dealing for instance with aggregate demand and supply schedules. Following this reasoning, equations 3.6 and 3.7 become a system in two equations and two unknowns, thus invalidating the OLS procedure.

Two ways help solve the problem of simultaneous causality: one is the use of instrumental variable equations, the other consists in designing and implementing a randomized controlled experiment in which the reverse causality channel is nullified.

In the discussion paper the instrumental variables method is used.

3.3 THE INSTRUMENTAL VARIABLES (IV) REGRESSION MODEL

To sum up, both $Perf_i$ and IFA_i are endogenous variable, as opposed to exogenous ones. Usually historical source of these terms traces to models with multiple equations, in which an “endogenous” variable is determined within the model, while an “exogenous” variable is determined outside the model.

As shown in the previous paragraph, since there is reciprocal causality between $Perf_i$ and IFA_i, two simultaneous equations which form a system (Equation 3.6 and Equation 3.7) can be written, one for each causal connection. Because both $Perf_i$ and IFA_i are determined within the model, both are correlated with the error term u_i (which encompasses wealth for example) that is both the variables are endogenous.

In contrast an exogenous variable, which is determined outside the model, is uncorrelated with u.

In order to avoid the endogeneity problem an instrumental variable may be used. For an instrument to be valid, two conditions must be satisfied, i.e. instrument relevance and instrument endogeneity:

- Instrument relevance: $corr(Z_i, IFA_i) \neq 0$
- Instrument exogeneity : $corr(Z_i, Perf_i) = 0$ (where Z_i is the instrument)

Even more than one instrumental variable, provided that all of them satisfy these two conditions, might be used in the instrumental variables regression model.

The regression coefficients are said exactly identified if the number of instruments equals the number of endogenous variables, overidentified when it is higher, underidentified when it is lower. To run the IV regression, the coefficients must be exactly identified or overidentified.

The type of model used is called Two Stages Least Squares (TSLS) because two regressions are run in two different steps.

Let's assume this model:

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 W_{1i} + \ldots + \beta_{1+r} W_{ri} + u_i \qquad \text{Equation 3.8}$$

Where:

- there are r exogenous variables, i.e. r W_i;
- X_i is the endogenous variable;
- There are m instruments, i.e. $Z_1, \ldots, Z_m$

The first step consists in regressing the endogenous variable on the exogenous and the instrumental ones:

$$X_i = \pi_0 + \pi_1 Z_{1i} + \ldots + \pi_m W_{mi} + \pi_{m+1} W_{1i} + \ldots + \pi_{m+r} W_{ri} + v_i \qquad \text{Equation 3.9}$$

where:

- $\pi_{0,\ldots} \pi_{m+r}$ are the regression coefficients;
- v_i is the error term.

Using equation 3.8 the predicted value of X_i, i.e. $\hat{X}_i$, should be computed.

In the second stage Y_i should be regressed on the predicted $\hat{X}_i$ and the included exogenous variables.

In practice, the two stages are done automatically within TSLS estimation commands in modern econometric software.

The main problem with the TSLS regression is the eventual weakness of the instruments, because in this case the normal distribution provides a poor approximation to the sampling distribution of the TSLS estimator, even if the sample size is very large. When the instruments are weak, TSLS is no more reliable.

One way to check for instruments relevance is the use of a conventional F-statistics in the first stage of the regression in order to test the joint hypothesis that all the regressors are equal to zero. It the test is greater than 10 (rule of thumb) then the instruments are relevant.

To check for the instruments exogeneity the test of overidentifying restrictions can be performed. As the name suggests, it can be used only when the instrumented variables are overidentified.

The idea is that if all these instruments are quite good in approximating the instrumented variable, then, running the TSLS regression on each of them separately, they will tend to be close to each other, even if with some differences due to sampling variation. If instead the results are not comparable, then it means that one of them or both are not exogenous instruments.

The test of overidentifying restrictions implicitly makes this comparison, because thanks to it there is no need to run all these single regressions..

In fact, it is based on the idea that exogeneity of the instruments means that these are uncorrelated with the error u_i. This means that the instruments should be uncorrelated with $\hat{u}_i^{TSLS}$, where

$$\hat{u}_i^{TSLS} = Y_i - (\hat{\beta}_0^{TSLS} + \hat{\beta}_1^{TSLS} X_{1i} + \hat{\beta}_2^{TSLS} W_{1i} + ... + \hat{\beta}_{1+r} W_{ri}^{25} \qquad \text{Equation 3.10}$$

is the residual from the estimated TSLS regression using all the instruments. Running then an OLS regression of the error $\bar{u}_i^{TSLS}$ on the instruments and the exogenous variables,

[25] note that true Xs are used rather than their predicted values of the first stage of the TSLS.

$$\hat{u}_i^{TSLS} = \delta_0 + \delta_1 Z_{1i} + ...\delta_m Z_{mi} + \delta_{m+1} W_{1i} + ...\delta_{m+r} W_{ri} + e_i$$ [26]

it is possible to carry out a F-test which verifies the null hypothesis that δ_1=…. δ_m=0. The overidentifying restriction test is J=mxF (where m is the number of instruments).

Under the null hypothesis that all the instruments are exogenous if e_i is homoskedastic, then in large samples J is distributed χ^2_{m-k}, where m-k is the degree of overidentification, i.e. the number of instruments minus the number of endogenous regressors.

In the paper the instruments chosen for the IFA variable are the number of bank branches for capita, the log income in the region, the voter participation, and the fraction of population with college degree. At an intuitive level, they all should be relevant. In particular the first two should have a positive impact on the IFA variable, because they are proxies for the level of wealth (income per region) and capillarity of the service (number of branches), while the other two should be negatively correlated since the level of education as discussed before should have a negative effect on the propensity to hire an IFA.

These instruments should also exhibit exogeneity since the regional characteristics don't have anything to do with the portfolio performance. The F-test on the first of TSLS regressions is 37.4, thus it satisfies the rule of thumb. So the instruments can be considered relevant in all the following instrumented regressions that will be run. (IFA is always regressed on all of them in the first stage of each TSLS).

Also the exogeneity condition is satisfied, because the p-value associated with the J-tests always exceed 5%, i.e. the null hypothesis that all the coefficients of the regressors of u_i are zero can be accepted 95% of the times, which means that the error term on the TSLS regression is uncorrelated with the performance of the portfolio, thus the instruments are exogenous. Only in the case of log returns (p-value of 0.045) and Jensen alpha (p-value of 0.029) the null hypothesis can be accepted even at 1% level.

Let's consider in more details all the final results of TSLS regressions.

[26] with e_i as the error term of the regression.

3.4 PORTFOLIO RETURNS

The determinants of Log Returns. Instrumental variable estimates.		
	(1)	(2)
Financial Advisor	-2.037*** (4.39)	-1.893*** (5.35)
Male	-0.271*** (8.04)	-0.280*** (9.70)
Married	-0.013 (0.72)	-0.010 (0.61)
Employee	-0.062 (0.78)	-0.046 (0.66)
Self-employed	-0.056 (0.66)	-0.105 (1.45)
Experience	0.022*** (9.89)	0.012*** (9.23)
30<Age<=40	-0.088** (2.28)	-0.113*** (3.12)
40<Age<=50	-0.036 (0.95)	-0.139** (3.92)
50<Age<=60	0.103** (2.25)	-0.073 (1.99)
Age>60	0.426*** (5.61)	0.136*** (3.23)
Log Account Volume in 2001		0.212*** (8.45)
Constant	-0.451*** (5.13)	-2.391*** (11.19)
Observations	28264	28264

Table 3.4

Note: The table reports instrumental variables estimates using the following instruments for financial advice at zip code level:bank branches per capita, log income in zip code of residence, voter participation, and fraction of the population with college degree. Asymptotic t-statistics corrected for clustering at the zip code level are reported in parenthesis.

In both the regressions the coefficients on the financial advisor variable are negative. To have a general idea of this effect got through the regression, let's consider the IFA average return computed in Chapter 1, which was -0.439, i.e. the return estimated was 0.64%. According to the first regression the improvement in the portfolio return to be recognized to a financial advisor is 87% lower than in the statistic results, while in the second regression 85% lower. To make the reasoning easier, if before the contribute of an IFA to an investment return was 1 euro, trough this regression it is lowered to 14 cents more or less.

The other remarkable results are that women tend to exhibit greater returns in both cases, either taking into account wealth or not.

Experience instead plays a good role in increasing returns. Five years of further experience increase returns according to this regression from 8%(regression (1)) to 24%(regression (2)).

3.5 JENSEN ALPHA

The determinants of Jensen Alpha. Instrumental variable estimates.		
	(1)	(2)
Financial Advisor	-1.922*** (4.57)	-1.840*** (5.58)
Male	-0.239*** (7.81)	-0.250*** (9.29)
Married	-0.009 (0.55)	-0.008 (0.49)
Employee	-0.058 (0.82)	-0.042 (0.66)
Self-employed	-0.057 (0.75)	-0.098 (1.47)
Experience	0.019*** (9.59)	0.010*** (8.74)
30<Age<=40	-0.060* (1.69)	-0.084** (2.46)
40<Age<=50	-0.018 (0.51)	-0.110*** (3.29)
50<Age<=60	0.101** (2.40)	-0.054 (1.56)
Age>60	0.367*** (5.28)	0.113*** (2.83)
Log Account Volume in 2001		0.191*** (8.16)
Constant	-0.175** (2.19)	-1.919*** (9.63)
Observations	28264	28264

Table 3.5

Note: The table reports instrumental variables estimates using the following instruments for financial advice at zip code level:bank branches per capita, log income in zip code of residence, voter participation, and fraction of the population with college degree. Asymptotic t-statistics corrected for clustering at the zip code level are reported in parenthesis.

For what concerns Jensen alpha, the results are similar to the previous and again the financial advisor lowers its impact on returns in a range from 34% to 36% (depending on the fact that account volume in 2001 is considered or not). The costs on IFA are not compensated through the portfolio value added by their service.

Therefore when accounting for regional characteristics and correcting the simultaneous causality bias, IFAs tend to be associated to wealthier and older people who would rather enjoy higher profits if they managed the portfolio on their own.

3.6 THE DETERMINANTS OF PORTFOLIO VARIANCE, BETA AND UNSYSTEMATIC RISK

The determinants of Portfolio Variance, Beta and Unsystematic Risk. Instrumental variable estimates						
	Portfolio Variance		Beta		Unsystematic Risk	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial Advisor	0.060***	0.049***	0.440**	0.361***	0.034***	0.028***
	(3.20)	(3.61)	(2.45)	(2.72)	(3.71)	(4.15)
Male	0.014***	0.014***	0.105***	0.107***	0.007***	0.008***
	(10.12)	(12.41)	(7.97)	(9.61)	(11.17)	(13.46)
Married	-0.001**	-0.002***	0.003	0.001	-0.001***	-0.001***
	(1.98)	(2.70)	(0.40)	(0.18)	(3.32)	(4.25)
Employee	0.002	0.002	0.021	0.017	0.001	0.001
	(0.68)	(0.61)	(0.58)	(0.50)	(0.49)	(0.38)
Self-employed	0.003	0.006*	0.019	0.038	0.002	0.004**
	(0.95)	(1.89)	(0.48)	(1.08)	(1.18)	(2.15)
Experience	-0.001***	-0.001***	-0.009***	-0.005***	-0.000***	-0.000***
	(11.52)	(11.41)	(10.22)	(10.17)	(10.70)	(8.76)
30<Age<=40	0.006	0.007***	0.069***	0.077***	0.002**	0.003***
	(4.09)	(5.19)	(4.74)	(5.63)	(2.44)	(3.33)
40<Age<=50	0.003**	0.008***	0.037***	0.075***	0.001	0.003***
	(2.24)	(5.84)	(2.66)	(5.62)	(0.86)	(4.29)
50<Age<=60	-0.003	0.005	-0.014***	0.051***	-0.002**	0.002***
	(1.49)	(3.76)	(0.81)	(3.67)	(2.26)	(2.89)
Age>60	-0.018***	-0.005***	-0.166***	-0.058***	-0.009***	-0.001
	(5.92)	(2.89)	(5.69)	(3.63)	(5.62)	(1.58)
Log Account Volume in 2001		-0.009***		-0.076***		-0.005***
		(9.55)		(7.94)		(10.45)
Constant	0.084***	0.170***	1.144***	1.843***	0.043***	0.090***
	(22.13)	(20.15)	(28.22)	(21.93)	(21.62)	(21.12)
Observations	28264	28264	28264	28264	28264	28264

Table 3.6

Note: The table reports instrumental variables estimates using the following instruments for financial advice at zip code level:bank branches per capita, log income in zip code of residence, voter participation, and fraction of the population with college degree. Asymptotic t-statistics corrected for clustering at the zip code level are reported in parenthesis.

The results are reversed again. The use of an IFA increases the general level of risk (portfolio variance) as well as its single components (beta and unsystematic risk). This may happen because as argued in chapter 1, the advisors try to maximize commissions and fees, so they can leave aside the aim to maximize the portfolio efficiency, proposing sometimes suboptimal decisions.

Further, gender and experience have quite a remarkable effect on risk. Being female and having experience decreases it. If specifically unsystematic risk is considered, experience seems to have no link with it.

About age, which is usually connected with experience, it is possible to observe that its impact on risk turns gradually from positive to negative in the last two ranges.

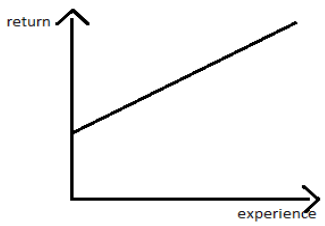
Also wealth has a negative effect on risk, because usually richer people tend to be more educated or they have accumulated a higher experience which helped them have better profits, thus better account volumes.

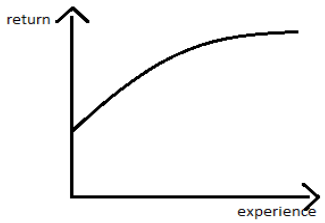
These results are perfectly in line with what was said in the first chapter of this thesis: one of the major problems in investments is the fact that investors are substantially illiterate and thus bias the optimal rational financial behaviour. Once they reach a higher level of education and experience, they get better results than what they would obtain if they hired an IFA. On the other hand, if education and experience are substantially important in decreasing the risk and increasing returns (according to the previous regressions they can increase returns up to 24%), it means that really, as argued at the beginning, successful IFAs are usually not the best in terms of knowledge, but instead they are gifted and trained as marketers, so they can increase the number of clients, but they are not able to improve the earnings of these same clients.

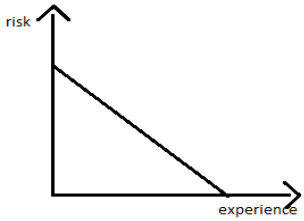
Those results which in the first chapter could seem a flight of fancy, here are instead supported by an empirical analysis.

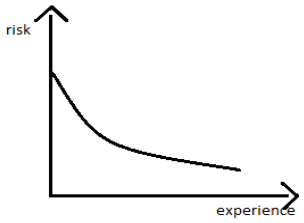
The only remark to improve these instrumental regressions is that the model should be replicated introducing a new variable, i.e. $(\text{Education})^2$. It is unlikely and unrealistic in fact that there is a linear relationship between experience and return and/or risk. So after a certain number of years the slope of the curve should decrease in absolute terms, i.e. the impact of experience on return and risk (taking all the other factors fixed) should decrease.

A more realistic model should use a non-linear function instead of a linear one.









3.7 THE DETERMINANTS OF THE PROBABILITIES OF LOW RETURNS

The determinants of the probability of Low Returns. Instrumental variable estimates.				
	Probability of return Less than -5%		Probability of return Less than 0	
	(1)	(2)	(3)	(4)
Financial Advisor	0.0094*** (3.29)	0.088*** (4.03)	0.071*** (3.15)	0.068*** (3.76)
Male	0.021*** (9.81)	0.022*** (11.67)	0.014*** (8.62)	0.015*** (9.90)
Married	-0.001 (0.98)	-0.001 (1.21)	-0.001 (1.21)	-0.001 (1.38)
Employee	0.015** (2.33)	0.014** (2.31)	0.014*** (2.67)	0.013*** (2.67)
Self-employed	0.018*** (2.69)	0.021*** (3.46)	0.018*** (3.34)	0.020*** (4.07)
Experience	-0.002*** (11.05)	-0.001*** (10.50)	-0.001*** (11.46)	-0.001*** (11.48)
30<Age<=40	0.007*** (2.75)	0.009*** (3.56)	0.0003 (1.49)	0.004** (2.14)
40<Age<=50	0.005** (2.09)	0.012*** (4.92)	0.002 (0.96)	0.007*** (3.32)
50<Age<=60	-0.003 (0.97)	0.008*** (3.29)	-0.004 (1.42)	0.005** (2.11)
Age>60	-0.025*** (5.22)	-0.007** (2.39)	-0.018*** (4.76)	-0.005** (2.21)
Log Account Volume in 2001		-0.014*** (8.77)		-0.010*** (7.70)
Constant	0.416*** (61.78)	0.541*** (38.12)	0.454*** (82.96)	0.544*** (47.07)
Observations	28264	28264	28264	28264

Table 3.7

Note: The table reports instrumental variables estimates using the following instruments for financial advice at zip code level: bank branches per capita, log income in zip code of residence, voter participation, and fraction of the population with college degree. Asymptotic t-statistics corrected for clustering at the zip code level are reported in parenthesis.

An IFA doesn't increase the returns or lower the risk, and he neither can reduce the probabilities of losses.

Also being male has a negative effect on the returns of the portfolio, while instead the coefficient on marital status is not significant at 10%, i.e. the effect of being married on the probability of low returns can be considered null.

Again, experience, wealth and age have an impact on the reduction of the probability of both losses and substantial losses. By the way, even if the coefficient on experience has a high t-statistic its effects are very low. The problem is the same as before, that is it is unrealistic to assume that experience has a linear relationship with the regressand.

3.8 THE DETERMINANTS OF TRADING, TURNOVER AND DIVERSIFICATION

As stressed many times one of the main problems of IFAs is that they encourage the churning mechanism in order to increase the number of commissions received, but in this way they also worsen the performance of the investment portfolio.

The determinants of Trading Frequency, Turnover and Diversification. Instrumental variable estimates						
	Number of Trades Per '000 Account Volume		Turnover		Share of Directly Held Stocks	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial Advisor	1.396***	1.306***	0.304**	0.280***	-0.235	-0.192
	(2.69)	(3.07)	(6.16)	(7.11)	(1.46)	(1.51)
Male	0.254***	0.269***	0.032***	0.032***	0.101***	0.104***
	(7.61)	(8.98)	(9.08)	(10.32)	(8.80)	(9.97)
Married	0.033*	0.031*	0.006***	0.006***	-0.017***	-0.016***
	(1.88)	(1.90)	(3.40)	(3.50)	(2.89)	(2.90)
Employee	-0.004	-0.025	-0.009	-0.010	0.080**	0.077**
	(0.07)	(0.41)	(0.99)	(1.23)	(2.53)	(2.47)
Self-employed	-0.140*	-0.090	-0.020**	-0.015*	0.121***	-0.117***
	(1.90)	(1.43)	(2.01)	(1.77)	(3.67)	(3.67)
Experience	-0.017***	-0.006***	-0.002***	-0.001***	-0.007***	-0.008***
	(8.78)	(5.40)	(8.41)	(7.59)	(10.41)	(17.45)
30<Age<=40	0.034	0.063***	0.010***	0.011***	0.012	0.013
	(0.78)	(1.54)	(2.72)	(3.46)	(0.90)	(0.98)
40<Age<=50	-0.025	0.091**	0.003	0.012***	0.020	0.019
	(0.60)	(2.34)	(0.82)	(3.60)	(1.54)	(1.45)
50<Age<=60	-0.113**	0.081**	-0.004***	0.012***	0.036**	0.0034**
	(2.34)	(2.06)	(0.90)	(3.38)	(2.36)	(2.54)
Age>60	-0.341***	-0.024	-0.034***	-0.008*	0.030	0.024
	(3.83)	(0.46)	(4.29)	(1.84)	(1.17)	(1.57)
Log Account Volume in 2001		-0.240***		-0.018***		-0.000
		(8.54)		(6.57)		(0.01)
Constant	0.274***	2.461***	0.010	0.176***	0.394***	0.391***
	(3.54)	(10.54)	(1.01)	(7.38)	(11.27)	(5.00)
Observations	28264	28264	28264	28264	28264	28264

Table 3.8

Note: The table reports instrumental variables estimates for number of trades and turnover, and instrumental variable tobit estimates for the share of directly held stocks using the following instruments for financial advice at the zip code level: bank branches per capita, log income in the zip code of residence, voter participation, and fraction of the population with college degree. Asymptotic t-statistics corrected for clustering at the zip code level are reported in parenthesis.

Differently from the previous section, the advisor seems to have a positive correlation with the number of trades. For trades here it is meant the number of purchases per month which excludes corporate actions, periodic saving plan investments and portfolio transfers, as to be more directly linked to the IFA incentives to sell specific instruments. Experience has a strong effect in reducing the number of trades.

To get higher commissions an advisor exploits also the turnover rate. What the third regression shows is that IFA accounts tend to have higher turnover. Further the positive effects of being married may reflect the need by families to rebalance their

investments to make them suitable to the changes which are linked to different moments of their life and of their children's, too.

A last issue to deal with is diversification, which is proxied by the number of directly held stocks. The IV regression reverses again the situation: the coefficient on IFA is negative, even if not significant at neither 5% nor even 10% level. This means that IFA doesn't provide any evident incentives to diversification. What is more remarkable is that experience should increase the skills to deal with risk, while instead here the opposite is proved: more experienced people prefer safer portfolios, so they decrease the number of stocks directly held.

3.9 THE FINANCIAL BABYSITTER

The results of the whole discussion point out a new perspective on the financial advisor's role.

It should not be taken for granted that advisors provide their services to smaller, younger investors who are typically identified as needing investment guidance.

They are instead usually matched to richer and older investors who could notwithstanding get higher profits if they managed their portfolios by themselves.

That is the general reason behind the title of the discussion paper. Richer families usually ask for a babysitter to look after their children not because they are not able to do that on their own, but because in this way they save time that they can spend on work and other activities. A babysitter is not more skilled than parents and he usually performs tasks in a suboptimal way when compared to them.

The same happens in the financial advice industry, where the IFAs are driven especially by their own interests, more than by those of their clients. The problem is that babysitters earn a well-defined salary, therefore parents can in any moment verify that their performance is adequate with respect to their reward, while instead transparency in the financial advice industry is something more difficult to achieve, especially because IFAs are well trained to catch the attention of the clients and to use strategies to look reliable.

CHAPTER 4
WHITE FLAG: A CHIMERA OR A REALITY?

4.1. THIS THESIS AS A KILLER OR A PROMOTER OF THE IFA?

So should it be concluded that financial advisors are always detrimental to the clients' interests?

The problem has not an easy solution.

It seems like on the basis of this research experienced people would get higher profits if they spent more time on financial activities, rather than leaving this task to an external third party.

Notwithstanding, not all the individuals exhibit sufficient knowledge to manage their portfolios properly, therefore in this latter case skilled and prepared advisors may be a good substitute for financial literacy and sophistication. Given the rapidly growing literature on investment mistakes, providing financial advice to inexperienced investors could be an alternative to try to educate them. The actual problem is that since the fees paid are generally proportional to the volume of the purchases and since a younger and less experienced individual is assumed to invest smaller amounts of capital, he doesn't provide a profitable hunting ground for financial advisors. This is confirmed by Mullen who in his survey shows that the best advisors accept a minimum size relationship which ranges from $500,000 to $100 million, with the average minimum being $1 million. So in many cases those who need most financial advice are those who can't have access to this business.

Moreover small and inexperienced investors are disadvantaged even because what IFAs add to the investment is in many cases completely offset by the fees paid for the service.

Last problem, if the cost of an IFA ranges from 100 to 200 basis points, in the case of smaller accounts it can be as high as 300-500 basis points, due to higher administration costs.

One of the issues introduced in the conclusions of the paper concerns the fact that perhaps these expenses are an acceptable trade-off when considering that smaller investors would otherwise retire from the financial markets if they had to manage investments on their own. This was only an hypothesis which couldn't be verified in that same research.

Yigitcan Karabulut (2010) proves that there is no significant effect of financial advisors on participation probability. He argues also that future research may have more success

in explaining the effects of financial advice on participation by investigating whether financial advisors tend to convert non-participants to participants.

In the same study he proves that international diversification is more evident in IFA accounts and that it limits the home bias. Even if advisors earn more through cross-border sales commissions, Bluethgen et al. (2008) claims that these excess earnings are not very sound. Nevertheless, it is worth mentioning that advised customers hold on average 76% of foreign share holding in stock and bond mutual funds. Considering the incentives for advisors to sell foreign mutual funds, it is not surprising to see a higher propensity to international diversification. Anyway, at least in this case interests are aligned because even investors earn from this choice. It should also be considered the possibility that benefits for clients are offset by the arising exchange rate exposure if the portfolio is not hedged against this particular risk. As a large fraction of private investors are not aware of exchange rate risk and do not hedge it efficiently (Bluethgen et al., 2008), this might also partly explain the higher volatility of advised accounts.

Considering all the cons (like higher costs) and the pros (like international diversification and possibility to avoid behavioural bias) it could be inferred that if there is more control on an advisor in order to avoid his moral hazard and selfish behaviour, and to assess his financial skills (imposing i.e. sanctions when he commits mistakes due to negligence or ignorance), his role can be very effective in defeating financial illiteracy of investors. This conclusion is even more sound when considering that in the sample under analysis one of the main propellants of good performance was experience, so the ideal situation would be that wherever investors miss it, the IFA overtakes the client's limit in a proper way, i.e. under monitoring of his behaviour and with a fair compensation (devoid of any imbalance caused by conflict of interest and information asymmetries).

As private investors are not able to monitor by themselves the behaviour of IFAs, in the last years a lot of regulations and directives have been created to impose requirements on advisors' conduct, since it has been recognized that last financial crisis created a further crisis of confidence and that it dampened even more the financial advice industry, giving small investors more reasons to doubt the reliability of this service. Moreover, the strong integration of the wholesale market, accessible to small investors through mutual funds (which IFAs generally privilege as stated in the previous chapters) has underlined even more the compelling need to deal with this issue from a legal point

of view, as the wholesale market was the channel of diffusion of the crisis. Law and enforcement of law seem the key to solve this problem in an efficient way.
Here is a quick analysis of the last reforms in the U.S.A. and E.U. .

4.2. COUNTERMEASURES IN THE USA: 408(b)(2)

Enormous attention has been centered on retirement in recent years. As shown in the study "Heuristics and Biases in Retirement Savings Behavior", by Shlomo Benatzi, The Anderson School at UCLA, and Richard H. Thaler, University of Chicago, employees tend to be passive, since they are slow in joining advantageous plans, make infrequent changes, and adopt naïve diversification strategies. Some very effective and cheap ways can help them avoid all these mistakes, i.e. sensible default options, small changes in plan design and opportunities to automatically raise saving rates and rebalance portfolios. This is a kind of compromise to support less sophisticated investors while maintaining flexibility for more sophisticated ones.
Apart from these tools to sustain self-managed retirement plans, on January 2009 another regulation to protect IFA accounts was introduced by the DOL (Department of Labour), i.e. 408(b)(2). This imposed many further duties on the IFA and shifted on him the burden to disclose any pieces of information which can help the fiduciaries judge whether the arrangements, including compensation, are reasonable and whether the conflicts are acceptable.
The first point underlined in the regulation is the duty to sign a written contract which satisfies certain given requirements. In fact, even if RIAs used to sign contracts already before 408(b)(2), in most cases they were standardized, without adequate review or counsel. Moreover, prior to this regulation, some advisors were engaged without a service agreement or verification of insurance coverage. These are only examples of what Mr. Phil Chiricotti, President of the Center for Due Diligence, defined as a "nuclear accident waiting to happen". In fact when a contract is not case-specific, rights and liabilities are not clearly specified, so the clients, who represent usually the weakest party, are in a position of disadvantage.
The regulation requires also that disclosure "at the best of the service provider's knowledge" must be done in writing before entering the legal relationship. It must concern all the services to be provided to the plan under the contract and, for each of them, the direct and indirect compensation to be received by the service provider and its affiliates.

The regulation obliges the IFA to disclose whether he will provide any services to the plan as a fiduciary[27]. ERISA's definition of fiduciary is a functional definition. This means that, even if an individual does not acknowledge that he is acting as a fiduciary, if he performs fiduciary tasks, he is an ERISA fiduciary in the performance of those tasks. Therefore advisors should understand which activities cause this status and spell them out in the contract.

Just as an example, providing individualized investment advice to a retirement plan for a fee is a fiduciary task, as advice is based on the specific needs of the client. When instead there is a generic investment advice the task is not fiduciary.

Up to this regulation, the advisors always tried to avoid the fiduciary status because it implies higher liabilities. As a result, 408(b)(2) provides with a legal incentive to foster specialization: more is expected from IFAs, but their compensation may not increase correspondingly. Therefore the best way for the IFA to offset the cost of learning, explaining and implementing these changes is to spread it over more assets and more plans. In other words, it will be more difficult for an advisor who has a limited number of plan clients and it will be easier for an advisor who has a significant block of 401(k) business.

Further according to 408(b)(2) FIAs can adopt a change in their service bill from time to time, but they have to communicate it through a written notice to the client.

Every violation of this regulation results in a prohibited transaction and may imply for the IFA to be subject to taxes imposed under the Internal Revenue Code (15% of the amount involved, which is probably the total amount of the compensation).

4.3. COUNTERMEASURES IN EUROPE: MiFID 2007 and MiFID II

The Markets in Financial Instruments Directive came into force on 1 November 2007. It comprises 3 main pieces of legislation: the Level 1 Directive 2004/39/EC, the Level 2 Directive 2006/73/EC and Regulation 1287/2006. It is part of the European Single Market Programme removing barriers to cross border financial services within Europe, and is designed to foster competition and a level playing field between the EEA's trading venues for financial instruments, and to ensure appropriate levels of protection for investors and consumers of investment services across the EEA.

[27] the meaning of fiduciary under 402(b)(2) is the same used under ERISA

The last financial crisis underlined a general need for both a reform of this directive and the introduction of bodies of prudential supervision, in order to prevent any disasters like the speculative bubble from happening again.

The financial crisis gave reason for the European Commission to focus, for example, on enhancing pre- and post-trade transparency in the advice service industry. Among the most important rules of business conduct, there are the following proposals:

- the obligation for an IFA to explain on which basis he is providing advice;
- the right of the client to obtain more details about OTC derivatives and other structured products;
- a clarification of the conditions that must be satisfied to qualify for an exemption from the appropriateness requirements when providing execution-only services in relation to non-complex products.

Even more importantly, there will be the introduction of a principle of civil liability within MiFID to enable clients to claim damages against firms infringing MiFID rules, and to cover the following areas: information and reporting to clients, suitability and appropriateness test, best execution and client order handling.

For what concerns authorisation and organizational requirements, more controls on IFA conduct should be introduced in order to respect the profile of risk of a client.

Although the Commission states that it agrees with CESR's[28] Technical Advice that the client categorization regime has worked well since the implementation of MiFID, it is also concerned by the great number of misseling cases in relation to very complex products which has revealed some flows in the current framework. The Commission is therefore reversing the position that the CESR took in relation to some client categorization: thus MiFID should be modified to limit the availability of eligible counterparty ("ECP")[29] status in some cases, including in relation to transactions in complex instruments, and the abolition of the presumption that professional customers have the necessary level of knowledge and experience.

Non-compliance with these principles implies administrative sanctions imposed by national regulators, but work by CESR has shown that there is a lack of convergence

[28] Committee of European Securities Regulation.

[29] An Eligible Counterparty (ECP) is an entity that is authorized or regulated to operate in the financial markets that is not given investment advice and belongs to one of the following categories: investment firms, credit institutions, insurance companies, UCITS and their management companies, other financial institutions authorized or regulated under Community legislation or the national law of a member state, commodity dealers and 'locals' on exchanges, national governments and their corresponding offices, including public bodies that deal with public debt, central banks and supranational institutions. If such clients are provided with investment advice, they will be treated as Professional Clients.

across the EU in terms of the administrative and criminal sanctions available for MiFID, as well as their application, which can lead to regulatory arbitrage.

The Commission is therefore proposing some amendments to MiFID to further detail the administrative sanctions that Member States can impose. It is also considering the option that a sufficient minimum level for fines has to be established.

4.4. THE REMUNERATION CODE IN THE UK

The Financial Services Authority (FSA) in the UK has recently widened the scope of its remuneration code, introduced for the first time in 2009. At the beginning it applied only to the largest banks, building societies and broker dealers. On 17 December 2010, the FSA published the final text of its revised Code of Practice on remuneration. The Code from 1 January 2011 applies also to all investment and financial advisor firms that fall within the scope of the EU's Markets in Financial Instruments. “The vast majority of IFAs will not be affected but the reality is that only a year ago this only applied to 27 banks but has now spread to 2,500 firms,” said Andrew Strang, policy director for the Association of Independent Financial Advisers in July 2010. “IFAs should be aware of these proposals because these things have a habit of expanding their scope”. He was right, and six months later the final revision imposed burdens also on them. Under the code, at least 40% of a bonus paid to an IFA must be deferred over a minimum time span of three years, amount which is raised at 60% if the bonus in absolute terms is more than £500,000. At least 50% of bonuses must be made in shares, share-linked instruments or 'other equivalent non-cash instruments' of the firm. Severance payments should reflect performance over time and 'failure must not be rewarded'. Reporting requirements for smaller firms are less demanding. Any requirement is appropriate and proportionate to the dimension and impact of the business.

4.5. DRAWING THE CONCLUSIONS

The key concepts in both the U.S. and the E.U. are the enhancements of transparency and disclosure practices, especially through the use of written agreements which declare in advance the liabilities arising from a legal relationship. Furthermore, the limits on the IFA's freedom of conduct impose for them the needs to know exactly the requirements of the regulations (both in Europe and America) and take actions to make sure they comply with each of them. Breach of the directives leads in fact to taxes and sanctions, even if there is still room for improving the norms relative to this issue in the Euro area. In particular, since there is arbitrage at a national level, this can become a kind of limit to the speed in the enforcement of law. As the cross-border investments are becoming more and more spread and through MiFID financial advisors can provide services or have headquarters in more different countries, when a breach of law arises, there could be a waste of time because of different sanction procedures in the interested countries. In such an integrated financial environment, not only law and supervision should be unique, but also coercive enforcement in case of breach. These three elements give an investor the certainty to be completely protected and readily reimbursed in case of misconduct of an advisor.

For what concerns the compensation policies, it seems that for the moment the U.S.A. have some more specific requirements, since there is en entire section in their directive which explains how to disclose information about the compensation that an IFA should receive and how any change should be put in writing and applied only after approval of the counterparty. There is a clear reference to the fact that all the indirect expenses must also be reported, together with any compensation to third parties, in order to let the client be aware of any possible conflict of interest. In Europe a focus on the accounting procedure for what concerns compensation disclosure should be addressed. The remuneration code in the UK is an example of law which tries to limit the IFA's moral hazard since it links retribution to the results of performance. Definitely something to take in consideration at broader level in Europe in order to create a unique compensation policy in the whole Euro zone.

The big investment lie is something difficult to defeat because of the fact it requires a large scale intervention to be debunked, given the deep roots that it has in society. What seems clear is that individual investors can't fight it alone, but the intervention of the

institutional bodies in the last two years is a signal that a powerful weapon is becoming active to correct the misconduct in the financial system, thus protecting not only the interests of the investors, but also of the whole real economy. The issue is in fact that the last crisis, a financial economy crisis, destabilized even the real economy, thus creating a huge systemic bottleneck.

Investors' and advisors' interests can be seen as two tracks: until two-three years ago, without a strong and sound intervention by law and government bodies they could be considered only as parallel.

Changes in the legal and supervisory environments are giving instead now some hopes for these tracks to be considered also in perspective, thus convergent.

Will this intervention be efficient? It is for posterity to judge.

The actual state of things traces institutions' intervention as the only way to ensure a white flag and a peaceful coexistence between advisors' and individual investors' interests, which anyway at the moment is more a flight of fancy than something with many examples of realization.

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