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Financial intermediation in the securities markets law and economics of conduct of business regulation

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Abstract

The economic theory explains the role performed by intermediaries in financial markets. In securities markets, in particular, intermediaries act as facilitators of the financial exchange. In this context, conduct of business regulation is justified on the basis of structural problems of asymmetric information affecting the relationship between securities professionals and the individual investor.

In this paper, two major conduct of business rules are analysed in the light of the kind of market imperfections they should be intended to address: the suitability and the anti-churning rules. From a functional perspective, the analysis merges major insights of financial theory with a comparative discussion of the legal rules in both the U.S. and the European Union. Law and economics approach to the matter leads to a much broader and more economically sound interpretation of the “churning” problem. This is related to an agency-based explanation of one of the most topical puzzles under debate in financial economics: the problem of noise trading. © 2000 Elsevier Science Inc. All rights reserved.

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1. Scope of the analysis

The efficiency of financial markets is one of the main matters of concern for economic (and thus legal) policymakers. Efficient allocation of financial resources is the necessary premise for the productive and allocative efficiency of an aggregate (country or world-wide)

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economy. Securities are one of the most important means for the exchange of financial resources. Securities markets, and the role played by financial intermediaries within them, are going to be therefore the subject matter of the present study.¹

Three major qualifications are required in order to clarify the scope of the analysis. First of all, I am focusing exclusively on the exchange of securities performed in secondary markets. Whereas it is true that efficient allocation of financial resources depends on the efficient performance of the primary market, setting the equilibrium price of newly issued securities, primary markets, however, would presumably not even exist without secondary markets. The key role and function of secondary markets are very well known in financial economics.² They basically consist in the marketability of the securities investment and in the evaluation of the same securities through an efficient pricing mechanism. Although it would be interesting, one is not addressing here the problem of the origin and development of organized secondary markets. Simplistic as it may appear, they are taken for granted.

Secondly, by the expression financial intermediaries, I am generally referring to the professional businesses in the securities industry, through which the exchange of securities in secondary markets is ultimately performed by individual investors either directly or indirectly, within the context of dynamic investment management on their behalf. In this sense, the term financial intermediary is mostly used here as a synonym for securities professional. From the economic-functional perspective, that means considering just some, but not all of the functions performed by intermediaries in the financial sector: namely, the exchanging of securities either on behalf of customers or on their own account, the provision of securities investment advice, and the management of securities portfolios.³ I am neglecting, on the other hand, perhaps the most important function traditionally performed by financial intermediation, that is asset transformation, typically carried out by commercial banks and insurance companies. In legal-institutional terms, I am therefore referring to financial intermediaries whose core business is related to the investment of tradable securities, and specifically to brokers, dealers, investment advisers (including professional asset managers), as well as to the broad category of financial institutions engaged in managing collective investments on behalf of other market participants (i.e., investment companies).⁴

Thirdly, this paper is going to discuss rationales and shortcomings of legal intervention in the market of financial services relating to individuals' investment in securities (hereinafter: "financial investment services," or simply "financial services"). The discussion, however, is exclusively concerned with conduct of business regulation, and thus focuses on how securities professionals deal (i.e., conduct business) with their customers. Prudential regulation, related concerns of financial institutions stability, and possible systemic effects (i.e., externalities) on the financial sector as a whole are therefore not addressed by the present study.⁵

2. Financial intermediation and imperfections in the market for financial services

Financial intermediaries in the securities industry emerge as a response to the failure of spontaneous exchange among investors. This is consistent with common observation. Individual investors never perform the exchange of securities directly, for they are always involved in securities transactions through intermediaries such as broker/dealers, asset

managers or investment companies. Securities professionals offer to the investing public a wide spectrum of services. Most importantly, however, they provide investors with information, which takes the form of either advisory services to uninformed investors or immediate investing on their behalf.

Investors generally seek for assistance and recommendation either directly, from stockbrokers and investment advisers, or indirectly, entrusting their money to professional asset managers or buying shares in investment companies.⁶ In this perspective, securities professionals act as facilitators of investors' participation in the financial exchange. That is to say, they typically supply investors with "participation services," in that they bridge the gap between the investors' lack of knowledge and the expertise required to get the most out of increasingly sophisticated financial markets.⁷

The core explanation of the existence and operation of financial intermediaries in securities markets ultimately rests, then, on their informational role. Underlying the provision of almost any financial investment service to the individual investor is a direct or indirect sale of information.⁸ From this perspective, securities professionals provide not only information about securities fundamentals and trading opportunities but also, more importantly, professional expertise concerning financial instruments available in the market which are most suitable to the investor's needs.

Securities professionals' major function in the financial system is therefore the provision of an efficient vehicle of information towards the market. Such intermediaries do bear the information and transaction costs that—in the individual investor's setting—would otherwise prevent the financial exchange. They provide investors with a simplified informational context, wherein the costs of acquiring and processing information are significantly lowered. In theory, they should provide their customers with the optimal amount of information and knowledge necessary to make conscious and rational investment decisions according to their preferences in terms of risk/return trade-off. To the extent that such preferences are ultimately reflected by sound buy/sell orders (brought directly—e.g., by a broker/dealer—or indirectly—e.g., by a mutual fund—to the market), this process will enhance the efficiency of securities pricing and, thus, of the overall allocation of financial resources.

In practice, however, the securities professionals' commitment to providing investors with the expertise they normally lack is highly problematic. In a typical asymmetric information setting, the likelihood of opportunistic behavior gives rise to a serious concern regarding the reliability of the financial intermediary's advice. Investors lacking the information and the expertise to perform the function of the intermediary cannot easily evaluate the quality of financial information and services provided to them for their investment decisions. Dealing with a securities professional, the customer cannot know whether he or she has been given the correct advice. Customers are therefore exposed to both adverse selection and moral hazard, for they may choose an incompetent or dishonest intermediary, or such intermediary may put its own interests (or the interests of another customer) above those of that customer which it is intended to look after.⁹

The basic economic rationale justifying the conduct of business regulation of securities professionals centers, therefore, on market imperfections relating to the problem of asymmetric information. In this context, it is commonly observed that such market imperfections are "more pervasive in the retail sector than in the wholesale sector."¹⁰ This traditional

distinction may be questioned, nowadays. To be sure, even the most sophisticated investor needs assistance in identifying and gaining information about the extraordinarily large and constantly changing set of investment opportunities available in the market.¹¹ However, the same notion of investor's sophistication is potentially misleading.

A better distinction is the one grouping securities market participants in two categories: the "involved" and the "uninvolved."¹² The first are firms or individuals actively involved in the dynamic management of their portfolio and thus professionally informed about hedging opportunities available on the market. The second and much broader group is that of uninformed investors, making decisions with limited information and expertise. To the latter group the financial intermediary typically supplies "participation services." Unless they are securities professionals or firms otherwise involved in financial markets, investors are generally to be regarded as "uninvolved," and therefore "unsophisticated" in the proper meaning. Their situation is structurally different from the one characterizing, for instance, the typical institutional investor. To be sure, the latter is also participating in financial markets through intermediaries, such as brokers/dealers, investment advisers, and portfolio managers. However, institutional investors are generally (although not always) securities professionals themselves. To the extent that institutional investors professionally invest pooled funds on behalf of others (mostly individual and unsophisticated) investors, they cannot be regarded as consumers of financial services. On the contrary, they *do* supply their *own* customers with "participation services," like any other kind of securities professional. They must be, then, ultimately regarded as intermediaries, rather than investors.¹³

Conduct of business rules are therefore aimed at mitigating principal-agent conflicts of interest in the characteristic interaction between securities professionals, on one side, and individual, unsophisticated (and thus uninformed) investors, on the other side. From a different standpoint, conduct of business regulation is intended to raise the quality standard of the information provided by intermediaries to the public of investors, thereby enhancing their confidence in the securities industry and solving the "lemons" problem otherwise affecting the market for financial services.¹⁴ Without regulatory intervention, quality uncertainty would inevitably characterize such a market. Customers who cannot distinguish good services from bad ones would indiscriminately evaluate all services available as being average. This would determine, in turn, a "race to the bottom" process, leading to a market where only low quality services are available. As a result, risk-averse investors would lack the confidence needed to enter financial transactions in the securities markets. They would refrain from dealing with securities intermediaries and, thus, from (directly or indirectly) participating in modern, sophisticated financial markets.

This traditional justification for regulating financial services has recently been challenged. It has been argued that most market imperfections affecting the provision of financial services are likewise characterizing a wide range of nonfinancial products and services. Nonetheless, as far as the markets for those goods are concerned, no conduct of business regulation has been enacted nor has any specific Authority been appointed to deal with economic problems faced by consumers. In addition, the "lemons" problem is potentially affecting every market characterized by asymmetric information, but this does not necessarily imply that, under quality uncertainty, risk-averse consumers are driven out from such markets.¹⁵

The argument fails to the extent that it compares financial investment services to other goods significantly different as far as quality aspects, and related information problems, are concerned. In this respect, the economic literature divides products and services into three categories, on the basis of their salient quality attributes: namely, *search* goods, *experience* goods and *credence* goods.¹⁶ To be sure, the market for virtually any product or service is affected by the problem of imperfect and asymmetric information. The real matter of concern is, however, the opportunity cost of gathering relevant information, as well as of acquiring the necessary expertise, for a knowledgeable purchase decision to be based on such information. The above-mentioned distinction between goods addresses precisely this issue. The information costs are relatively low for search goods, whereas they are always significantly high—and might turn out to be actually unbearable—for credence ones.¹⁷

It is true—as Schwartz and Wilde demonstrated—that imperfect information does not necessarily lead to market failure.¹⁸ Schwartz and Wilde’s argument relies on the role of the marginal consumers in exerting an effective market constraint on the suppliers’ opportunistic behavior. For the argument to work, a large enough group of individuals must exist at the margin, who are informed as to both prices and quality characteristics of goods or services available on the market. To the extent that such consumers knowledgeably shop around for the price/quality combinations most suitable to their needs, that will give rise to a “pecuniary externality” protecting the uninformed. The protection will arise from suppliers’ competition for the marginal customers who are informed and base their purchase decisions on this information. In such a scenario, notwithstanding the asymmetric information problem, the market will still behave in a competitive fashion; and this will lead, in turn, to an efficient outcome as far as the price/quality trade-off of goods and services sold is concerned.

According to Schwartz and Wilde, the marginal consumer argument is definitively applicable to the markets where search goods are exchanged. The argument can be easily extended to experience goods frequently purchased, since consumers “can quickly learn all aspects of quality before making further purchases.”¹⁹

However, when experience goods are infrequently purchased, the learning process would presumably take a significant amount of time before marginal consumers could knowledgeably engage in comparison shopping; this would allow moral hazard and adverse selection in the meantime. Once one finally introduces credence goods, even in a repeated setting, the learning process would be in theory indefinitely lengthy (and so practically useless), no matter what the frequency of purchase was. In this case, knowledgeable comparison shopping by marginal consumers is not likely to occur at all. Consequently—as the same Schwartz and Wilde recognize—the marginal consumer argument “appears to say little about markets for experience goods [infrequently purchased],” and so even less about markets for credence goods.²⁰

This actually seems to be the case as far as the provision of financial services to unsophisticated investors is concerned. Only apparently financial services could be characterized as experience goods. More careful consideration, however, shows that the frequency of purchase of investment advice or decisions from securities professionals is largely irrelevant for the individual investor’s learning of the “true” quality of the services provided. For this reason, whenever involving the provision of investment advice or decisions on the investor’s behalf, financial services are to be considered credence goods.

As a general matter, learning is extremely difficult with respect to investment activity, for “feedback is neither unambiguous nor immediate.”²¹ And this is actually what distinguishes the investment services context from others wherein different kinds of goods are exchanged through intermediaries or sales agents, even though under characteristic asymmetric information (such as, for instance, the real estate market, the automobile market, or the computer market). Once one is dealing with securities investments, “even after the decision is made and financial results are announced, it is difficult to determine whether an unfavorable outcome was the result of bad luck, even though good advice was competently and honestly rendered, or the result of incompetence or dishonesty.”²²

Problems of asymmetric information are intensified by the typical investor’s *rational ignorance* as far as financial technicalities are concerned. Indeed, there is little doubt that investor’s general lack of accurate financial knowledge is a rational choice. Individual investors, normally lacking a background of financial studies, have only “a limited ability and opportunity to acquire the necessary skills to enter into complex financial contracts and to assess [relevant] information.”²³ Realistically, they do not spend too much time and resources to acquire such expertise, assuming that they have more profitable matters to deal with. The value of people’s time has increased over time, whereas financial skills necessary for a knowledgeable investment decision have become extremely complex and, thus, costly. This one insight explains the role currently played by intermediaries in securities markets.²⁴ On the other hand, once investors have decided to rely on professional advice or investment decision-making, they do not feel the urge to become securities experts.

Indeed, the core relationship between securities professionals and the individual investor is built upon the latter’s trust and reliance. Cognitive illusions, such as the one often referred to as “herding,” play a significant role in overcoming the customer’s natural suspicion in approaching the provider of financial investment services.²⁵ Residual doubts about the securities professional’s credibility are easily deflected by invoking the apparent reputation of the firm. What investors do not immediately realize is that financial intermediaries’ concern with their reputation is not in itself sufficient to guarantee the good quality of financial services. To the extent that financial institutions’ reputation is enhancing public confidence in the market for financial services, investments in reputation are inevitably characterized by a public good dimension, and related free-riding problems.²⁶ In addition, the securities firm’s employees are not naturally concerned with the market reputation of the institution they are working for, and might rather be engaged in fostering their own private interests.²⁷ Finally, it may be preferable to exploit clients in the short run rather than spending energy on building a reputation in the long run. There are both rational and behavioral reasons that conspire against the investor’s prompt realization of overreaching by the provider of bad advice or bad investment decisions. Therefore, cheating by the securities professional can (at least occasionally) turn out to be a rational strategy.²⁸

The problem is that, once trust is established, the customer generally commits him/herself to a long-term relationship with the financial intermediary. This leads, in turn, to the subconscious tendency to justify in any case the initial choice of the securities professional: people do not like to admit to having been wrong and prefer, rather, to bolster their original decisions. When the individual investor is confronted with fairly ambiguous investment feedback, it is generally much easier for him or her to blame external circumstances (such

as timing, market influences, or chance), rather than the incompetence of the securities professional to whom he or she has deliberately decided to entrust his or her money.²⁹ Therefore, in the investor's mind, knowledgeable realization of the unwise character of financial intermediaries' recommendations or investment decisions can be postponed almost indefinitely. As a result, investor's ability to learn from experience is constrained far beyond what would be predictable on the basis of the traditional bounded rationality assumption.

This is no less true in the context of collective investment management services, such as those provided by mutual funds. On the one hand, there is some empirically tested resistance to fleeing from lower performing funds, for investors are unwilling to face the evidence that they made a bad investment.³⁰ Yet, on the other hand, individual investors seem to pay particular attention in choosing how to allocate their savings among most "successful" mutual funds. Seemingly, then, individual investors do learn from "experiencing" funds' past performance, and they actively seek for the funds that provide them with the best performance.³¹ Unfortunately, however, the lesson investors ostensibly learn from experience is wrong.

It may be that some fund managers are overall better than others are.³² But *ex ante* determination of which funds would be superior performers in the future is extremely difficult, if not impossible. Past performance of mutual funds cannot systematically predict future performance. Consequently, mutual funds rankings based on past performance have no value for the investing public.³³ Nevertheless, individual investors mostly rely upon such rankings, provided by financial publications and advertisements, when making mutual fund investment decisions. And, although a slight majority of them do read the prospectuses, there is little evidence that they understand them properly. Notwithstanding the statement warning investors that "past performance does not predict future performance," they tend to focus their attention just on data relating to the fund's historic performance.³⁴ As a result, major sources of information individual investors actually resort to are ultimately misleading. Their activism in twisting their mutual fund holdings cannot, thus, be regarded as knowledgeable comparison shopping, for it is based on wrong beliefs. Truly, what investors suppose to "learn" from financial press, analysts, and any other source of information about funds' past performance is not even a good proxy of the quality of the management services provided.

The market for financial services is then affected by information problems much more severely than other markets where search or experience goods are exchanged. The general inability of individual, unsophisticated investors to ascertain the quality of financial services supplied by intermediaries mainly depends on their (otherwise rational) lack of financial expertise. Cognitive biases, particularly relevant within the context of financial markets and services, do the rest of the job in constraining investor's ability to learn from experience. It is true that that is actually what securities professionals tend to exploit most. Sales pitches in the securities industry appeal just to the customer's cognitive biases. This can take the form of fairly "manipulative" selling techniques, typically at the brokers' level. They are mostly perceived as being "part of the game" ("since customers lack the time and expertise to appreciate product quality on their own, and need to be led to the right conclusion"), while contemporaneously leading to higher sales volume.³⁵ Alternatively, within the context of investment management services, the intermediary will choose to transmit rather appealing, but mostly misleading, signals of quality (such as timely activism in stock-picking and —

allegedly related — short-term performance), thereby trying to maximize the expected inflow of customers' investment.³⁶

The described situation implies the inapplicability of the marginal consumer argument in the market for financial investment services supplied to individual investors. In this context, it is reasonable to believe that the number of knowledgeable and sophisticated customers at the margin, who would consciously shop around seeking for high-quality financial services, will never reach the significant amount necessary to exert an effective market discipline on the suppliers' behavior. The scarce likelihood of a spontaneous market self-correcting mechanism is, thus, the ultimate reason why incomplete and asymmetric information characterizing the provision of financial services to unsophisticated investors seems to lead inevitably to market failure, in the absence of regulatory intervention. In this context, conduct of business regulation is supposed to address potential conflicts of interest in the principal-agent relationship between securities professionals and their unsophisticated customers. By raising the quality standard of financial services provided by the securities industry to individual investors, the same regulation is intended to overcome the "lemons" problem that would otherwise impair widespread participation in the securities markets.

3. Conduct of business rules in law and economics: the suitability doctrine and the problem of churning

3.1. Introductory remarks

Intermediaries in the securities industry do provide different services to their customers, ranging from mere trading services (so-called "discount brokerage") up to money management on a discretionary basis. Apart from the case wherein the investor expresses the specific desire to buy a given security, investor decision-making, as regards investment in securities, is generally dependent upon the intermediary's advice. It has already been pointed out that the sale of information generally underlies the provision of financial services. This is true also in the case of discount brokerage, wherein the broker's activity involves the "sale" of professional information about trading opportunities available on the market. However, discount brokerage and, more generally, the provision of mere trading services which do not come together with investment advice fall mostly outside the scope of the present analysis. Here I focus on the provision of investment advice and/or decisions by securities professionals, on whose basis investors enter and participate in the securities markets. Most recent developments in e-commerce through the Internet show that a growing number of individual investors feel that they do not need professional investment advice to enter financial markets. "On-line" investors typically exhibit overconfidence in their trading skills.³⁷ But this has (at least apparently) very little to do with agency conflicts in the relationship between securities professionals and their customers. These are, instead, the subject matter here.

In principle, particularly high standards of conduct are imposed on financial intermediaries dealing with individual investors, simply by virtue of the same intermediaries' being in the securities business. Special consideration is given by virtually all legal systems to the informational disadvantage borne by unsophisticated investors dealing with firms providing

financial services of any kind. In fact, from the legal point of view, investors purchasing these services rely on the implicit representation that they “will be dealt with fairly and in accordance with the standards of the profession.” Under US federal securities law, this enunciates the so-called “shingle theory.”³⁸ In hanging out its “shingle,” the financial intermediary represents to its (actual and prospective) customers that they are dealing with a professional securities expert, who has both the information and the skills they are lacking. It follows from the theory that a financial intermediary is “under a special duty, in view of its expert knowledge and proffered advice, not to take advantage [. . .]” of its customers’ lack of such expertise.³⁹

The international conduct of business principles adopted by the IOSCO (*International Organization of Securities Commissions*) analogously declare that “in conducting its business activity, [a financial intermediary] should act honestly and fairly [and] with due skill, care and diligence in the best interests of its customers and the integrity of the market.”⁴⁰ The same principles of honesty, fairness and diligence are characterizing conduct of business regulation in the countries of the European Union.⁴¹ From a functional perspective, such principles are addressing the same economic problem underlying the development of the “shingle theory” under US securities law: namely, informational asymmetry, related concerns of moral hazard and adverse selection, and thus the general matter of the reliability of intermediaries’ advice underlying the provision of financial services to unsophisticated investors.

Indeed, from the legal point of view, the implicit representations approach underlying the “shingle theory” has been criticized as an useless “fiction.” The same results could be more easily achieved by proscribing single acts qualifiable as unfair dealing “without going through the gymnastics required by the shingle theory.” Surprisingly, however, such “gymnastics” (i.e., the legal reasoning on the implicit representations involved in the professional supply of financial services) is not economically meaningless.⁴² Individual investor’s reliance on financial intermediaries is actually based upon the belief that they will receive professional advice and fair treatment by securities experts. Such confidence is supposed to be guaranteed by an appropriate conduct of business regulation. Otherwise, under the quality uncertainty inevitably characterizing the provision of financial services, most risk-averse investors would refrain from dealing with intermediaries and, then, from entering financial transactions in the securities market.

3.2. *The suitability doctrine*

Virtually all conduct of business rules governing the relationship between securities professionals and the individual investor can be derived from the general clause of fair and honest dealing in accordance with the high standards of the profession implicitly represented to the public of investors. In the US legal system, for instance, the shingle theory covers a wide variety of activities.⁴³ First of all, a securities professional implicitly represents the professional knowledge of market conditions and securities characteristics in terms of risk/return trade-off. Consequently, any investment advice or decision on investor’s behalf must imply that an adequate investigation, on the basis of all information reasonably ascertainable by a securities expert, has been made into the quality of the securities being

recommended or purchased, and that the selection of the investment is based on the findings of that investigation. This is known as the “know-the-security” rule.⁴⁴

Securities professionals must also fulfill a specific “know-your-customer” obligation.⁴⁵ That is to say, they are supposed to inquire about their customers’ financial status and experience as well as about their investment objectives. Put together, the “know-the-security” and “know-your-customer” rules lead to the suitability requirement, which must characterize the provision of financial services. In principle, “a suitable recommendation matches the investor’s needs, assets and objectives to the appropriate securities.” In the light of the “shingle theory,” the provision of financial services “also carries with it an implied warranty that the securities [involved] are suitable for the individual customer.”⁴⁶ True, individual investors’ reliance on the financial intermediary’s professional expertise is based not simply on the latter’s better knowledge of securities and market conditions, but rather on its superior ability to discover investment opportunities most suitable to its customers’ needs. From this perspective, formulation of the suitability doctrine on the basis of the theory of implied representations is consistent with the economic theory.

The suitability requirement of financial services provided to individual investors plays a central role in the system of conduct of business regulation. We already know that intermediaries basically act as facilitators of individual investors’ participation in the financial exchange. Intermediaries are therefore supposed to bridge the chasm between the investors’ lack of financial expertise and the sheer number of extremely sophisticated investment opportunities available in the securities markets. In other words, intermediaries are supposed to match investors’ preferences with the market.

Unlike in economic theoretical models, however, individual investor’s preferences are very seldom expressed in terms of risk/return trade-off. This is not because investors are (or should ever be regarded as being) not rational. They are, rather, *rationaly ignorant* as far as the technicalities of financial theory and practice are concerned. The suitability rule thus places on the securities professional the positive duty to investigate, that is to interpret, its unsophisticated customers’ preferences as to the risk/return combination that best suits their financial needs. To the extent such preferences are correctly interpreted and accordingly brought to the securities markets, this would lead to consistent buy or sell transactions and, ultimately, to the efficient determination of securities prices.

The described virtuous mechanism strictly depends on the appropriate fulfillment of the suitability requirement; which implies, firstly, the compliance with the “know-the-security” and “know-your-customer” rules. Yet, above all, it involves a professional assessment of the investor’s financial needs. On the grounds of economic theory of risk diversification, it has been correctly pointed out that the suitability of any investment in securities should be evaluated in the light of its contribution, in terms of both risk and expected return, to the whole portfolio of assets held by the investor.⁴⁷ In addition, investor’s risk attitude cannot be determined separately from his or her preferences in terms of expected return from the investment. That is to say, securities professionals must investigate the amount of return each customer demands for assuming any given level of risk, and behave accordingly. Consequently, any investment raising the investor’s overall portfolio risk should be regarded as unsuitable if not leading to a more than proportional increase in the expected return, depending on the investor’s degree of risk-aversion. Finally, transaction costs must also be

taken into account. Potential benefits from varying an investor's portfolio risk/return combination must always be balanced against transaction costs incurred, for they could more than offset the same benefits.

Clearly enough, there are some practical problems with such a strict requirement of professional assessment of the investor's overall portfolio risk/return trade-off. It is very well known that investors are mostly reluctant to provide intermediaries with the information necessary to accurately assess their overall financial situation. Langevoort, then, recently suggested a different approach to the suitability rule.⁴⁸ In his view, the rule should be interpreted as a "meaningful risk disclosure requirement," aimed at gaining the investor's informed consent to the investment decisions or strategies either recommended or performed, on his or her behalf, by the securities professional. Although this approach was originally developed to account for brokerage services, it can be easily extended to the provision of any other service involving investment advice or decision by the securities professional. This is quite obvious in the case of investment advisers. But it is equally true for portfolio managers and providers of collective investment management services, in so far as they are supposed to make their investment decisions according to (and consistently with) overall strategies, which must be, in turn, suitable to their customers' needs. Riskiness and expected returns characterizing these strategies should, therefore, be made clear effectively to the individual investor.

That is to say, in more general terms, that securities professionals should be required to disclose risk factors that are material in the light of their professional understanding of their customers' needs and objectives. On the one hand, this solution is likely to overcome the problem of investor's reticence as regards his or her overall financial situation. At the very least, the intermediaries would be bound to take into account the investor's financial situation, needs, experience, and objectives they are actually (or should be reasonably) aware of. Yet, freedom to dismiss in practice the legal protection would be left to the individual investor's choice. On the other hand, the proposed interpretation is likely to raise serious concerns about disclosure effectiveness. Enforcing a rule of informed consent is extremely difficult, especially if one takes into account cognitive biases characterizing the relationship between securities professionals and their unsophisticated customers.⁴⁹

Investors' risk sensitivity is likely to be significantly lessened in such a context. And this is actually what the securities professional tends to exploit most. For it to be effective, therefore, disclosure of material risk factors under the suitability rule should be primarily required in a way fitted for "captur[ing] the attention of the investor." That is, it should be requested in a way that appeals to the investor's diligent evaluation of the investment riskiness rather than to his or her cognitive illusions. Sharp as it might appear, "[t]he message must be that there are also good reasons *not* to make [such an investment decision]." And these reasons must be made at least as clear to the investor as any others suggesting the opportunity of the investment. It is true that, in this way, one is "in some sense asking the seller to 'unsell' the investment."⁵⁰ Yet, there would otherwise be very little chance to get effectively informed consent from individual investors, given that both they and—even more so—the intermediaries from whom they purchase financial investment services are inclined to take excessive risks; and, eventually, to trade too much and too often. This last remark leads us to the discussion of the churning problem.

3.3. *The legal approach to churning*

An important corollary of the suitability doctrine is the so-called “antichurning” rule. The legal definition of churning is quite narrow. In the US judicial definition, churning is “excessive trading in disregard of customer’s investment objectives for the purpose of generating commission business.”⁵¹ The proscribed conduct consists in the excessive trading, in order to generate extra brokerage commissions, for an account wherein a broker/dealer holds discretionary power or whose volume or frequency of transactions can be influenced, anyway, by virtue of the (fiduciary) relationship with the customer. What level of trading has to be considered “excessive” is clearly a matter of a case-to-case investigation. The “excessive” character of a trading pattern can only be assessed in the light of the individual investor’s financial situation, experience and investment objectives. That is, on the basis of the same investor-specific information which are, in general, necessary for the securities professional to evaluate the suitability of any given investment decision or advice.

However, under current US securities law, churning is not always related to unsuitability. Churned accounts will often involve unsuitable investment decisions by the broker/dealer, but not necessarily so.⁵² A different approach is adopted in European countries’ conduct of business regulation. In this context, antichurning rules are basically derived from the general suitability requirements and they are not—in principle—restricted to brokerage. In the provision of financial investment services of any kind, European intermediaries must refrain from recommending or performing on their investors’ behalf transactions which are not “suitable” in terms of size and/or frequency.⁵³ Excessive size and unnecessary frequency of transactions, in the light of the customer’s financial needs and objectives, qualify the typical “churning” case.

In fact, from a functional perspective, the evaluation of size and frequency of investor’s trading is still a matter of economic suitability of the financial services provided by the intermediary. Rational investors do not like trading securities as such. Their utility functions are, in any case, concerned with risk/return combinations characterizing any hypothetical investment decision. Not only investment preferences are depending on these utility functions. Indeed, so too are desired trading volume and portfolio turnover. Or at least they should be, for they should ultimately relate to the investor’s time horizon, liquidity needs, and inclination to undertake more risk in order to earn abnormal profits.

In this latest respect, it may be that high trading volume and investment turnover are in some instances induced by the investor’s “irrational exuberance.”⁵⁴ And actually self-biased overconfidence, as well as other cognitive illusions, seems to provide a good explanation for “on-line” traders activism, despite the adverse effects of such an activism on trading profitability. But, in so far as it does not involve the broker’s or the investment adviser’s responsibility, this is another story.⁵⁵ Here, instead, one is focusing on investor’s *rational* inclination to trade more or less frequently. Such inclination, in as far as it is ultimately based on the investor’s risk attitude and return expectations, cannot be clearly stated. Investors’ rational lack of financial expertise prevents them from taking a knowledgeable decision on the trading pattern as well as on the kind of investments that best suit their investment objectives. They must therefore rely on the financial intermediaries’ professional advice and

decision-making on their behalf, as far as both the objects and the amount of trading are concerned. Accordingly, from the economic standpoint, securities professionals are responsible for correctly interpreting their customers' preferences also to the extent that they affect frequency and volume of trading: the same preferences must be reflected by a consistent trading behavior in the marketplace.

In legal terms, this corresponds to the prohibition of overtrading customers' accounts. Antichurning rules have got, however, a too narrow scope of application compared to the dimension of potential economic problems arising in the fiduciary relationship between securities professionals and their unsophisticated customers. This principal-agent relationship involves inherent conflicts of interest, especially as far as the amount of trading is concerned. In the provision of financial services of any kind the intermediary has got the incentive to boost trading even in disregard of its customers' interests, for its compensation is anyway—sometimes directly, but more often indirectly—linked to transaction volume. This is obvious in the case of the broker/dealer, whose remuneration is contingent to transaction volume. But it is no less true as far as investment advisers, asset managers, and even mutual funds are concerned.

It has been demonstrated that the agency conflict between mutual fund investors and the investment company provides the latter with the incentive to manipulate the level of risk of the fund, depending on the same fund's year-to-date return, in order to maximize the expected inflow of investment (and thereby the overall fund's management compensation).⁵⁶ This leads to a trading activity that is not aimed at maximizing the portfolio risk-adjusted return (what would be in the investors' best interest), but rather at taking the chance of increasing the fund's year-end return. This is something which actual and potential investors are mostly attentive (and reactive) to, while paying little attention (if any at all) to eventually wasteful trading expenses, as long as they are offset by the overall fund's performance. More generally, subsequent discussion is going to show that portfolio managers, as well as investment advisers, are inclined to signal their superior informed status through random activism in, respectively, either turning-over assets under management or making recommendations.

This incentive compatibility problem is not correctly addressed by regulation. Under U. S. securities law, for instance, a finding of churning is necessarily subordinated to the specific purpose of the broker/dealer to generate extra commission business. In Western European countries such a constraint is not indeed applicable to the idea of "unsuitable" frequency and size of trading. In this context, the prohibition of churning is, in abstract terms, applicable not only to brokerage but also to the provision of advisory and portfolio management services. Excessive size and unnecessary frequency of trading is then supposed to be assessed objectively, on the basis of the investor's financial situation, experience, and investment objectives, regardless of the intermediaries' actual incentive to engage in the fraudulent conduct. Such an incentive is, however, extremely important for understanding the intermediary's behavior and, consequently, in what circumstances churning is more likely to occur. As will be made clear in the following discussion, both approaches are not entirely consistent with the economic phenomenon they should be intended to discipline.

3.4. Churning as noise trading: positive analysis

In recent financial literature the term “churning” has been used in a much broader meaning than in the legal language. It is intended to track down observed trading in securities markets “which is not motivated by an informational advantage nor by ‘genuine’ motives such as hedging, portfolio rebalancing, or liquidity needs.” In this sense, churning is pure “noise” trade.⁵⁷

From the time John Maynard Keynes likened stock markets to casinos “there is a long-standing debate concerning whether prices and trading volumes in securities markets reflect fundamentals or ‘animal spirits.’”⁵⁸ Nowadays, such a debate takes the form of differing interpretations of noise trade. Noise trade has been introduced by Grossman and Stiglitz as a random error in the stock market demand in order to allow privately or professionally informed traders to profit by trading on their information.⁵⁹ Noise (uninformed) traders lose money to informed traders, who would otherwise lack the incentive to collect information. In Grossman and Stiglitz’s view, this process is necessary for market efficiency. “It is only because uninformed traders cannot infer *all* information from price movements—that is, because prices are ‘noisy’—that informed traders enjoy a return on their information up to the point at which further trading moves prices beyond the noise threshold.”⁶⁰ At that point market price will contain the full information, and the latter will be definitively “used up.” However, the possibility of profitable informed trading will again induce people to look for new information, for it to be gradually impounded in new prices, and so on. Consequently, securities markets are inevitably characterized by an “equilibrium degree of disequilibrium.”⁶¹

Grossman and Stiglitz did not model the origin of noise trade, so different interpretations have arisen in this regard. Noise trading could be explained in terms of rational agents’ behavior justified by liquidity or hedging motives; and this is consistent with the rational expectations hypothesis.⁶² Alternatively, it can be interpreted as the irrational behavior of a subset of investors who do not have rational expectations with respect to the expected returns on risky assets, but rather tend to confuse noise—that is, by definition, any data which is not information—with information.⁶³

Empirical evidence on US securities markets shows that trading turnover (volume of exchanges as a fraction of total market value) is inexplicably high. In current financial literature this has led to the general suspicion that the level of trading volume observed is excessive and could result as being inefficient, for it raises market price volatility and involves wasteful transaction costs. It actually seems “difficult to explain the level of trading activity purely on the basis of ‘rational’ motives for trade. [. . .] Hence the appeal of the ‘irrational’ point of view.”⁶⁴

Noise trader (i.e., the “irrational expectations”) approach to the matter is extremely interesting, as well as highly criticized in financial literature. Traditional financial economics is reluctant to assign any role to noise traders in studying asset prices behavior. In the classical view, sophisticated arbitrageurs would always trade against irrational, uninformed (i.e., “noisy”) investors and drive prices close to fundamental values. As a result, noise traders are inevitably going to “buy high and sell low,” losing money to informed investors,

and they will sooner or later be driven out of the market.⁶⁵ Nevertheless, “the idea that financial prices are noisy and do deviate from fundamentals is now commonly accepted.”⁶⁶

Two major points have been made by noise trading theorists.⁶⁷ The first is that investors’ sentiments matter: many shifts in investors’ demand for securities are, in fact, not completely rational.⁶⁸ Secondly, arbitrage is seriously constrained by professionally informed traders bearing not only fundamental risk, but also “noise trader risk” (i.e., the risk that stocks which are mispriced now may be even more mispriced in the future). This depends on the arbitrageurs having, in practice, a finite horizon. Securities professionals (both firms and individuals), especially if they supply investment management services, are evaluated on their short-term performance. As a result, instead of trading against irrational investors’ misbeliefs (as traditional financial theory would predict), it may be profitable for them to “jump on the bandwagon” and so contribute to the movement of prices away from fundamentals. One day arbitrageurs will be likely to reverse their trading, make their profits, and thus help prices to return to fundamentals; but much later on, allowing (*rectius*: feeding) noisy prices in the meantime. A similar role is played by imitation and “herding” among individual investors.

Noise trading is, therefore, important to accurately understand finance and cannot be easily dismissed as an ultimately irrelevant anomaly in terms of the asset price determination. Whether, however, noise traders can systematically affect prices in the long run is another question. Noise traders—it is argued—are likely to be exposed to a “truly extravagant level of risk.”⁶⁹ To the extent that risk-taking is rewarded in the market, this would lead to higher expected returns; which, however, comes together with a much greater variance of such returns. As a result, “[n]oise traders might end up very rich with a trivial probability, and poor almost for sure. Almost for sure, then, they fail to affect demand in the long run.”⁷⁰ Most advocates of the importance of noise traders for the determination of asset prices get out of the impasse by assuming a “permanent outside source of noise traders.”⁷¹ De Long et al. have tried to deal with noise trader performance over time, but they have been unable to demonstrate their survival when they do affect prices in the long run.⁷² In an alternative model where noise traders survive over time, they cannot affect long-term asset prices in a nontrivial way.⁷³ Finally, a recent study challenged De Long et al.’s fundamental propositions, and demonstrated that multiple noisy equilibria always coexists with the “classical” one, where assets are efficiently priced.⁷⁴

The evidence concerning noise trading effects on asset pricing efficiency is therefore far from conclusive. My opinion is, then, that the basic insight of Grossman and Stiglitz still holds. Noise trading has to be regarded as a *disequilibrium phenomenon* within the context of the virtuous, and presumably robust, *tendency* of securities prices to reach their (otherwise unattainable) informationally efficient values. However, further investigation of the origins and causes of noise trading is needed to assess whether this phenomenon is actually necessary (or simply inevitable, and if so, to what extent) in the mechanism of market efficiency; or whether it is, rather, adversely affecting the efficient functioning of financial markets. One thing is certain: the “irrational” approach to noise trading does not seem to provide us with any clear-cut answer to this question.⁷⁵

“Law and Economics” scholarship has been recently involved in the matter. In a provocative article, Lynn A. Stout—recalling and updating the Keynesian approach—compared

stock markets to “costly casinos.”⁷⁶ Her “heterogeneous expectations” model explains excessive trading as a consequence of the investors’ *rational* behavior, justified by disagreement on expectations. Overtrading phenomena are then likely to be exacerbated by individual investors’ operating through financial intermediaries, who have generally a specific economic incentive to encourage trading.⁷⁷

In replying to Lynn Stout’s arguments, Mahoney correctly pointed out that her model of heterogeneous expectations postulates irrational, rather than rational, investor behavior. In this respect, it is comparable with the traditional noise trader theory, based on misinterpretation of noise as valuable information. Mahoney then suggested an alternative explanation of noise trading, based on the agency problem characterizing the relationship between financial intermediaries and their customers. “Most investment takes place through intermediaries such as brokers, banks, and mutual funds.” Their compensation is ultimately related to the amount of trading they generate. This, in turn, creates a potential conflict between the intermediaries’ and the investors’ interests. As a result, excessive volume of trading observed in securities markets, and thus “churning” in the broad economic sense, could typically originate from “conflicts of interest between investors and intermediaries whose compensation is linked to transaction volume.”⁷⁸

From a slightly different perspective, similar conclusions have been drawn in a subset of the financial literature relating to the problem of noise trading. All of these contributions focus on the role of financial intermediaries providing asset management services. According to Trueman, the asset manager typically tends to engage in noise trading in order to provide a positive signal about his or her ability to collect private information concerning current and potential investments.⁷⁹ Allen and Gorton have likewise demonstrated that, when there is asymmetric information between investors and the portfolio manager, the latter has an incentive to “churn.”⁸⁰ “[B]ad portfolio managers strictly prefer to speculate in this sense. [. . .] If they lose the money entrusted to them, they obtain nothing no matter how badly they do. If they do well they keep a proportion of what they make.”⁸¹

Allen and Gorton’s underlying assumption on portfolio managers’ compensation corresponds to the typical incentive fee structure. This assumption can be easily relaxed. Developing a more general model, Dow and Gorton have argued that a significant amount of noise trading observed in securities markets arises from “a [structural] contracting problem between professional traders and their clients or employers.”⁸² In this principal-agent relation there is a major difficulty in writing incentive compatible contracts, as far as both amount and motives for trading are concerned. Indeed, portfolio managers engaged in producing information do not always discover profitable trading opportunities. In such cases, the optimal decision would be “inactivity,” that is not trading. However, it is extremely difficult, if not impossible, for the delegated portfolio manager to convince his or her clients or employers that inactivity was actually his or her best strategy; for the same clients/employers cannot distinguish “actively doing nothing” from “simply doing nothing.” In this context, lacking information as to new profitable opportunities, the portfolio manager will choose to trade anyway; he or she may thus “engage in *ex ante* unprofitable trades which have some chance of being profitable *ex post*.”⁸³ This is what economists call “uninformed” or “noise” trade. It corresponds also to the most economically sound notion of churning.

The proposed explanation does not necessarily require asset management to be rewarded

through incentive fee compensation schemes. It is also consistent with the fact that typical portfolio management contracts pay a fixed percentage of funds under management. In the repeated context, in fact, fund managers who do nothing are likely to be fired. In this sense, there is never a reward for (even “actively”) doing nothing. In addition, Dow and Gorton’s approach can be extended—at least intuitively—to any other kind of financial intermediation, for they all involve the direct or indirect sale of information.⁸⁴

In the direct sale of information setting, Dow and Gorton argued that it would be extremely easy for the seller to provide the investor with a random recommendation, which may turn out to be profitable. This is simply because the seller has nothing to lose. Introducing the effect of reputation in a repeated setting, the conclusion might be slightly different but still—as it has been already shown in the foregoing discussion—not sufficient to guarantee the reliability of the information provided, without regulatory intervention. This is clearly affecting the amount of trading in securities markets. It is, in fact, no surprise that financial intermediaries invariably advise trading, for this is the only way to signal to investors their being professionally informed. Likewise in the case of money management, professional sellers of information who, notwithstanding their efforts in finding mispriced securities, do not uncover any profitable trading opportunity, have got the incentive to advise trading anyway; for “not trading” advice would be ultimately perceived as lack of information and, thus, of professional expertise.

3.5. The problem of churning revised: normative implications

The outlined explanation of financial intermediaries’ general (and rational!) incentive to overtrade is clearly much broader than the basic idea underlying the legal notion of churning commonly adopted. One has intentionally neglected the obvious incentive to “churn” relating to compensation schemes directly contingent to the amount of trading, since this would confine the scope of the analysis to the direct or indirect provision of brokerage services; which is actually the mainstream legal approach to the problem of churning. In the approach suggested here, on the contrary, the dimension of potential conflicts of interest between intermediaries and their customers is definitively more extensive as far as the amount of trading is concerned.

Not only the broker/dealer’s remuneration, but also any other securities professional’s service compensation is ultimately related to the transaction volume. It has been shown to be so in the cases of both portfolio management and advisory services, whose compensation has apparently no connection to trading volume. Activism in advising or performing investment decisions on the investor’s behalf is generally used as a signaling device of the securities professional superior informed status, thereby feeding an otherwise illusory investor’s perception of the intermediary’s competence in dealing with securities markets. Eventually (even though by mere chance) such an activism can also lead to superior short-term performance, which in turn leads, at least in the case of mutual funds, to the maximization of the expected inflow of investment, provided individual investors focus on fund’s short-term performance when making mutual fund investment decisions. Whereas it has been shown that superior performance does not persist in the long run, there is actually some evidence that “funds that have higher turnover also tend to have better performance [in the

short run], suggesting that managers generate enough returns to offset turnover-related expenses.”⁸⁵ Otherwise plainly wasteful transaction costs (as well as inappropriate risk-taking) are therefore justified by the asset managers’ incentive to hopefully increase the inflow of investment (and so their compensation), but they are not consistent with the pursuit of individual investors’ best interest. Such kinds of agency problems, giving rise to potential overtrading phenomena, seem, in fact, not adequately addressed by regulation.

From the economic standpoint, however, the agency approach provides a quite convincing explanation of seemingly irrational investors’ behavior, giving rise to noise trade. That is (following Mahoney), “a plausible explanation of why investors, even those who do not otherwise appear infused with the gambling spirit, behave as if they were:”

“Casual empiricism suggests that many investors do not think they are smarter than the rest of the market. On the contrary, they are afraid that they are not as smart as the rest of the market, and, as a result, they rely more heavily on ‘expert’ intermediaries, such as their brokers, than the facts would warrant. [. . .] Small investors may pay [intermediaries’] fees for worthless portfolio turnover or advice not because they have reached a considerable judgment that an active trading strategy can beat a buy-and-hold strategy, but rather because they have not even recognized that this is an important question.”⁸⁶

This basic insight is also consistent with empirical evidence, in so far as it shows a significant correlation between high trading volume (and thus, presumably, the level of noise trading) and institutional presence in the market. Recent studies indicate “an empirical link between turnover and agency problems, as proxied by the fraction of the market controlled by institutions and intermediaries.”⁸⁷

Besides the agency explanation proposed here there still remains, nonetheless, some scope for the “irrational expectations” approach to noise trading. But that must be necessarily confined to the domain of individual investors’ self-confidence, wherein the same investors engage in securities trading on their own, without resorting to advisory or investment management services provided by securities professionals. In most recent studies, individual investors’ overconfidence hypothesis has been empirically tested on a limited data set, namely on the trading activity of discount brokerage customers, wherein the same “trading is not complicated by agency relationship.”⁸⁸ To this extent, such work is complementary to the present one, which just focuses on agency problems between securities professionals and their customers in explaining the origins of noise trade.

From a slightly different perspective, it might be argued that also securities professionals (i.e., individuals working for securities firms) tend to be overconfident and to have therefore “irrational expectations.” But I would claim, in this case, that regulation should never allow professional advice or decisions on investor’s behalf to be provided on such a basis. On the other hand, potential agency conflicts should deserve more attention even in some instances of discount brokerage services, such as the particularly fashionable “on-line trading.” In this specific context, the same theorists of investor’s irrational exuberance pointed out that on-line brokers do encourage investors to trade speculatively and often, by reinforcing their cognitive biases and overconfidence, as well as creating unrealistic expectations.⁸⁹ And this is ultimately consistent with foregoing observations concerning the general tendency of securities professionals to exploit their customers’ cognitive illusions.

No matter what its origins, noise trading's effects on market efficiency are and remain controversial. In principle, as Grossman and Stiglitz demonstrated, the securities market would actually fail to exist without noise trade. This may lead to the suggestive conclusion that "noise trade, by making the market more liquid, can benefit everyone." In this perspective, Dow and Gorton provide an example in which noise trading, or churning by portfolio managers, is Pareto-improving.⁹⁰ Market liquidity, in effect, is a public good. Noise trading is actually necessary to the market's operation, to the extent that it increases such liquidity, while contemporaneously providing information producers with the incentive to collect information to be impounded in efficient prices. Yet, noise trading has also potentially adverse effects on aggregate welfare. For instance, De Long et al. argued that, to the extent that noise trading makes returns on assets more risky, it could reduce physical investment; the overall impact would be, then, dependent on the magnitude of noise.⁹¹ One has already seen, however, that the alleged excess volatility of asset prices in the long run is controversial, provided there is still no clear-cut evidence that noise do affect securities pricing over long periods of time.

To be sure, the real matter of concern is not the *existence*, but the *level* of noise trading. There must be a point in which liquidity benefits from noise trading are offset by the total amount of wasteful transaction costs incurred by investors trading on noise. However, since economic models have not yet been developed to explain trading volume on the basis of the alternative motives to trade, the actual level of noise trade, and so its optimal amount in the presence of transaction costs, results as being ultimately unassessable.⁹²

Normative conclusions with regard to the problem of churning, as agency-dependent noise trading, are consequently quite difficult to draw. From the "law and economics" perspective, the first step to take should be the adoption of a legal interpretation of antichurning rules conceptually closer to the underlying economic phenomenon which they are intended to regulate. In other words, one should stop considering churning as necessarily (or even just typically) aimed at generating extra brokerage commissions. On the other hand, the regulator should investigate more carefully each intermediary's economic incentives to overtrade in assessing the fulfillment of "suitability" requirements with regard to the size and frequency of transactions performed on investors' behalf.

Noise trading cannot be prohibited as such. The first-best solution would be to proscribe excessive production of noise trade above the optimal amount, for it leads to the inefficient increase of transaction costs. Provided, however, the optimal amount of noise trading cannot be determined, different solutions to the churning problem must be identified. It has been acutely suggested that the regulatory system should focus more "on the alignment of the interests of financial intermediaries with those of their customers."⁹³ In the absence of first-best guidelines, drastic policy conclusion should be—in principle—avoided.⁹⁴ Primary reliance on investors' preferences on risk/return trade-off, as affecting their own optimal level of active trading, could be instead a viable solution. We already know that such preferences can be revealed only through the filter of intermediaries' financial expertise. In this perspective, the regulatory goal would be—once again—to ensure genuine and unbiased interpretation of such preferences by securities professionals.

However, the preferences at issue are likely to be understated in the investor's demand for financial services. Under current regulatory systems this places on intermediaries a specific

duty to investigate and to interpret their customers' financial needs and objectives, as well as the obligation to always have an adequate and reasonable basis for providing them with any financial service concerning the investment in securities. In economic terms, this means that any trading decision or advice rendered by the intermediary must be consistent with both a knowledgeable assessment of investor's preferences, as to his or her overall portfolio risk/return trade-off, and the professional definition of compatible investment strategies (and, thus, trading patterns) on the investor's behalf.

Some particular features characterizing the regulation of asset management services seem to be consistent with the approach outlined above. In this regard, for instance, Italian regulation states that any trading decision made by the portfolio manager must be consistent with *general investment strategies previously delineated*, taking into account all available information relating to the investor.⁹⁵ That is to say:

- a) trading by portfolio managers must be based on general investment strategies defined *ex ante*, so it cannot be randomly justified;
- b) the same trading must be, in any case, suitable (also as far as the size and frequency of transactions are concerned) to the investor's financial situation and investment objectives.

This kind of regulation is obviously not aimed at eliminating noise trading by portfolio managers. Trading on the erroneous belief that noise is information would be allowed anyway, provided that such trading is consistent with "general investment strategies previously delineated," as well as suitable to the investor's financial needs and objectives. Requiring the *ex ante* definition of investment strategies on whose basis the intermediary is supposed to devise consistent trading patterns is likely, however, to exert a reasonable constraint on the asset managers' incentive to "churn," in order to signal a superior informed status that he or she may not actually possess.

Investors' learning process will presumably do the rest in correcting the allegedly "excessive" amount of noise trading. One would expect that, over time, investors will be in the position to evaluate, if not the consistency, at least the profitability of the investment strategies and objectives devised by the intermediaries, just by comparing them with the results obtained in practice. Actual consistency of trading patterns with the general strategies should be ensured by the efficient enforcement of the rule. Regulation should thus provide investors with a simplified evaluation context, wherein they are supposed to assess the quality of the intermediary's service depending on whether the underlying, predevised strategies turned out to be profitable in practice. A disclosure rule, aimed at gaining individual investors' informed consent concerning the strategies at issue, would be therefore extremely helpful. And, in fact, one such rule should otherwise follow from the previously suggested interpretation of the suitability doctrine.

Correspondingly, high quality providers of investment management services (but the same would be true for financial services in general) will learn, sooner or later, "how to send credible signals of their quality that help consumers overcome the high cost of information."⁹⁶ We do not know whether such virtuous process would ever take place and, if so, how long it would take. The ultimate response as to the optimal distribution of trading between

“informed” and “uninformed” (i.e., “noisy”) transactions must be left, in any case, to the market.

The last point has, indeed, quite a more general purport. Recalling Schwartz and Wilde’s discussion on the role of the marginal consumers in enhancing market efficiency, even when experience goods infrequently purchased are dealt with:⁹⁷

“[Competitive] equilibria are likely to be largely functions of the ratio of knowledgeable consumers to total consumers in a market; probably an appropriate way for the state to facilitate their occurrence is to reduce the costs of comparison shopping.”

Although the provision of financial services characteristically involves the supply of credence goods, I actually believe this basic insight should guide both economic and legal policymakers in drawing an efficient system of conduct of business regulation of the security industry. Regulatory intervention should be, therefore, primarily concerned with restoring market ability to self-correct its imperfections and potential failures. With specific regard to the problem of churning, this proposition involves the provision of legal rules aimed at focusing investors’ attention on reliable signals of the quality of financial services, as well as of underlying professional information and expertise, thereby leading to the restriction of (agency-based) noise trade to the optimal amount needed for the efficient operation of securities markets. And this, for instance, has been shown to be the case as far as the *ex ante* determination, and a meaningful disclosure, of investment strategies adopted by portfolio managers are concerned.

4. Conclusion

Economic theory of financial intermediation shows the crucial role played by intermediaries in the mechanisms of securities market efficiency. Individual, unsophisticated investors participate in the financial exchange taking place in the securities market through the services provided by financial intermediaries. However, the provision of such services is affected by a structural problem of asymmetric information and related concerns of moral hazard and adverse selection. Individual investors are, in fact, “rationally ignorant” in that they lack the information and the financial expertise necessary to engage in a knowledgeable evaluation of the quality of the services provided by intermediaries. Should it be a rational choice for the investor to spend time and effort in acquiring that information and expertise, he or she would not even need to rely so much on the intermediaries’ services to perform his or her investment decisions; he or she would, rather, become a securities expert him/herself.

Provided investors, in general, are not—and should rationally not strive to become—securities experts, the information reliability problem and related quality uncertainty of the services rendered by intermediaries to their customers will give rise to a serious concern of market failure. Recalling the characteristic distinction of goods and services on the basis of their salient quality attributes, one has shown that the provision of financial services typically embodies credence good characteristics, whose quality is not ascertainable at a reasonable cost even after a process of repeated purchase. This is likely to impair market spontaneous self-correcting mechanisms, such as the indirect protection of uninformed customers by a

significant amount of comparison shopping consumers at the margin (the Schwartz and Wilde's famous argument), as well as the suppliers' attempts to signal high-quality services by investing in reputation. Without regulatory intervention, the market for financial services would be presumably characterized by "lemons" equilibria where only low-quality services and unreliable information, as to investment opportunities, are available to the public of investors. Most risk-averse individuals would, therefore, refrain from dealing with securities professionals and, thus, from entering the financial exchange in the securities markets.

A system of conduct of business regulation disciplining financial intermediaries' behavior in the securities industry is therefore needed to ensure the reliability of the information that securities professionals are supposed to provide, thereby guaranteeing the soundness of the investment advice on whose basis investors enter and—directly or indirectly—participate in the securities markets. In this field, the "law and economics" approach provides some useful insights for the interpretation of legal rules, by making such interpretation more attentive to the economic problems and related concerns of market failure the same rules should be intended to cope with. In the present article, I have attempted to apply this approach to the analysis of two major rules of conduct disciplining the provision of financial services: the "suitability" rule and the "antichurning" rule.

Results of the economic analysis are quite suggestive, at least as far as the notion of churning is concerned. One can argue, on economic grounds, that churning by financial intermediaries is relating to one of the most puzzling issues under discussion in financial economics: the problem of allegedly excessive "noise trading." Normative conclusions on this specific matter suggest a more general approach to the conduct of business regulation. This regulation should be, in the first place, aimed at stimulating market self-correcting mechanisms, by developing a legal framework wherein reliable signals of the overall quality of the services provided by securities professionals can be easily sent to the public of investors and, of course, understood by them. Market forces' "invisible hand" would then do the rest of the job.

Notes

1. On the general matter *see*, for example, F. Fabozzi, F. Modigliani, M. Ferri, "Foundations of Financial Markets and Institutions," Prentice Hall (1998); C. Dematté, G. Forestieri, P. Mottura, "Economia degli intermediari finanziari," Egea (1993), 336–339; R. J. Herrig & A. M. Santomero, "The Role of the Financial Sector in Economic Performance," Wharton School W.P. 95–08, University of Pennsylvania, at 9–27.
2. *See*, for example, R. A. Schwartz, "Equity Markets: Structure, Trading and Performance," Harper & Row (1988), at 3–15.
3. F. Fabozzi, F. Modigliani, M. Ferri, *supra* note 1, at 18–19.
4. *See*, for example, J. Cox, R. Hillman, D. Langevoort, "Securities Regulation: Cases and Materials," Asp. Law & Business (1997), Ch. 16–17.
5. *See*, on the distinction, C. Goodhart, P. Hartmann, D. T. Llewellyn, L. Rojas-Suarez, S. R. Weisbrod, (hereinafter: Goodhart et al.) "Financial Regulation: Why, How and Where Now?," Routledge (1998), at 2–9.

6. J. Cox, R. Hillman, D. Langevoort, *supra* note 4, at 1071–1072 and 1143.
7. Cf. F. Allen & A. M. Santomero, “The Theory of Financial Intermediation,” Wharton School W.P. 96–32, University of Pennsylvania (1996); F. Allen & D. Gale, “Innovations in Financial Services, Relationships and Risk Sharing,” Wharton School W.P. 97–26-B, University of Pennsylvania (1997); and most recently, in the same matter, F. Allen & A. M. Santomero, “What do financial Intermediaries Do?,” Wharton School W.P. 99–30-B, University of Pennsylvania (1999).
8. “Many forms of financial intermediation are intimately connected with the provision of information.” For example, “actively managed mutual funds perform research, and the resulting information is used to invest clients’ funds. One of the features of full-service stockbrokers is that they give investment advice as well as executing orders. Similarly with many other types of intermediary, information comes as a part of a package of services.” F. Allen, “Information Contracting in Financial Markets” in S. Bhattacharya & G. Constantinides (eds.), “Financial Markets and Incomplete Information,” New York (1989), at 188.
9. For example, “the advisor may have an incentive to shirk, by not collecting precise information, or the advisor may be giving inappropriate advice, because he does not understand the customer’s hedging needs or risk tolerance.” F. Allen & D. Gale, *supra* note 7, at 3. Therefore, in the relationship with securities professionals, “uninformed customers are [structurally] vulnerable to incompetence, negligence and fraud.” R. J. Herrig & A. M. Santomero, *supra* note 1, at 31.
10. Goodhart et al., *supra* note 5, at 8, noticing that if the distinction between retail and wholesale business is not drawn sufficiently strongly, there is a danger that the latter will be excessively regulated. Similarly, D. T. Llewellyn, “Regulation of Retail Investment Services,” 15 *Economic Affairs* 12, 13 (1995), argues that “[t]he case for regulation and supervision of retail financial services is more firmly based than in the wholesale market.”
11. D. Langevoort, “Selling Hope, Selling Risk: Some Lessons for Law from Behavioral Economics About Stockbrokers and Sophisticated Customers,” 84 *Cal. Law Rev.* 627, 650 (1996).
12. For this *summa divisio*, compare F. Allen & A. M. Santomero (1996), *supra* note 7, at 21.
13. For the opposite conclusion, although based on a different approach to the matter, see D. Langevoort, *supra* note 11, at 655–659 and 696–699 (arguing that there is no reason to distinguish between sophisticated and unsophisticated investors and, above all, to revise the legal standards of broker’s customers protection when these customers are institutional investors).
14. D. T. Llewellyn, *supra* note 10, at 14. On the general matter, see G. A. Akerlof, “The Market for ‘Lemons’: Quality Uncertainty and The Market Mechanism,” 84 *Q.J. Econ.* 488 (1970).
15. See G. J. Benston, “Regulating Financial Markets: A Critique and some Proposals,” London (1998), 57–73.
16. In this regard see, for example, A. I. Ogus, “Regulation: Legal Form and Economic Theory,” Oxford (1994), at 133, and references cited therein.

17. See, for example, R. Padoleski & A. Paces, "Clausole vessatorie e analisi economica del diritto: note in margine alle ragioni (ed alle incongruenze) della nuova disciplina," 1996 *Diritto Privato* 377, 405 (1997).
18. A. Schwartz & L. Wilde, "Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis," 127 *U. Pa. L. Rev.* 630, 659 (1979).
19. That explains why such markets can perform efficiently even in the presence of incomplete and asymmetric information. In such a context, then, regulatory intervention is very seldom justified. A. Schwartz & L. Wilde, *supra* note 18, at 659–662.
20. A. Schwartz & L. Wilde, *supra* note 18, at 662. Notice that the Authors did not even consider credence goods in the discussion of their search model. Based on this, I have elsewhere discussed and criticized Schwartz and Wilde's argument as applied to the problem of standard form contracts. See, in this regard, A. Paces, "The Problem of Standard Form Contracts and Its New Legal Discipline in Italy After the E.C. Directive on Unfair Terms in Consumer Contracts: A 'Law and Economics' Approach," 6th Belgian Workshop on 'Law and Economics' (Gent, March 1996), unpublished; and R. Padoleski & A. Paces, *supra* note 17, at 407–412.
21. D. Langevoort, *supra* note 11, at 639.
22. R. J. Herrig & A. M. Santomero, *supra* note 1, at 31.
23. Goodhart et al., *supra* note 5, at 8. P. G. Mahoney, "Is There a Cure for 'Excessive' Trading?," 81 *Va. L. Rev.* 713, 737 (1995), also observed that "[i]t is easy for those who study financial markets to forget just how daunting the world of [financial intermediation] appears to the neophyte." Actually, in the real world, "[m]any people appear to be poorly informed about basic concepts of risk and return."
24. F. Allen & A. M. Santomero (1996), *supra* note 7, at 24.
25. Following D. Langevoort, one is entering here a largely controversial body of research, which attempts to merge economics with principles derived from psychology, sociology, and anthropology: this is the so-called "behavioral economics." In this perspective, 'loss framing' (otherwise called 'status quo bias' or 'prospect theory': i.e., risk-seeking behavior depending on the individual's perception of the possibility of loss) explains investor's "anxiety" when he or she comes to invest. Securities markets are extremely fashionable, nowadays. So, "fail to invest wisely now, and you will suffer an erosion in financial and reputational capital and a potentially diminished standard of living compared to peers who make the right choices." Under such psychological pressure, while bearing a significant degree of uncertainty due to incomplete information and bounded rationality constraints, a "natural human response [. . .] is to externalize the dilemma [(to invest or not to invest)] by seeking out someone to whom to transfer the responsibility." And the securities professional is the best candidate for this role. Cf. D. Langevoort, *supra* note 11, at 637–641 and 654.
26. "Unethical firms may be able to free-ride on the reputation established by ethical firms and take advantage of the relative ignorance of clients in order to boost profits." R. J. Herrig & A. M. Santomero, *supra* note 1, at 30.
27. Accountability should, in theory, provide a solution to this problem. However, monitoring of employees is costly and thus cannot be pervasive. On the other hand, perfect reputational incentives that guarantee the alignment of the agents' interest

- with those of the firm has not yet been invented. In other words, “full accountability is an illusory ideal.” D. Langevoort, *supra* note 11, at 646.
28. *Id.*, at 658–661.
 29. Behavioral economics teaches us that cognitive biases are as unconscious as extremely easy to rationalize in the individual’s mind. “The search for information is in terms of discovering a plausible rationale for the result rather than dispassionate evaluation of alternatives.” Even if performance with the securities firm has been poor on average, simple chance dictates that some of either the recommendations (maybe just the ones the investor did not follow) or the investment decisions probably did well. Or they may perform well in the near future. “Markets, after all, are volatile and unpredictable” and, in fact, almost any investment is “open-ended”: poor performance is not established forever. *Cf.* D. Langevoort, *supra* note 29, at 655 and 659–660. Investors, on the other hand, are reluctant to realize their losses and tend to hold on their losing investments in the hope of future reversal. *See* T. Odean, “Are Investors Reluctant to Realize Their Losses?,” 53 *J. Fin.* 1775 (1998).
 30. R. J. Shiller, “Human Behavior and The Efficiency of the Financial System,” NBER W.P. No. 6375 (1998), at 13–14.
 31. Mutual fund investors go through historic performance records and, in the mostly fallacious hope of earning abnormal returns in the future, they “churn their mutual funds holdings at a furious rate.” B. De Long, “Noise Risk and Financial Markets,” public lecture available at www.j-bradford-delong.net (1999), at 1. *See also* R. J. Shiller, “Irrational Exuberance,” Princeton (2000), Ch. 10.
 32. There is actually some evidence in this regard. *See* J. A. Chevalier & G. D. Ellison, “Are Some Mutual Funds Managers Better Than Others? Cross-Sectional Patterns in Behavior and Performance,” 54 *J. Fin.* 875 (1999).
 33. Under the efficient market hypothesis, portfolio managers cannot beat the market: any superior performance is dictated by simple chance and cannot persist. Empirical evidence on performance persistence is apparently mixed. However, a recent study demonstrated that an investment strategy based on popular mutual fund rankings does not produce superior performance. *See* M. L. Detzler, “The Value of Mutual Fund Rankings to the Individual Investor,” University of Massachusetts, Boston (1999), unpublished W.P. downloadable from S.S.R.N. Electronic Library (www.ssrn.com). *See also*, on this point, H. Hu, “Faith and Magic: Investor Beliefs and Government Neutrality,” 78 *Tex. L. Rev.* 778, 805 (2000), at note 154, and references cited therein.
 34. H. Hu, *supra* note 33, at 842–849. *See also* G. J. Alexander, J. D. Jones, P. J. Nigro, “Mutual Fund Shareholders: Characteristics, Investor Knowledge, and Source of Information,” (1999), unpublished W.P. available at www.occ.treas.gov/wp97%ZDIZ.htm.
 35. D. Langevoort, *supra* note 11, at 664.
 36. J. A. Chevalier & G. D. Ellison, “Risk Taking by Mutual Funds as a Response to Incentives,” 105 *J. Pol. Econ.* 1167 (1997).
 37. B. Barber, T. Odean, “Online Investors: Do the Slow Die First?,” University of California, Davis (1999), unpublished W.P. available at www.gsm.ucdavis.edu/~odean. *See also* S. Gervais, T. Odean, “Learning to Be Overconfident,” University

- of California, Davis (1999), unpublished W.P. available at www.gsm.ucdavis.edu/~odean.
38. See, for example, J. M. Salmanowitz, “Broker Investment Recommendations and the Efficient Capital Market Hypothesis: A Proposed Cautionary Legend,” 29 *Stanford L. Rev.* 1077, 1084 (1977); A. S. Jacobs, “The Impact of Securities Exchange Act Rule 10b-5 on Brokers-Dealers,” 57 *Cornell L. Rev.* 869, 876 (1972); L. Loss, “Fundamentals of Securities Regulation,” Boston (1983), 946–958.
 39. See the leading case *Charles Hughes & Co. V. SEC*, 139 F.2 days 434 (2nd Cir. 1943).
 40. See IOSCO Resolution on International Conduct of Business Principles, Nov. 1990, Principles n. 1 and 2.
 41. See Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field, art. 11, par. 1.
 42. Compare A. S. Jacobs, *supra* note 38, at 880 with D. Langevoort, *supra* note 11, at 688–691.
 43. “From its origin in cases involving implied representation of a reasonable trading price, the theory has evolved to encompass various additional representations.” A. S. Jacobs, *supra* note 38, at 879; see also D. Langevoort, *supra* note 11, at 691.
 44. See J. M. Salmanowitz, *supra* note 38, at 1085. In terms of IOSCO International Conduct of Business Principles, the “know-the-security” rule corresponds to the obligation “to acquire and to provide information, including information about risks, needed by the customer to make informed investment decisions” (Principle n. 5). See also Directive 93/22/EEC, art. 11, par. 1.
 45. See IOSCO Resolution on International Conduct of Business Principles, Nov. 1990, Principle n. 4, and Directive 93/22/EEC, art. 11, par. 1. See also J. M. Salmanowitz, *supra* note 38, at 1085–1086 and references cited therein.
 46. J. M. Salmanowitz, *supra* note 38, at 1086; and A. S. Jacobs, *supra* note 38, at 879.
 47. For this approach, see S. B. Cohen, “The Suitability Rule and Economic Theory,” 80 *Yale L. J.* 1604, 1626 (1971).
 48. D. Langevoort, *supra* note 11, at 688–695.
 49. Some of them have been already mentioned in the previous section (see *supra*, notes 25, 29, and accompanying text).
 50. For all quotations in the text, see D. Langevoort, *supra* note 11, at 693–694.
 51. *Hecht v. Harris Upham & Co.*, 430 F.2 days 1202 (2nd Cir. 1970). In addition, see J. M. Salmanowitz, *supra* note 38, at 1087.
 52. “[A] finding of unsuitability in cases of ‘churning’ implies that no reasonable basis existed for believing that the securities purchased would produce an economic advantage sufficient to offset the broker’s commission.” S. B. Cohen, *supra* note 47, at 1632. On the other hand, “[o]ne can easily envision a single successful security which is bought and sold an unreasonable number of times, thereby relieving the client of gains and improperly enriching the broker.” *Nesbit v. McNeil*, 896 F.2 days 380 (9th Cir. 1990).
 53. See in these terms, for example, in Italy, CONSOB Reg. n. 11522/98, art. 28, par. 1. Similar rules have been enacted, for instance: in Germany, by the BAWE, prohibiting intermediaries from performing or recom-

mending a number of transactions “highly disproportionate” in the light of customer’s interests (*See* par. 5.1 of the Guidelines pursuant to Section 35, par. (2) of the Securities Trading Act–WpHG–of 26/7/1994);

in the United Kingdom, by the IMRO, prohibiting intermediaries from performing or recommending any dealing that would be regarded as “too frequent in the circumstances,” taking into account:

- (a) “a Customer’s investment objectives as previously notified to the firms”; and
- (b) “the understanding which a customer may reasonably be expected to have of the Firm’s policy in relation to its management of the Customer’s assets and Investments.”

(IMRO Rulebook ed. 1997, Ch. 2, Sect. 3, par. 3.11.(1)).

54. This suggestive expression was first used in 1996 by Alan Greenspan, President of the US Federal Reserve Board. *See* R. J. Shiller, *supra* note 31.
55. To be sure, as I am going to point out later on, there is some reason to believe it might be not completely so. *See infra*, text accompanying notes 88–89. About on-line trading by individual investors, *see* B. Barber, T. Odean, *supra* note 37.
56. J. A. Chevalier & G. D. Ellison, *supra* note 36.
57. J. Dow & G. Gorton, “Noise Trading, Delegated Portfolio Management and Economic Welfare,” Wharton School W.P. 95–10, University of Pennsylvania (1995), at 1. Noise trading is perhaps one of the most puzzling issues under debate in financial economics. One is not going to enter here into such a complex debate, for it would lead us far away from the topic under discussion. However, the noise trading theory results are particularly helpful in understanding securities professionals’ incentive to overtrade and related effects on securities market efficiency. To such an extent, the same theory deserves some closer examination.
58. J. Dow & G. Gorton, *supra* note 57, at 1. *See also* J. M. Keynes, “The General Theory of Employment, Interest and Money,” 159–60 (1st Harbinger ed. 1964).
59. S. Grossman & J. Stiglitz, “On the Impossibility of Informationally Efficient Markets,” 70 *Am. Econ. Rev.* 393, 396 (1980).
60. R.J. Gilson & R. H. Kraakman, “The Mechanisms of Market Efficiency,” 70 *Va. L. Rev.* 549, 578 (1984).
61. S. Grossman & J. Stiglitz, *supra* note 59, at 393.
62. *See* D. Diamond & R. Verrecchia, “Information Aggregation in a Noisy Rational Expectations Economy,” 9 *J. Fin. Econ.* 221 (1981).
63. *See* F. Black, “Noise,” 41 *J. Fin.* 529 (1986).
64. “Hedging and liquidity seem likely to explain only a small fraction of this trade, and it seems unreasonable to suppose that a small amount of such uninformed trade can support a large amount of informed trade.” J. Dow & G. Gorton, *supra* note 58, at 2.
65. *See* E. F. Fama, “The Behavior of Stock Market Price,” 38 *J. Bus.* 34 (1965); and M. Friedman, “The Case for Flexible Exchange Rate,” *Essays in Positive Economics*, Chicago (1953).
66. R. Bhushan, D. P. Brown, A. S. Mello, (henceforth: Bhushan et al.) “Do Noise Traders ‘Create Their Own Space’?,” 32 *J. Fin. Quant. An.* 25 (1997).

67. B. De Long, A. Shleifer, L. Summers, R. Waldman (hereinafter: De Long et al. 1990), "Noise Trader Risk in Financial Markets," 98 *J. Pol. Econ.* 703 (1990); B. De Long, A. Shleifer, L. Summers, R. Waldman (hereinafter: De Long et al. 1991), "The Survival of Noise Traders in Financial Markets," 64 *J. Bus.* 1 (1991); A. Shleifer, L. Summers, "The Noise Trader Approach to Finance," 4 *J. Econ. Persp.* 19 (1990).
68. Actually most recent contributions in the field of so-called "behavioral finance" focus on explaining why they are not. See, for example, R. J. Shiller, *supra* note 30.
69. B. De Long, *supra* note 31, at 3.
70. A. Shleifer, L. Summers, *supra* note 67, at 25; see also De Long et al. 1990, *supra* note 67, at 717.
71. See De Long et al. 1991, *supra* note 67, at 1–2, and references cited therein. See also, for example, F. Black, *supra* note 63.
72. De Long et al. 1990, *supra* note 67, at 717.
73. And yet, the last model suggests that, even if they do affect prices, noise traders always survive as a group, "in a world in which investors occasionally 'mutat[e]' and chang[e] from noise trader to rational investor or vice versa." De Long et al. 1991, *supra* note 67, at 17.
74. Bhushan et al., *supra* note 66, at 27–29.
75. I therefore basically agree with Professor Fama when he challenges the literature on long-term return anomalies, for such studies never provide any "specific alternative to market efficiency." They suggest, rather, a general idea of market inefficiency, which is extremely vague and thus unacceptable as such. E. F. Fama, "Market efficiency, long-term returns, and behavioral finance," 49 *J. Fin. Econ.* 283, 284 (1998).
76. L. A. Stout, "Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation," 81 *Va. L. Rev.* 611 (1995).
77. In Stout's opinion, imperfectly and heterogeneously informed traders learn the deficiencies in their knowledge and trading skills only through making repeated losing trades. Once traders, who consistently lose, decide to finally exit the game, new generations of traders continuously enter and make the same mistake as their predecessors. "In a world without financial intermediaries, the investor who attempt to make money by speculating in stocks may need time to discover her relative trading ability (after all, given stocks' general volatility, how can the unfortunate trader who loses in a particular year conclude with certainty whether he or she was the victim of overconfidence or simple bad luck?). In a world where investors can choose to rely not only on their own trading skills but also on the skills of a broker or fund manager, however, lessons that tend to take years can take a lifetime." *Id.*, at 645.
78. For all quotations in the text, see P. G. Mahoney, *supra* note 23, at 716 and 736.
79. "If the manager's compensation is directly related to investor's perceptions of his or her ability, the manager will then trade more frequently than is justified on the basis of his or her private information." B. Trueman, "A Theory of Noise Trading in Securities Markets," 43 *J. Fin.* 83 (1988).
80. "[S]ome of the portfolio managers' trades are not motivated by changes in information, liquidity shocks or risk sharing. Instead they are churning their clients' portfolios

- in the hope of a speculative profit.” F. Allen & G. Gorton, “Churning Bubbles,” 60 *Rev. Econ. St.*, 813 (1990).
81. This provides also a “rational” explanation of speculative (“churning”) bubbles. A “bubble” is defined to be “a price path supported by the trading of agents who are ‘willing to pay more for [the security] than they would pay if obliged to hold it [to horizon].’” “Bad” portfolio managers are then inclined to “purchase securities which are trading above their fundamental provided there is some chance of a capital gain even though they know that there is a good chance they will lose their investors’ money when the bubble crashes.” *Id.*, at 815.
 82. J. Dow & G. Gorton, *supra* note 57, at 2.
 83. As Dow and Gorton explain:

“If the contract allows a reward for not trading, portfolio managers may simply do nothing; the contract may either attract incompetent managers or lead competent managers to shirk. If this makes it impossible to reward inactivity, and limited liability prevents punishing ex post incorrect decisions, then the optimal contract may induce trading by the portfolio manager which is simply a gamble to produce a satisfactory outcome by chance.” (*Id.*, at 2).
 84. Economic theory of financial intermediation has often treated delegated portfolio management as economically equivalent to direct sale of information, especially as far as agency problems are concerned. True, “instead of managing the portfolio, the agent could simply make trading recommendations. The principal could then manage the portfolio on the basis of this recommendation, making a payment to the agent depending on the accuracy of the recommendation.” *See*, J. Dow & G. Gorton, *supra* note 57, at 17, and the literature cited therein.
 85. M. L. Detzler, *supra* note 33, at 22.
 86. P. G. Mahoney, *supra* note 23, at 737.
 87. J. Dow & G. Gorton, *supra* note 57, at 2, and references cited therein. In a much earlier study, De Long et al. also noticed that “[i]nstitutional investors are more prone to churn portfolio than individual investors, and are notoriously reluctant to pursue a passive investment strategy.” B. De Long, A. Shleifer, L. Summers, R. Waldman, “The Economic Consequences of Noise Trade,” NBER W.P. No. 2395 (1987), at 1. Evidently, however, they did not investigate further the problem as potentially arising from “rational” conflicts of interest between such institutions and their customers.
 88. T. Odean, “Do Investors Trade Too Much?,” 89 *Am. Econ. Rev.* 1279 (1999). *See* also B. Barber, T. Odean, “The Courage of Misguided Convictions: The Trading Behavior of Individual Investors,” University of California, Davis (1999), unpublished W.P. available at www.gsm.ucdavis.edu/~odean.
 89. B. Barber, T. Odean, *supra* note 37, at 29–30.
 90. J. Dow & G. Gorton, *supra* note 57, at 12–16.
 91. B. De Long, A. Shleifer, L. Summers, R. Waldman, “The Size and Incidence of the Losses from Noise Trading,” 44 *J. Fin.* 681 (1989); A. Shleifer, L. Summers, *supra* note 67, at 31.
 92. *See*, in this regard, J. Dow & G. Gorton, *supra* note 57, at 1.
 93. P. G. Mahoney, *supra* note 23, at 744.

94. As a general matter, one should be suspicious of a “regime in which a confident law-and-economics approach is used to interfere with consumer choice by policing claims of investment advisers and brokers.” That would be—for instance—prohibiting intermediaries from engaging in particular trading strategies, or limiting the manner in which they may be compensated. *See* S. Levmore, “Efficient Markets and Puzzling Intermediaries,” 70 Va. L. Rev. 645, 656–657 (1995).
95. Evidence of such strategies, as well as of the underlying studies and financial analyses, must be kept by the intermediary for allowing ex-post verification by the regulatory Agency. *See* Italian CONSOB Reg. n. 11522/98, art. 43, par. 1 and 2.
96. P. G. Mahoney, *supra* note 23, at 744.
97. A. Schwartz & L. Wilde, *supra* note 18, at 662.

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