

The Legal Supervision of Intelligent Securities Investment Consultants in the View of Chinese Law

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Abstract

Intelligent securities investment consultant is an important product under the background of intelligent finance, but the relevant laws and regulations in China are not clear about this, and there are many problems in the promotion of intelligent securities investment consultant. This paper will analyze the reasons for the disordered development of China's intelligent securities investment consulting market and put forward legal supervision suggestions from three aspects: the overview of intelligent securities investment consulting, the necessity of legal supervision of intelligent securities investment consulting and the suggestions of legal supervision of intelligent securities investment consulting, in order to provide suggestions for the stable development of China's financial market.

Keywords

Intelligent securities investment consultant; legal supervision; market access; data security.

1. OVERVIEW OF INTELLIGENT SECURITIES INVESTMENT CONSULTANTS

1.1. The Definition of Intelligent Securities Investment Consultants

With the development of financial science and technology, the combination of traditional financial industry with artificial intelligence and big data is deepening day by day, thus a new era of financial format, intelligent finance, has emerged. Intelligent securities investment consultant is an important product under the background of intelligent finance. Intelligent securities investment consultant, as its name implies, refers to a securities investment consultant system based on Modern Portfolio Theory (MPT) and provided with technical support by big data and AI artificial intelligence algorithm. It provides personalized securities investment advice for financial consumers by analyzing the professional nature, income source, consumption preference, investment preference, actual risk-bearing capacity and other aspects of financial consumers.

1.2. The Development of Intelligent Securities Investment Consultants

In 2008, the U.S. financial crisis made the financial and securities markets shake obviously, the credibility of traditional financial institutions was generally questioned, and the U.S. financial supervision department also implemented stricter supervision measures on the financial industry. It was also this year that Betterment, the first digital financial company, was established. Financial consumers gradually focused on passive index products of exchange-traded funds (ETF) in order to achieve greater profits or minimum losses. Therefore, some scholars also called 2008 "the first year of intelligent investment and care" [1]. In recent years, China's economic development has been advancing steadily. Residents' disposable income has

increased year by year. At the same time, with the evolution of new forms of economic and social development in "internet plus", the theme of intelligent securities investment consultants has been introduced into China. Under this background, traditional financial institutions and new smart finance have begun to lay out the field of smart securities investment consultants [2]. The main types are: 1. Smart securities investment advisory systems developed by new smart finance technology enterprises, such as Blue Ocean Wealth; 2. Intelligent securities investment consulting systems developed by traditional financial institutions, such as Capricorn Investment of China Merchants Bank; 3. Intelligent securities investment consulting systems developed by modern Internet enterprises, such as JD.com. However, it is not difficult for the author to find through downloading relevant APP into various intelligent securities investment advisory systems. The so-called intelligent securities investment advisory system includes not only securities investment proposal schemes, but also securities trading systems, private investment advisory and other sectors, which is beyond the scope of simply providing securities investment proposals.

1.3. The Legal Relationship of Investment Consultation of Intelligent Securities Investment Consultants

In the traditional legal relationship of securities investment consulting, the relationship between securities investment companies and securities investment consultants (natural persons) is labor relationship, the relationship between securities investment consultants (natural persons) and securities investors is investment consulting legal relationship, and securities investment consultants (natural persons) have dual identities, they are both employees of securities investment companies and trustees of securities investors. In this relationship, the obligations of securities investment consultants (natural persons) are due diligence obligations (investor suitability obligations and best execution obligations) and loyalty obligations (I believe that maximizing the profits of securities investors into their own professional criteria is the duty of loyalty). Securities investors, as clients, of course enjoy the right to receive securities investment consulting services provided by investment consultants (natural persons) of securities investment companies[3].

However, the rise of intelligent securities investment consultants has led to a problem: the intelligent securities investment consultants are not natural persons, resulting in the absence of the main body in the legal relationship obligation of investment consultation. This shows that the investment consultation legal relationship of the intelligent securities investment consultant is a complicated legal relationship. First of all, it is the person in charge of system development and modeling who injects soul into the intelligent securities investment consulting system. The person in charge of system development and modeling is bound to be the financial institution practitioners with rich financial knowledge and investment and financial management experience. In other words, the person in charge of system development modeling is likely to be the investment consultant (natural person) of many securities investment companies. Therefore, the author believes that the legal relationship of investment consultation of intelligent securities investment consultants still exists, but the responsibilities and obligations of investment consultants (natural persons) are ahead of them. Finally, I have to mention the algorithmic programmers. The author thinks that their position is neutral and their duty is to compile algorithmic programs according to the instructions of the person responsible for system development modeling. They only provide technical support for the whole intelligent securities investment consulting system. Therefore, they do not need the same diligence and loyalty obligations as the person responsible for system development modeling.

2. NECESSITY OF LEGAL SUPERVISION OF INTELLIGENT SECURITIES INVESTMENT CONSULTANTS

2.1. There Is A Conflict Between Discretionary Authorization and Prohibition of Discretionary Authorization for Intelligent Securities Investment Consultants

In the intelligent securities investment consulting system of the United States, discretionary authorization is a service item commonly used in the industry. For example, Wealthfront, the world's largest online financial consulting company, first opens an account with the company and transfers the shares it holds to Wealthfront. Wealthfront gradually sells the shares without commission and with low tax according to the Single-Stock Diversification Service. Then the funds are transferred to a securities brokerage company called Apex Clearing, which accepts the entrustment of customers, determines the ETF investment proportion according to the Mean Variance Optimization, and purchases the ETF portfolio on behalf of customers [4]. At the same time, real-time monitoring of the market is carried out, and the threshold method is adopted to adjust positions in time to determine the optimal investment portfolio and improve the asset returns of customers. It can be seen that the original operation mode of the intelligent securities investment consulting system is to accept the full authorization of securities investors and provide all-round investment and consulting services for securities investors.

However, China's "Securities Law"[5] and "Interim Provisions on Securities Investment Consultancy Business"[6] stipulate that only customers can make investment decisions themselves, and securities investment consultants are only used to assist in decision-making, and it is forbidden to fully entrust securities investment consultants. Therefore, within the scope permitted by Chinese law, intelligent securities investment consultants can only provide securities investment advisory services just like investment consultants (natural persons) and cannot directly conduct securities investment on behalf of clients. It can be said that it runs counter to the operation mode of the intelligent securities investment advisory system and will lead to another problem: recommending securities investment projects only to financial consumers may breed chaos in which intermediaries disrupt the securities investment market and turn into disguised promotion of securities investment products. Financial consumers will ultimately pay for this.

It is worth mentioning that if we break the legal taboo and allow full delegation, we will also bring about a new problem-the emergence of agency between the two parties. Securities investment companies are "economic agents". Once full authorization is allowed, when securities investors are entrusted to carry out mixed ETF portfolios, it is inevitable that securities investment companies will mix their products. At the same time, securities investment companies also assume the responsibility of asset management. Obviously, this is "internal digestion", that is, the phenomenon of agency by both parties. In Chinese law, agency by both parties is an abuse of agency. Both parties are prohibited from acting in the General Provisions of the Civil Law of the People's Republic of China [7] and the Economic Contract Law of the People's Republic of China [8]. To sum up, the conflict between discretionary authorization and prohibition of discretionary authorization for intelligent securities investment consultants is a difficult problem to be solved urgently.

2.2. Lack of Regulations on Market Access System for Intelligent Securities Investment Consultants

2.2.1. Lack of regulations on the admission system for practitioners

Due to frequent market turmoil in intelligent securities investment advisors (mainly for stock recommendation software), from 2010 to 2012, China Securities Regulatory Commission successively issued "Interim Provisions on Securities Investment Advisors" and "Interim Provisions on Strengthening Supervision of Securities Investment Advisors Using" Stock

Recommendation Software ".It stipulates that obtaining a securities investment consulting business qualification license is a prerequisite for recommending or selling intelligent securities investment consulting systems to financial consumers, and forbids practitioners who have not obtained a securities investment consulting business license from recommending or selling intelligent securities investment consulting systems to financial consumers. However, intelligent securities investment consultants are new things based on big data and AI artificial intelligence algorithms. Undoubtedly, they should have more comprehensive, stricter and more specific access rules. In order to obtain the license of securities investment consulting business, only the requirements of securities practitioners, minimum registered capital, fixed place and articles of association are required. These requirements are not sufficient to ensure that the institutions have sufficient technical and financial capabilities to operate and develop a high-quality intelligent securities investment consulting system.

2.2.2. Lack of regulations on algorithm access system

It is precisely because of the information asymmetry in the financial securities market and the lack of professional investment knowledge for most financial consumers that securities investment consultants with professional knowledge and skills have emerged, and the state also has a special professional entrance examination for this: the competency examination for securities investment consultants. China's "Securities Law"[9] stipulates that the qualification of securities investment consultants requires not only academic qualifications (bachelor degree or above) but also working experience (more than two years in securities business). However, the intelligent securities investment adviser is not a natural person, and the competency test for securities investment consultants is meaningless to him. Financial consumers regard the intelligent securities investment adviser as a securities investment adviser (natural person). If the algorithm is not reviewed and supervised, it is impossible to ensure that the intelligent securities investment adviser system in the market has the professional knowledge and analysis ability of the professional securities investment adviser (natural person). The professional knowledge of securities investment advisors (natural persons) is embodied in the construction of algorithm models in the intelligent securities investment advisor system, and the analysis ability of securities investment advisors (natural persons) is embodied in the analysis of big data methods in the intelligent securities investment advisor system. If there is no admission standard for algorithms, the intelligent securities investment advisor system used by financial consumers is likely to be a "test piece" with immature algorithm models and immature big data analysis methods. Then the securities investment advice given at the end may also have major mistakes, bringing misleading cognition to many financial consumers using the system, and finally the impact on the entire financial market can be imagined.

2.3. Lack of Personal Data Security Protection for Financial Consumers

In recent years, the phenomenon of stealing and reselling consumer's personal data has been banned repeatedly. However, in order to give personalized investment and financial management advice to financial consumers, intelligent securities investment consultants are bound to collect personal information of financial consumers, such as identity information, work unit, family information, income information, investment preference, risk-bearing capacity and other private information. When assisting financial consumers to invest, they are bound to have financial consumers' bank accounts, transaction flow, investment product details, etc. The author believes that the network firewall of the intelligent securities investment consultants of most professional institutions is not indestructible and may even be a form of firewall that "prevents the gentleman from preventing the villain"[10]. Assuming that the financial consumer information stored by the intelligent securities investment consultant is stolen and leaked, the harm caused is large-scale and extensive.

At the same time, China's laws are blank on the data security supervision of securities investment consulting agencies. They neither stipulate how the internal control of securities investment consulting agencies can protect the personal data security of financial consumers, nor stipulate how relevant government agencies supervise the personal data security of financial consumers of securities investment consulting agencies. The lack of internal and external supervision has resulted in the securities investment consulting agencies not paying attention to the technology and work of financial consumers' personal data security, thus greatly increasing the possibility of financial consumers' personal data being leaked.

3. SUGGESTIONS ON LEGAL SUPERVISION OF INTELLIGENT SECURITIES INVESTMENT CONSULTANTS

3.1. Authorized Compliance Smart Securities Investment Consultants

The original operation mode of the intelligent securities investment consultant system is to accept the discretionary authorization of securities investors, which is a significant difference between the intelligent securities investment consultant and the traditional securities investment consultant. Therefore, the adoption of discretionary authorization is a key link of the intelligent securities investment consultant [11]. However, China's ban on discretionary authorization runs counter to the operation mode of the intelligent securities investment advisor system, which makes the intelligent securities investment advisor unable to give full play to its "intelligence" and can only recommend securities investment products. As a matter of fact, China's current smart securities investment consultants do, recommending only securities investment products, but will execute transactions through third-party platforms. This is also an important factor that the operating cost of China's smart securities investment consultants is higher than that of developed countries such as the United States.

This model in China will also give rise to "moral distrust" between smart securities investment consultants and third-party securities economic platforms and financial consumers, who have good reasons to suspect that smart securities investment consultants and third-party securities economic platforms are colluding with each other. Therefore, some scholars believe that article 171 of the Securities Law of the People's Republic of China should be deleted for the development of intelligent securities investment consultants, but the author thinks that this move is too rash and undesirable. The author's thinking is that the state has issued relevant regulations or judicial interpretations, allowing individual compliant smart securities investment consultants to be fully authorized, and confirming the legitimacy of the full authorization of smart securities investment consultants. Specifically, the smart securities investment consultants in the market are divided into two types: one is to allow qualified smart securities investment consultants to have both a smart securities investment advisory license and an asset management license, and the smart securities investment consultants who hold both licenses have full authorization. One is to hold only an intelligent securities investment consulting license and only conduct investment consulting.

3.2. Improve the Market Access System for Intelligent Securities Investment Consultants

3.2.1. Improve the Access System for Business Organizations

The Securities and Exchange Commission of the United States stated in its "Guide to Smart Investment consultants" that "smart investment consultants" that provide financial consumers with discretionary asset management services through algorithmic procedures under the support of modern technology should be registered as registered investment consultants with the Securities and Exchange Commission of the United States [12]. Similarly, the market access system for smart securities investment consultants should be stipulated in China. The regulations include that the actual controller of an intelligent securities investment consultant

should obtain a securities investment consulting license, while the intelligent securities investment consulting system should also obtain an intelligent securities investment consulting license. The reason is that the current smart securities investment consulting market is full of tricks. Whether it is a new type of smart financial technology innovation enterprise, a traditional financial institution or a modern Internet enterprise, most smart securities investment consulting and development enterprises emphasize efficiency rather than taking risk control as the first priority in system development in order to seize the market as soon as possible. As a result, almost all kinds of intelligent securities investment advisory systems are "premature babies", and their function is only to use the name of "intelligent securities investment advisor" to recommend securities investment projects or other projects in disguised form. It is stipulated that the actual controller of an intelligent securities investment consultant shall obtain a securities investment consulting license (at present, China has issued 84 securities investment consulting licenses, and no separate securities investment consulting license has been issued since 2014), which greatly increases the threshold for entering the intelligent securities investment consulting market, prevents enterprises without sufficient capital operation capability and system development capability from entering the intelligent securities investment consulting market, and is also conducive to the stable and healthy development of the intelligent securities investment consulting market.

3.2.2. Establish an algorithm access system

The author believes that the admission system of the algorithm should be established, that is, the prior supervision of the algorithm. Although some foreign scholars believe that the advance supervision of algorithms is not conducive to the diversified development of algorithms, and may lead to convergence of algorithm models caused by professional institutions in order to cater to the favor of regulatory agencies on algorithms[13], resulting in the failure risk of scale, namely "risk derived from legal regulation risk". However, the author believes that the establishment of the algorithm access system is based on the consideration of financial market security. The number of clients served by intelligent securities investment consultants is large-scale, not a few clients served by securities investment consultants (natural persons). Therefore, the harmfulness caused by the wrong algorithm of intelligent securities investment consultants is also large-scale, which is likely to cause a chain reaction in the financial market, causing financial market shocks. Therefore, it is necessary to supervise the algorithm of intelligent securities investment consultants in advance. However, the convergence of algorithm models caused by the prior supervision of algorithms can also be avoided through institutional design.

First of all, what needs to be examined is the scientific nature of the algorithm model: it is necessary to consider whether the financial principles and calculation formulas used by the intelligent securities investment advisory algorithm are recognized achievements that have been tested in practice, whether the intelligent securities investment advisory algorithm has undergone sufficient analysis and study of high-quality big data, and whether the suggestions given by the algorithm conform to the provisions of laws and regulations. Secondly, it is clear about the way to supervise the algorithm in advance. For example, the Australian Securities Investment Commission (ASIC) does not directly examine the algorithm, but requires the professional examination report issued by the practitioners themselves. The Australian Securities Investment Commission (ASIC) will examine the examination report, which is also worth learning from China.

3.3. The Establishment of Financial Consumer Personal Data Security Protection System

The establishment of a personal data security protection system for financial consumers depends on both internal wind control and external supervision. Because the securities investment advisory body is the actual operator of the intelligent securities investment advisor, and all the personal data of financial consumers are stored in the intelligent securities

investment advisor system, the securities investment advisory body has greater responsibilities in the personal data security protection of financial consumers. In the construction of internal wind control, a data security protection system should be established, and compliance review should be integrated into the process of collecting, using, storing, encrypting and decrypting consumer personal data. At the same time, a 24-hour real-time monitoring system for data security, an encryption and filing system for personal data of financial consumers and an emergency plan for data leakage shall be established. When personal data of financial consumers have to be provided to third-party institutions, the data security protection system and the data security protection review system of third-party institutions shall be strictly implemented.

In the external wind control supervision, although China has not yet issued a personal information protection law for financial consumers. However, the China Securities Regulatory Commission may formulate regulations on the protection of personal information of financial consumers, clarify its responsibilities and working rules for data security protection of securities investment consulting agencies, inspect the firewall of the intelligent securities investment consulting system from time to time, and conduct random checks on the compliance review of securities investment consulting agencies from time to time. It is believed that through institutional design and implementation in the work, the personal data security of financial consumers will be better protected.

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- [6] See Article 12 of the Interim Provisions on Securities Investment Consultancy Business, "Securities Investment Consultants shall not make investment decisions on behalf of clients".
- [7] See Article 168 of the General Provisions of the Civil Law of the People's Republic of China, "An agent shall not carry out civil legal acts with himself in the name of the principal, except with the consent or ratification of the principal. An agent may not carry out civil legal acts in the name of

the principal and other persons acting on his behalf at the same time, except with the consent or ratification of both parties acting on his behalf. "

- [8] See Article 7 (3) of the Economic Contract Law of the People's Republic of China, "The contract signed by the agent in the name of the principal is invalid".
- [9] See Article 170 of the Securities Law of the People's Republic of China, "Personnel engaged in securities service business of investment consulting agencies, financial consulting agencies and credit rating agencies must have professional knowledge of securities and at least two years of experience in securities business or securities service business".
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