The promotion of Exchange Traded Funds: From performativity to socially embedded market devices

Laurent DEVILLE, CNRS research fellow (GREDEG - Nice Sophia-Antipolis University) and Associate professor (EDHEC business school), laurent.deville@gredeg.cnrs.fr

Mohamed OUBENAL, PhD Student IRISSO-ORIO (CNRS - Paris-Dauphine University), mohamed.oubenal@dauphine.fr

Abstract: This article studies the construction and development of the market for Exchange Traded Funds in France between 2000 and 2009. Building on a longitudinal qualitative study of the French ETF market, we present the multiple regulatory and institutional challenges that had to be tackled before ETFs could meet success in France. We analyze the product itself as a collection of detached and reattached entities and show that those market devices are not neutral techniques. Rather, they are used within power relation to convince reluctant parties. This article emphasizes the role played by the promotion of these products and argues that market devices are socially embedded.

Keywords: performativity, market devices, financial innovation, promotion, social embeddedness, Exchange Traded Funds.

Draft: please do not quote or circulate without permission. We would appreciate comments.
Introduction

The capacity of financial engineers to develop new products seems to find no limit. After a very fertile era in the mid 60’s to mid 80’s that saw the development of a huge deal of innovations\(^1\) among which can be noted the advent of index futures and options. Miller (1986) argued that this extraordinary period had certainly come to an end. As shown by Tufano (2003) in his review of financial innovation, the next 30 years were about to contradict him. New forms of financial products, either simple or exotic derivatives, equity-like products appear regularly. Tufano defines financial innovation as “the act of creating and then popularizing new financial instruments as well as new financial technologies, institutions and markets.” It is thus not only a matter of defining products paying new types of cash-flows, the way products are traded is also of importance.

Exchange Traded Funds (ETFs), that started trading in the US in the 90s and in Europe after 2000, are a typical example of such innovations. As index funds, they aim at replicating the performance of a benchmark index as closely as possible. However, contrary to conventional mutual funds, ETFs are issued by asset managers and listed on an exchange to be traded intraday. Hence, these products mix the characteristics of both funds and regular stocks. The innovation here relies in the trading structure that has been set in place to allow for an efficient trading of funds in a continuous basis.

More generally, given the way these products may impact the whole society, one may wonder how they proceed to set a new standard for investment strategies and trading, if ever. To answer this question, a field of research that could be named, after Godechot (2009), the ‘Social Studies of Finance’ (SSF) has emerged in the 90’s. These studies explore financial theories and market practices from a social sciences’ perspective. Building on sociological and anthropological theories and methodologies they analyse different financial products and markets.

\(^1\) In his analysis of past and future financial innovation, Miller (1986) gives the following, non exhaustive, list of new products: “negotiable CDs, Eurodollar accounts, Eurobonds, sushi bonds, floating-rate bonds, puttable bonds, zero coupon bonds, stripped bonds, options, financial futures, options on futures, options on indexes, money market funds, cash management accounts, income warrants, collateralized mortgages, home equity loans, currency swaps, floor-ceiling swaps, exchangeable bonds”.

2
Among these works, some specifically study the way new products and markets emerge and get adopted or fail to achieve success. MacKenzie and Millo (2003) study the CBOE and the effect of the Black-Scholes-Merton option pricing formula on financial derivatives trading. Millo (2004) more specifically addresses the origins of index-based derivatives, for which the underlying instrument is not deliverable. MacKenzie (2004) and Lepinay (2007), building on very different theories, explore the case of related theories and products, portfolio insurance and capital guaranteed products, and explain their relative failure. A more recent financial innovation, namely CDS, is the object of Huaault and Rainelli (2009) that shows how the market may be shaped in an attempt to overcome the ambiguities inherent to the product.

In this paper, we study the way ETFs have been introduced and promoted in France since their introduction in 2001. ETFs are certainly one of the most spectacular successes in financial markets since the advent of financial futures. Our paper is related to MacKenzie (2006) work addressing the way in which financial theory has impacted market practices. More important in our article is the case of index funds that were developed as a reply to the development of modern portfolio theory. Indeed, ETFs find their roots in the same theory stating the superiority of full and simple portfolio diversification over active management. Our paper differs in many ways from previous works on financial innovation, not only in the product that is studied, ETFs that present several specificities, but also on which aspect we focus on. First, most studies are interested in the first appearance of a product. We look at the way a product already existing in a market is adopted and possibly transformed when it is traded in another exchange with different culture and regulation. Second, if ETFs are listed on regulated exchanges, there is also an over the counter market that attracts most of the institutional investors trading. Hence ETFs combine some of the characteristics and complexity of both trading systems. Finally, we consider that the promotion of ETFs played a key role in the structuring of the market.

Building on the concept of market devices (Muniesa et al. 2007, Callon and Muniesa 2005) we study the design and promotion of ETFs in France. We consider the product itself as an agencement of different entities. The conditions of possibility of the ETF market lay in Modern Portfolio Theory (Markowitz 1952, Sharpe 1964). Setting up an exchange platform where the offer and demand can meet was also important. However, promoters of ETFs in France had to convince reluctant parties about the importance of these new products. We
argue that creating an adequate structure for the market does not guarantee its success and that promotional activities are crucial in this process in financial markets. This is done through devices such as: the classification and one-to-one meetings with journalists, sending of press release or choosing a Public Relation agency to manage the relationship with the press. Those devices are combined with a social control exerted on journalists that includes: calling journalists to order whenever they deviate from the promotional discourse and financial pressure through advertisement.

The first section provides a literature review on the promotion of financial products. In the second section we describe our qualitative methodology and the data we gathered. The third section is devoted to the design of ETFs in general and the way they have been developed in France. We then analyze in a fourth section the way promotional activities shape the market. We conclude on discussing why we find it necessary to articulate the notion of market devices with that of social dimension.

1- Performativity, market devices and social embeddedness in financial markets

1-1- Performativity and market devices


The word performative was used by Austin (1962) to qualify the statements that create or transform the reality through the very act of uttering. The callonistic notion of performativity enriched the interest for language (Austin 1962) with a focus on techniques and devices (Callon 2007). Based on the Actor-Network theory (Latour 2005) it explains that market devices and economic statements shape the economy.

Since the laws of the markets where Callon (1998) explains that "economics, in the broad sense of the term, performs, shapes, and formats the economy (p:2)" the confrontation with reality, through field studies, leads the prominent defenders of the performativity thesis to reconsider the concept. When Mackenzie and Millo studied (2003) the emergence of the Chicago options market they noticed that the Black and Scholes model has shaped reality but the crisis of 1987 changed the model itself. This challenges the idea that economics performs
reality in one way and led Mackenzie (2006) to distinguish between four types of performativity: the ‘generic performativity’ which means that an economic theory is used only as a tool; the ‘effective performativity’ implies that the theory helps to change the reality; the ‘barnesian performativity’ where the practice is conform to the model; and the ‘counterperformativity’ in which the practice behave in opposite way to the theory. Even Callon (2007) suggests moving to the notion of co-performation. This new concept introduces the aspect of activity and action which means the process of socio-technical agencements that makes economic statements evolve. It also integrates the collective dimension that involves different devices which may compete with each other.

In a recent work, Muniesa and Callon (2009) suggest four categories of tension that impact economic agencement. The first tension between theoretical and experimental performation reflects the degree to which the theory or/and the practice determines the agencement (this tension underpins the former distinction between generic, effective, barnesian and counterperformativity). The second tension involves psychogenic versus material performation. It considers the importance of subjectivity or instruments and tools. The tension between distributed or planned performation raises the issue of hazard and politics. The study of the history of an agencement determines whether its development is unintended or programmed. The fourth tension between narrow and broaden performation emphasizes the space and location of the agencement. Even if this renewal gives some research opportunities to performativity (or co-performation) it depicts an instable concept that needs to be readjusted and reconfigured. Then how can this research program be useful to study financial markets? We suggest that works referring to performativity foresee an answer: the emergence of the strong and useful notion of market devices.

The philosophical foundation of market devices is grounded in the concept of agencement (Callon 2007, Muniesa et al. 2007, Muniesa and Callon 2009). This French word comes from Deleuze’s interpretation of the works of Foucault (Deleuze and Guittari 1980, Deleuze 1986, 1989). According to Deleuze, we can distinguish between the first and second Foucault. In the first studies, ranging from history of madness to that of clinic, he is concerned with discursive aspects while in the second moment he emphasizes the importance of materiality such as the panopticon (Deleuze 1986). Foucault adds to the analysis of enunciation a second dimension of visibility (non-discursive) which has to do with the ‘diagram’ that shapes the reality. For instance the discipline is enacted through an agencement of discursive enunciations on delinquency and the materiality of jail (Foucault 1975).
Building on the concept of *agencement*, Callon and Muniesa (2005) focus on the materiality of economic markets. This materiality is visible through calculative collective devices. The authors assert that calculation is a process of “isolating objects from their context, grouping them in the same frame, establishing original relations between them, classifying them and summing them up (p:1232)”. This definition allows for a large use of devices in the three aspects of economic markets. The first aspect, the production of objectified and singularized goods, requires the use of devices to define and compare goods. The second aspect, calculative agencies, emphasizes the distribution of agency among humans and non-humans. The third aspect, calculated exchanges, evidences that devices organize the encounter and exchange in the market.

1-2- Social embeddedness of market devices:

The concept of calculative collective device or market device (Muniesa et al. 2007) can be helpful in the analysis of the emergence and transformation of markets. For instance, Poon (2009) evidences that the importation of a consumer risk score device - FICO® - shaped the subprime mortgage finance. She explains that this calculative device was transferred from US consumer credit markets and implemented in mortgage finance. The same concept of market device has also been used by Cochoy to explain the choices made by customers in the supermarket. According to him, those devices act like tools and procedures that attract and seduce costumers (2004). Market studies are an example of devices that provide information about clients to determine the characteristics of the product and thus attract customers. The packaging and the area where the product is displayed are also important devices to reach customers (Cochoy 2000).

However, during financial crises we can observe that economic theories and market devices are replaced by negotiation and social relations. In 2008, when market devices failed to stop the crisis, informal meetings between Paulson and the heads of big banks came up with many results: saving Bear Stearns, failing to do so with Lehman Brothers and convincing some CEOs to accept State participation in some private financial institutions (Tett 2009). The role played by social relations was also evidenced by Mackenzie and Millo (2003). They argue that “the network of interpersonal connections mobilized by Melamed on the night of October 19, 1987 (p:139)” saved the US markets of derivatives from general failure. Considering these events, one should ask some questions: Are the calculative collective
devices the unique explanation of the dynamics of markets? If the answer is ‘No’, then how can we integrate other dimensions such as the social one?

Some social studies of financial markets (Mackenzie and Millo 2003 and Beunza et al. 2006) have already tried to answer these questions. Thus, Mackenzie and Millo (2003) consider that the social structure, collective action and moral community are as important as the Black and Sholes model in the emergence of the Chicago Options Market. During the sixties, the US regulators still have in mind the crash of 1929 and were deeply suspicious about Options. The collective action and lobbying efforts of promoters using economic arguments in a context of political transformations were decisive to convince regulators. Beunza et al. (2006) confirmed the importance of social interactions in addition to the classical theme of devices. Their material sociology focuses on “the role played in social relations by artefacts and other physical objects and entities (including human bodies viewed as material entities) (p:725)”. Physical entities and devices define the price of arbitrage as a ‘thing’ but the authors argue that it is also social. In fact, arbitrageurs have many relations with actors inside and outside the trading room and need to influence and be convinced by other persons. The Options Market is also concerned with this phenomenon because “Trading-floor interaction often spills over into off-floor socializing and elaborate membership committee structures. (p:117)” (Mackenzie and Millo 2003)

Considering economic market as only calculative collective devices elude many questions related to social cooperation and power struggle. Building on studies that insist on the social dimension of markets (Beckert 2009, Fligstein 1996, Lazega 2009) we suggest considering market devices as socially embedded.

Beckert (2009) argues that if a product is complex - which is the case for many financial products - the technical criteria for valuation become contested. In this case, social processes are playing a key role in legitimizing them. The author explains also that the judgment (Karkip 2007) on this value is socially constructed because intermediaries (Zuckerman 1999) with social status can reinforce or change it. Thus, attributing a value to financial products can be done through market devices embedded in social processes. Fligstein (1996) proposes to consider that the creation and transformation of markets obey to the same dynamic as social movements. According to him markets are not only places of exchange but also political arenas where actors engage in power relations to control competition and impose their rules in the market. So market devices can be used or contested in power struggles during the creation or crisis of a market. Building on Coleman’s social rationality (Coleman 1994), Lazega (2009) introduces the temporal dimension to explain how
actors politicize their exchanges. The author suggests that market entrepreneurs engage in social discipline which is the ability to self-limit themselves in their demands and their use of power. Market devices do not have an impact on the selection of partners with whom actors cooperate. They are anchored in social niches of cooperation based on identities, symbolic or strategic aspects.

In this paper we make a formal distinction between market devices and the social dimension. We demonstrate that calculative collective devices are important for the creation of the Exchange Traded Funds (ETFs) French market but show that those devices are used in power relations to influence and convince others. We finally evidence that market devices of promotions of ETFs are also embedded in social relations of control.

2- Data and research design

This article is based on a longitudinal qualitative study of the French ETF market, from its inception in 2001 to 2009. Although ETFs are trans-national, with ETFs issued primarily in one country but often listed on multiple exchanges, we focus on French market. The reason for this choice is fourfold: first, ETF markets remained highly segmented in their first years, with national sponsors listing and promoting their products in their home market; second, even though products are listed in multiple exchanges, European markets each developed in very different ways; third, the resources necessary to study the European ETF market are far beyond the scope of this paper.

We started our research by exploring the ETF market in order to identify the actors. At this step we used documentation published in the press and lists of participants to conferences related to ETFs; we completed this by information gathered from the actors during interviews performed as the research progressed. Thus, we identified many actors related, directly or indirectly, to the ETF market as: Stock exchange, ETF issuers, brokers, journalists, event organizers, investors. We then conducted interviews of these 57 actors. Some of our data comes from the analysis of press articles between 2000 and 2009 (See Appendix 2).

Sources of data

---

2 We performed three exploratory interviews between March and April 2009 before conducting the rest of the interviews between October 2009 and May 2010. The duration of the interviews varied from 27 minutes to one hour and 36 minutes.
Our major source of data is the content of the interviews that we led with 57 actors in this market. These actors were interested in the ETF market each from the positioning and the point of view of the institution he or she worked in. We decided to diversify our sample in order to be sure to gather different perceptions the French market to avoid the bias of reflecting the vision of one actor. So our sample contains ETF issuers, Euronext, journalists, investors and brokers. Regarding the diversity of our interviewees, our questions covered many aspects, e.g., the reason for creating an ETF market in France, the reasons for the success of ETFs, relationships with other actors and so on.

Data Analysis

The whole pattern of the construction of the French market emerged from a lexical analysis and a progressive interpretation of the data. We evidence the existence of market devices embedded in social relationships. We made a formal distinction between the two in different aspects of the ETF market: the functioning, the promotion and press monitoring (See Appendix 1).

3- The design of Exchange Traded Funds

From a financial viewpoint, Exchange Traded Funds are index funds, managed to accurately track the performance of a given benchmark, that trade on stock exchanges on a continuous basis. From a sociological viewpoint, we can also consider them as devices made of elements, equipment, formal rules and practices. Thus, an ETF can be apprehended as an agencement of detached and reattached entities (Callon and Muniesa 2005, p: 1231). Basically the benchmark, whose returns are replicated by the ETF, is an average of the value of a portfolio of stocks or bonds that are chosen according to a given algorithm so as to represent the value of a market, a sector, or a specific strategy. For example, the conventional algorithms for blue chip indices consist in selecting among the most highly capitalized stocks, the most liquid, and possibly favour a few stock in order to be representative of various economic sectors:

3 Initially, ETFs’ benchmarks were equity indices.

4 The average can be simple as for the famous Dow Jones Industrial Average Index (DJIA), or more generally weighted with respect to the market value of the stocks. An old controversy on the relative merits of both types of construction has risen again with the development of alternative weighting schemes. Amenc and al. (2011) empirically compares efficient, fundamental, minimum-volatility, and equal-weighted indices returns with capitalization weighted indices.
“We [index provider and ETF issuer] will take out certain countries that are not liquid, for instance: Iceland and Greece are not liquid equity market so we take them out, then we took out the 30 stocks that had the lowest liquidity on averagely turnover to a marketcap basis. And then we looked at the ability to borrow all the stocks and looked to the 30 stocks that were hard to borrow, and we took those out. […] and then we tried to respect the UCITS. And now we have a basket that people agree is a good basket to trade, more liquid.” (Head of marketing department – ETF issuer 3)

The result is put on the electronic program of the index provider and becomes an index (CAC40, S&P 500, FTSE100, etc.) whose value is calculated and publicly disclosed on a regular basis (for example every 15 seconds for the CAC40 index) and can be used in the media or by analysts.

An ETF is a more complex *agencement* than an index. Behind the word tracking or replication - of a benchmark - lays another process of detachment and attachment. Issuers have developed two different models to construct ETFs: full and synthetic replication. In the first model, the fund manager buys and holds the stocks constituting the index. They often lend some of those stocks, which are in a sense unused, against collateral to provide some extra returns, which helps to keep the fund expense ratio at a low level. For the second model, the basket held by issuers does not necessarily match the index but they enter in a total return swap with a counterparty in order to replicate the benchmark.

If we consider the whole market we can say that it “is always an issue whose formulation partly depends on (but is not fully determined by) previous events and trajectories.” (Muniesa et al. 2007, p.4) So the conditions of possibility of the French ETF market can be found in the wider financial historical process, and more particularly of the development of index funds. Market devices and especially financial theories played a major role in the emergence of ETFs because they provide passive management industry with the ‘scientific’ arguments needed. However, those devices evolve in a social context where the

---

5 Sometimes the fund manager does not hold all the stocks but a fraction of them, the weights being given by a model that should allow for an accurate replication. This process is called statistical sampling.

6 A total return swap is a derivative instrument. It is simply an agreement to exchange, at a future date, the performance of one portfolio against the performance of another. In the case of ETFs, the return from the portfolio held by the fund is exchanged against the return of the benchmark index.

7 It is generally the investment bank of the issuer, for instance it is SG CIIB for Lyxor, Deutsche Bank for DB trackers and so on.
regulator or other parties can resist to new instruments. Convincing reluctant actors was crucial to insure the success of the ETF market.

ETFs find their root in financial economic models of portfolio selection developed in the 60’s. Since Markowitz seminal work on portfolio diversification and the development of the Capital Asset Pricing Model by Sharpe\(^8\), there has been a trend of financial innovation aiming at translating this theory into effective financial products. According to the results of this model, the optimal portfolio of risky assets is the same for all investors and, as a result, every investor should hold a combination of the market portfolio and of the risk-free rate. Index funds, passive investment funds replicating a given index are the translation into effective investment products of Modern Portfolio Theory. If the first index funds were initially offered to institutional investors at the start of the 70’s with the Samsonite’s pension fund managed by Wells Fargo (MacKenzie, 2006), retail investors soon got access to such products with the creation of the First Index Investment Trust (later renamed Vanguard Index Trust 500). The rationale behind such products is simply that, if markets are efficient, it should not be possible to outperform the market consistently on the long run,\(^9\) and equity index funds should prove the most logical and efficient tool for building portfolios. This argument is central in convincing investors and other parties that passive management is the only rational investment choice. For instance, John Bogle, former CEO of Vanguard, argues that: “investors as a group cannot outperform the market, because they are the market” and thus active management is a zero-sum game that ends up as a negative game for investors “because the costs of participation—largely operating expenses, advisory fees, and portfolio transaction costs-constitute a direct deduction from the market’s return”.\(^10\)

With the increasing appeal towards passive investment strategies, the development of a suitable instrument allowing index components to be negotiated in a single trade then became increasingly interesting. The creation of index futures contracts in the early 80’s (Millo, 2007) represented another way of achieving broad diversification with a single instrument. The antecedents of the ETFs we now know were introduced on U.S. and Canadian exchanges in the early 90s with diverse success (Gastineau 2002, Tufano 2003). In 1993, after three years of dispute with the SEC, the American Stock Exchange (AMEX) began trading

---

\(^8\) See Markowitz (1952) and Sharpe (1964).

\(^9\) Since Treynor (1966) and Sharpe (1966) most empirical studies evidence that it is very difficult to outperform the market, and, if ever, to do it consistently over time.

Standard & Poor’s 500 Depositary Receipt (SPDR, popularly known as “Spider”, ticker SPY), which is often referred to as the world’s first ETF. It is worth noting that the product directly emanates from the AMEX as it was sponsored by PDR Services Corporation, an AMEX subsidiary, with State Street Bank and Trust as trustee. After a few years of relative moderate growth, the ETF marketplace experienced its effective boom in March 1999 with the launch of the Nasdaq-100 Index Tracking Stock (popularly known as Cubes or Qubes in reference to its initial ticker, QQQ). Over the years, new ETFs were regularly introduced and these securities started reaching the daily financial pages.

In Europe, ETFs only started trading in April 2000 with the openings of the XTF and extraMARK specific market segments of the Deutsche Börse and the London Stock Exchange, respectively. A few months later, in January 2001, Euronex opened NextTrack, a market segment dedicated to the trading of ETFs. It is only after they became a serious alternative to traditional non-traded index mutual funds, as they captured a significant part of the asset growth in index funds that European exchanges executives who were monitoring the developments of US financial markets decided they should start trading ETFs. As any other kind of innovation, financial innovation is costly and risky, and multiple regulatory and institutional challenges had to be tackled before ETFs would eventually become a success in Europe.

In France, once the decision to create an ETF segment was taken, Euronext had to find a way to attract major investment banks in this business. As it soon appeared within AFG (Association Française de la Gestion Financière, the French Asset Management Association that represents and promotes the interests of the French asset management industry), the idea of ETFs faced a strong opposition in the asset management industry. Both passive and active managers then viewed this innovation as a serious competitor as ETFs promised a high degree of index tracking at low cost along with intraday tradability. In France, index funds were then offered in banks retail networks with significant entry fees and commissions that would disappear with ETFs:

“ETFs did not enhance the commercials’ P&L of banks retail networks due to their lower fees” (Investor 1).

“The bank retailing network was strongly against this product since they already sold index funds on which they earned higher margins” (Head of the ETF issuer 1)
On the side of active management, the incoming promotion effort on ETFs was poorly thought of and this industry has always feared the everlasting debate on their real performance:

“Asset managers saw this type of products as aggressive competitors to active management”, (Paris Stock Exchange – A former Executive 1)

NextTrack, the segment of Euronext dedicated to ETFs, was to be launched in January 2001, it remained to find ETFs to list. If Euronext selects which ETFs will be listed on NextTrack in the last resort, they needed providers to ask their funds to be listed. Any collective investment funds would be considered but Euronext explicitly states that it “may reject an application for admission to trading on NextTrack if the applicable conditions are not met or if Euronext believes that admission would not be in the interests of NextTrack or investors.” (NextTrack – Admission to trading document, 2000). The strong opposition of AFG to ETFs made it necessary for the executives of Euronext Paris to find a way to lead the management industry to get in the market. Along with the standard arguments stating that Euronext would accompany the market (see Appendix 3), the way Euronext launched a first request for proposals for the creation of ETFs on the CAC 40 index, within which an exclusive licence for a fixed term would be granted can be viewed as a market device. The perspective of the attribution of exclusivity on ETFs on the leading blue ships local index lead many members of AFG to think like this:

“Everybody said: s*** if Société Générale, or BNP, or Crédit Agricole [some major French investment banks], etc is launching something and we do not, this is not good for us”, (Paris Stock Exchange – A former Executive 1)

As a result, Euronext received a number of offers, mainly from the major French investment banks or their subsidiaries which allowed them to refute AFG’s claims that this product presented no interest (they finally selected Lyxor Asset Management, a subsidiary of Société Générale).

As for the regulator, his main concern was about the price at which ETFs trade on the exchange. An ETF itself is a device based on two prices: the Net Asset Value (NAV) per share of the fund and the price market of these same shares. The first value is the value per share of the funds effectively held by the fund computed at the end of each trading day while the second depends on the supply and demand for shares on the exchange. It is well documented that significant premiums or discounts generally goes along with the trading of funds:
“One of the difficulties we faced and had to solve was the regulation. We had discussions with the COB [the Commission des Opérations de Bourse, the former French equivalent of the SEC] on what could be done so that the exchange price does not depart too much from the fund’s value. The regulator was concerned about the possibility of an excessive difference between both values.” (Paris Stock Exchange – A former Executive 2)

Actually, ETFs faced this problem at their inception in the US and the major innovation in these instruments and principal advantage over traditional funds relies in its specific trading process that aims at allowing for continuous trading that aims at allowing for continuous trading while avoiding these deviations.

The structure built in NextTrack for ETFs closely resembles the system that was set up in the AMEX for SPDRs. It explicitly allows for arbitrage between the managed fund and the shares that trade on the exchange. The ETF specific dual trading system is represented in Figure 1. The main trading venue for an ETF is the exchange, where ETF shares trade almost like simple stocks with no limitation on order size. However, it is possible for some institutional investors to ask for the creation or redemption of ETF shares directly from the fund: they can deposit the stock basket underlying the index with the fund trustee and receive fund shares in return (and conversely). The shares thus created can then be traded on an exchange as simple stocks or later redeemed for the stock basket then making up the underlying index. Among the exemptions that were granted to these funds are the permissions for the fund to redeem shares only in lots, for the shares to trade at prices different from the net asset value determined by the fund and for affiliates to deposit or receive the basket of securities in exchange for the shares. These exemptions thus state that individual shares are not redeemable and can trade at a premium or a discount with respect to the fund value on the exchange.

The possibility of “in-kind” creation and redemption helps market makers absorb the liquidity shocks that might occur on the secondary market, either by redeeming outstanding shares or creating new shares directly from the fund. Moreover, the process ensures that departures between the shares price and the fund’s Net Asset Value (NAV) are not too large.

---

11 One important distinction with stocks is that admission to trading is generally subject to the existence of competing market makers, even in pure order book markets.

12 In the US, such a structure could not exist under the Investment Company Act of 1940 and thus faced many regulatory issues.
Indeed, authorized participants can arbitrage any sizeable difference between the ETF and the underlying index component stocks.

![Diagram of ETF Market Structure](image)

**Figure 1: Primary and Secondary ETF Market Structure**

The regulator nonetheless asked for more guarantees and imposed specific trading halts. The French laws stipulate that Index Funds must trade at a price that does not deviate from their NAV by more than 1.5%. One problem is that, if the market price can change throughout the trading day, the NAV is not continuously known accurately. Alain Dubois, chairman of Lyxor, along with Euronext, negotiated with the regulator:

“We [Euronext] have done a lot of lobbying over the AMF [French regulator] to demonstrate that this product [ETFs] will evolve; and the regulatory frame has to be improved. […] When we selected Société Générale, Alain Dubois [Chairman of Lyxor] helped a lot in changing the regulation.” (Paris Stock Exchange – A former Executive 1)

“Euronext made a good path and then Alain Dubois [Chairman of Lyxor] intervened in the second half of the year 2000 to accelerate the discussion on the regulations that need be changed to enable the quotation of funds continuously.” (Head of the ETF issuer 1)

The solution chosen was to calculate along the trading day an indicative Net Asset Value (iNAV), which is based on the previous day’s end-of-trading Net Asset Value (calculated and provided by the issuer) and updated regularly to reflect the intraday variations
of the underlying index. The iNAV becomes one of the results extracted from the calculation made along the process. Finally, we have different public information about the fund value: the iNAV, the NAV of the previous day, the bid-offer prices on the Exchange; but institutional investors can get a different price OTC. This category of investors may call brokers and ask for a special price for a given amount of investment, a price that can be different from the bid-offer prices prevailing on the exchange. Brokers take into account the constraints of the market to determine the price they can offer but use their social relationships to offer the best prices to their good clients.

“So, either we directly make a price on lyxor or other series or if we don’t do it ourselves, we have counterparties with whom we can arrange the deal. It is a bilateral agreement [...] We don’t tell the client it is not our price, we tell him it is the price. I, in a few seconds, ask for prices (they can do the same with me). So we make prices all day long. [...] The added value is not huge simply because you gave your client a good price. Instead of asking for prices himself, he asks me, I ask three person at the same time, tell him the best price and ask: “do you want to trade at this price?”. Then, he says either yes or no.” (...)

ETF promoters faced reluctant parties and had to convince them to adapt the regulation in order to launch ETFs. The market devices they used to do so include Modern Portfolio Theory, the ETF product itself (which is an *agencement* of detached and reattached entities) and electronic equipments such as the Nextrack trading platform. The act of convincing parties goes beyond the regulatory sphere to that of market practices themselves. We demonstrate in the following section that the creation of socially embedded promotional devices played a key role in the success of ETFs.

4- Promotional devices

Actors such as marketing managers, head of ETF department, and head of communication of financial products or press managers apply in the ETF market what they have learned in business schools or practiced in their former experiences. One of the things these actors have in common in their activities is the promotional aspect. They manage the relationship with the press and participate to conferences because the image of the product and the company depends on those efforts. Their educational background focuses on the marketing side and especially on the promotion of products. Sometimes they prefer to name it ‘pedagogy’ which means that they try to educate the investor in order to understand and choose ETFs.
Implementing promotional devices that they have learned or used is not easy and obvious. Sometimes they face existing devices and resistance from other actors. The social and political process plays here a major role in defining the success or failure of actors in setting-up these promotional devices for ETFs. Before the inception of the market in France an effort was made in order to convince and change the existing order. The dominant device used to be the technical one. Paris Stock Exchange was well known for managing project, solving technical problems, setting-up rules instead of doing marketing and promotional activities. It was not an abstract question of asymmetries or competition between two or different calculative collective devices as suggested by Callon and Muniesa (2005: 1237-1238), what was determinant is the convincing strategy of some “marketing activists” inside Paris Stock Exchange who influence their colleagues. An Executive from the Paris Stock Exchange at that time remembers that:

“*I had the support of my marketing supervisor who believes in the project and who had a marketing approach. We, in Paris Stock Exchange we hadn’t this marketing approach, we were rather technical, we had projects for setting technical rules, but we were not marketing and customer orientated. She [the supervisor] permitted to give a weight, a breath and thus the means to launch this project.*” (Paris Stock Exchange – A former Executive 1)

In addition, the shareholders of Paris Stock exchange and issuer bodies were also asking for more marketing orientation than the jurisdictional one13.

The inception of the ETF market is clearly different from the creation of other markets (options, futures and so on) because the stock exchange itself participated to the promotional effort and supported it. They create the trademark ‘tracker’ and used it to designate an Exchange Traded Fund in France. When they have launched the invitation to tender exclusivity on the CAC40 index, they asked issuers to give a significant marketing budget to be monitored by both the winning issuer and the Stock Exchange:

“*Between Euronext and Lyxor we made a communication partnership, we choose a Public Relation agency that constructed the communication plan in France and Europe. [...] In terms of promotion we had an important advertising budget, many road-shows, and many meetings with retail investors around France, a lot of collaboration with brokers especially a partnership with online brokers to promote the*

---

13 This was evidenced by the press article: “Paris Stock Exchange is preparing to launch Exchange Traded Funds”, published in “Les Echos” in 22/06/2000.
products. We were also, automatically, in all conferences.” (Paris Stock Exchange – A former Executive 1)

Even if the Paris stock exchange implemented the promotional devices in the ETF market, the issuers rapidly took over this activity. Regarding retail investors, they borrow from:

“Mass marketing promotion techniques such as commercial teams, freephone service and websites all dedicated to retail investors”. (Head of the ETF issuer 1)

These are the same devices that are used by producers to attract and seduce customers (Cochoy 2004). Some of these techniques have been studied by Cochoy who shows that modern marketing implements techniques such as Customer Relationship Management (CRM) or after-sales service to attract customers.

ETF issuers also develop promotional techniques to attract institutional and professional investors. Thus, a salesperson from an ETF issuer explains:

“We meet investors and we make presentations for them. Those presentations are adapted according to the constraints of the clients: what they can do, if it is a fixed income, a diversified or a stock manager. If it is a pension fund what are the constraints. It depends also on their benchmark.” (Salesperson – ETF issuer 2)

These promotional techniques are made of practices established and managed by ETF issuers (CRM, regular visits to investors, etc.) as well as objects that constitute material support for promotion (phones, IT systems, reports, prospectuses and flyers, etc.). Issuers gather information on investors (CRM) and products (prospectus), classify them, and provide details on the characteristics of ETFs (management fees, dividend, etc.) with a focus on the advantages of the product while hiding the possible risks. The agency is distributed (Callon and Muniesa 2005) between, on the one hand, non-humans which are made of equipments and practices and, on the other, the humans that group investors and promoters. The latter are equipped with procedures and instruments to sell ETFs while investors are using material support and meetings to choose their asset allocation. However, it is not only a matter of distributed calculative agency; it is also a question of using devices in social interactions.

Promotional devices engender regular interactions. These interactions are social in the sense that they imply power relations where an actor or a group of actors try to influence others. We argue that those promotional techniques do not only have a calculative dimension but they are also socially embedded. This means that they are used to convince reluctant actors about the virtues of the financial product. In fact, even if the material supports (prospectus and flyers, etc.) are well done, the success of new financial products, such as
ETFs, requires social abilities of salespersons. They have to develop a good rhetoric and meet investors regularly in order to convince them. A broker explains that:

“*The promotional effort played a major role. Asset managers were reluctant because they saw the product, in the beginning, as a competitor. I think there was a huge work done by the different marketing teams from Lyxor, iShares and others. There was this effort dedicated directly to asset managers but also to private banks. What is important is all the work done through the retail channel in the specialized press such as ‘La Vie Financière’ and so on.*” (Broker – Investment bank 1)

Promoters are also seeking to influence investors with an aggressive commercial effort especially with regular one-to-one meeting and road-shows. We consider this aggressiveness as a social aspect because it is not a neutral technique; it aims at changing customers’ opinion to make them choose ETFs. When they speak about promotion, ETF issuers themselves prefer the word pedagogy and talk about educating the client.

“This is not promotion but rather pedagogy and teaching customers. Because when you launch a new brand or a product, if you don’t back it with salespersons that will visit clients and explain how the product works, it will remain a luxury product. Today it is true that all ETF issuers are developing strong relationships with customers, and an aggressive policy directed to investors but it is primarily a pedagogic approach.” (Salesperson – ETF issuer 2)

This shift from a market relationship to an educational one evidences one of the main objectives of promotion. It consists on teaching the good definition of ETFs (that generally describes the advantages of the product while keeping silent on its risks) and the right way to invest and allocate assets. In order to understand the means used by promoters to achieve this aim, we need to go deeper on the analysis of promotional devices and the way they are embedded in social relationships.

- Monitoring the press

The marketing budget criterion was important in the attribution of the CAC40 license exclusivity. Thus the marketing teams of Euronext and Lyxor had the means to explain what the ETFs are and to promote them. And because Paris Stock Exchange has chosen a marketing orientation in the turn of 2000, they applied technical devices to manage their relationships with the press. A former executive from Paris Stock Exchange declared that they “*organize the noise in the press.*” They started by selecting a Public Relation (PR) agency that
brought all the procedures and products. The aim was clearly to make people discover ETFs. The number of articles on ETFs starts to increase since 2005 when Euronext launched another invitation to tender licenses on the CAC40 index. Issuers became the main promoters of ETFs and started to focus rather on publication dedicated to retail or institutional and professional investors. The controversy on the risks behind the synthetic or full replication synthetic that appears in 2007 increased again the papers dedicated to ETFs (99) (Appendix 2).

The presence of ETFs in the press during all these years is explained by the promotional effort done by issuers. They classify journalists according to their reputation. They plan one-to-one meetings with journalists writing, or likely to write, on ETFs; they send reports and press release. They can also choose a PR agency to manage relationships with the press:

“Issuers come and see us every time. They have very very active marketing. […] When I first join the journal issuers came and say this is what we are doing; but then they all have papers, a little bit of research, new products or anything that can work as an excuse to see journalists.” (Journalist 1)

“Issuers put a lot of pressures; they send press releases and invite us to conferences.” (Journalist 2)

“I have an agency called ‘Y’ which is a media advisor in the UK and then I have a serious local media advisors in France and Germany who help me manage the relationship with the core people in each country. You know in France ‘L’Agefi’, ‘La Tribune’. You pick eight or nine and communicate to the ones you want to focus on. The rest, when we send out press release we send it to 12 000 different media contacts, right. So we send it to everybody. In the UK we probably call 15 or 20 contacts at the FT, at Financial News, at Euromoney and so one and we check if they pick up our story.” (Head of marketing department – ETF issuer 3)

But those devices are not always efficient they can harm the promotional effort especially if journalists are overwhelmed by repeated information:

“It is not always useful, for instance, [the issuer 4] changed recently their PR (Public Relation) agency and as a result we are getting a lot of contact from them and they arranged a roundtable last week but it was not useful in term of information it was just a meeting with journalists. It was just a matter for the PR agency to show [the issuer 4] that they were working.” (Journalist 1)

These devices that enable managing relationships with the press cannot be efficient if they are not used in a way to monitor the discourse relayed by journalists. Those techniques
and practices are not neutral; they are used in a social process and serve to influence journalists. First of all, it is about controlling who, from the company, is allowed to speak to the press. Those who master the rhetoric are rather put ahead because they have developed the skills to convince reluctant journalists. In this power relation, controlling the content is also important, this is done through a social process of monitoring the press that includes: information dependency, calling journalists to order and financial pressure through advertisements.

The first aspect of the social process of monitoring the press is to define the executives authorized to talk to the press. During our interviews some traders who though, in the beginning, that we were journalists orientate us to press managers or marketing team of their bank. And one of the journalists that we interviewed declares that:

“We generally talk to issuers and to some extent to the investment banks a little bit and it’s always mediated by the fund promoters. I guess we should talk more to them [traders and brokers] because that’s part of our core area, instead of just talking to the fund managers and the funds promoters. But, apparently investment banks tend to be quite strict about their employees contacting the press and also I think, especially, that the ETF providers want to control their relationship with the press as well.” (Journalist 1)

Journalists mainly rely on banks and their management companies as their source of information on ETFs, which leads them to maintain permanent and if possible cordial relations with the managers of these companies. The managers at the banks are aware of this and actively maintain these relations:

"I try to create a relationship of trust with journalists. They also call me to ask questions, even about the products of my competitors who failed to explain them clearly." (Head of communication – ETF issuer 1)

This creates a situation of dependency of information. Almost all what journalists write is based on what issuers told them so the different contacts and influences of a journalist will impact his articles:

“He (a journalist) kind of takes what other people say and he is smart so he can say maybe that’s right, that’s not. But he can’t deconstruct what they say to know what’s bullshit and what’s correct. He can get led by people in various directions. They (the journalist and his team) are not totally unbiased, they have their influences. And they are not analytical. They just scratch slightly blow descriptions. So [issuer 4]
tells them you just watch our hedge fund thing there is 2 billion in it, they go oh, ok great great. And then I call them and say do you realize that actually in this kind of hedge fund half the money is them investing in the thing themselves, and he says: Oh I didn’t know that, so he writes that. And then [issuer 2] calls and so one. So he (journalist) gets a little bit deeper because he puts it up on the web and somebody calls him.” (Head of marketing department – ETF issuer 3)

But the relation between the press and ETF issuers is not built on mutual trust alone. Indeed, the press officers at financial groups keep a keen eye on what's published and reprimand journalists when they deviate from positive information. For example, a manager at an issuer company emphasises: "I always take care about what appears in the press and call the journalists when they're wrong". Consequently, several implicit rules must be respected. Journalists must avoid elements that might harm an issuer and are expected to consult the latter before writing articles that deal with one of their products:

"Journalists don't write just anything about ETFs. If they compare our products with those of our competitors in a somewhat negative way, we call them to ask why they have compared two products that can't be compared. Above all we ask why they have written about our products without calling us." (Head of communication – ETF issuer 1)

“If someone writes an article and I know him, then I call him and say: “Steve what are you thinking? You know this isn't quite true”. If it’s somebody I don’t know, I call them up and I say: “Hi, I'm X, we haven’t spoken before. It's just to let you know that in this article that you wrote, there are three different things that you should be aware of. Maybe the next time you guys dig into the question, feel free to come to see me. Here's my telephone number, Okay.”” (Head of marketing department – ETF issuer 3)

“If they think that there is any way through like they can say that we have done mistakes, they do it. They say: actually you wrote that, it’s a matter of view of the situation but it’s not our own view.” (Journalist 1)

“In this case [If they don't like what the journalist writes], I got feed-back (laughing).” (Journalist 2)

This amicable reprimand certainly allows the issuers to ensure that the social rules are respected, but it is above all advertising budgets that place the journals in a position of dependence. Establishing this social discipline by bringing advertising pressure to bear has not been that easy, and has required changes in newspapers and journals. Thus assigning
commercial tasks to journalists has had an impact on their profession since they easily assimilate the rationale of profit; what is more, some of their managements now evaluate not only the quality of their articles but also the importance of the advertisers they attract. Several communication managers confirmed:

"Before, when there were journalists around in one part of the world and sales managers in another, that raised problems. But that's no longer the case. Journalists maintain their own relations with clients, which makes it easier for us." (Head of communication – ETF issuer 1)

Even in press companies known for their editorial independence the pressure on journalists is very important:

“The marketing team always wants to a kind of push editorial part, it’s not really the problem of [our journal] it’s a general problem. With my previous employer a part of the job was fighting with sales people.” (Journalist 1)

We can also consider that the amount of money that promoters invest in advertisements put them in a strong position to monitor the press and especially relay their own discourse on ETF:

“The space purchased by management companies [ETF issuers] for their advertisements make them big contributors”. (Journalist 3)

In return they ask journalists to participate in the effort to promote ETFs, as mentioned by another journalist:

"If an advertiser arrives and puts a large sum on the table, they can ask for pages of editorial comment to go alongside the advertisements." (Journalist 4)

Likewise when promoters find themselves face to face with a journalist who has not yet assimilated the commercial facet in their activity, they perhaps react like this manager:

“If there's a problem, we call their boss who knows that we're in a partnership type relation, meaning to say that we pay for their advertising banners.” (Head of communication – ETF issuer 1)

The social pressure wielded by the issuers leads some journalists to incorporate the rules and no longer consider them as pressures imposed from outside but rather as personal criteria for writing articles. For example, two journalists who appear to have taken in the rule that consists in not criticising ETFs said:

"You know, my policy is not necessarily about running someone down. [...] Well, I did write once about an ETF X, but I won't ever speak about it again, because I warned the issuer. I told the readers that we'd made a mistake, after which I didn't say
anything. I'm not here to get at certain ETFs; I'd rather discover a good ETF for my readers." (Journalist 4)

“The magazine is not going to slate the whole industry. I am not criticizing ETFs, while someone like the FT, which is a national publication, can do. And we can’t write everything especially when they [issuers] criticize each other it's very hard. Generally it is off the record.” (Journalist 2)

5- Discussion and conclusion

In this paper we show that financial theories and especially Modern Portfolio Theory were important in the establishment of the ETF market. We then analyze the product itself as a collection of detached and reattached entities. Those market devices are not neutral techniques but are used within power relation to convince reluctant parties. We describe the multiple regulatory and institutional challenges that had to be tackled before ETFs meet success in France.

We evidence that actors implemented promotional devices in the ETF market. This starts from Euronext Paris exchange where “marketing activists” brought a customer orientation in the turn of 2000 even if they have faced some resistance. Then ETF issuers started setting-up promotional techniques such as one-to-one meetings, freephone service and websites. But those instruments are efficient only if promoters use rhetoric and aggressive commercial efforts to convince and attract investors.

We also demonstrate that the presence of ETFs in the press is explained by promotional devices such as: the classification and one-to-one meetings with journalists, sending of press release or choosing a Public Relation agency to manage the relationship with the press. Those devices are combined with a social control exerted on journalists. ETF issuers choose from their executives those who are allowed to speak to the press. Generally they are from marketing department and they have the skills to influence journalists. The selected executives try to control the content of press article through a social process that includes: calling journalists to order whenever they deviate from the promotional discourse and financial pressure through advertisement.

Considering that social studies of finance focus, mainly, on the construction and design of financial markets (Godechot 2009) and do not study the marketing aspect. Our research sheds light on the promotional dimension in Finance. We show in this paper that marketing is important in the development of Exchange Traded Funds in France. Promotional
devices that exist in supermarkets and different industries (Cochoy 2002, 2004) are also present in financial markets and are used to attract and seduce investors. We thus argue that further research should focus on marketing devices in financial markets and their social anchorage. Analyzing conferences and events dedicated to financial products such as ETFs can be a first step.

Our paper demonstrates that market devices are important in the construction of financial markets but in a different way from what has been suggested by Callon and Muniesa (2005). In fact, we argue that those devices are socially embedded. Thus, social relationships play a major role in the success of new products. Actors who promote new financial products use different kinds of devices such as: “pricing techniques, accounting methods, monitoring instruments, trading protocols and benchmarking procedures” (Muniesa et al. 2007, p: 4) but they have to convince reluctant parties and influence them (Mackenzie and Millo 2003, pp: 113-115). This is done through social processes such as control over journalists or rhetoric and arguments used to negotiate with the regulator.

The main critique addressed to the ‘social’ is to consider it as a vague concept used to fill all the gaps that other domains could not explain (Latour 2005). In this paper, we try to draw a clear and strongest definition of the social dimension. In our point of view, the latter refers to a situation of power relation where an actor or a group of actors tries to convince other parties or influence them in order to make them change their position (Fligstein 1996). On the one hand, devices are made of objects, machines, formal rules, formulas or practices (such as management and marketing techniques) that reinforce human agency; on the other, social dimension consists on relationships between different actors or groups which are immaterial, informal, fluid and dynamic. We do not consider market devices as neutral instruments and techniques, they are rather socially embedded in power relation and serve to influence and convince reluctant parties.

Nevertheless, our study has some limitations. Concerning our qualitative methodology, it was difficult to find all the actors that participate to the creation of the ETF market, some of them are based in the US or Japan right now. Maybe the latter have different points of view. The results of interview of actors, even if they are diverse, suffer from different bias related to their personal perception and their retrospective stories. They may have exaggerated the contribution of some parties in the inception of the ETF market. We articulate the notion of market devices with that of social dimension but the latter can be considered itself as a device or agencement. We have in mind Callon’s answer to the selfless and moral behavior of market participants (Mackenzie and Millo 2003, pp: 117-119, 139-
The author argues that these are themselves moral and non-calculative *agencement* that involve the use of different equipment (Callon 2007, pp: 346-347).

Our study showed that promotion is not a neutral technique of marketing that respond to the needs of investors. It is rather a social and political process that would require more attention and critical analysis. Can such efficient promotion mislead investors? The French regulator (Autorité des Marchés Financiers) examines prospectuses and advertisements of issuers. But there is no intervention in promotional activities relayed by the press or conferences. Should we regulate these activities instead of allowing promoters to establish a social discipline in their favor?

**References**


Appendices

Appendix 1: An overview of the analysis of interviews.

<table>
<thead>
<tr>
<th>Devices</th>
<th>Social dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objects, machines, formal rules, formulas or practices that reinforce</td>
<td>Relationships between different actors or groups which are immaterial, informal,</td>
</tr>
<tr>
<td>human agency. Considered as neutral techniques.</td>
<td>fluid and dynamic. It is a power relation that influence and convince parties.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Market functioning</td>
<td></td>
</tr>
<tr>
<td>- “We [index provider and ETF issuer] will take out certain countries that are</td>
<td>- “The bank retailing network was strongly against this product since they</td>
</tr>
<tr>
<td>not liquid, for instance: Iceland and Greece are not liquid equity market so</td>
<td>already sold index funds on which they earned higher margins” (Head of the ETF</td>
</tr>
<tr>
<td>we take them out, then we took out the 30 stocks that had the lowest liquidity</td>
<td>issuer 1)</td>
</tr>
<tr>
<td>on averagely turnover to a marketcap basis. And then we looked at the</td>
<td>- “Asset managers saw this type of products [ETFs] as aggressive competitors to</td>
</tr>
<tr>
<td>ability to borrow all the stocks and looked to the 30 stocks that were</td>
<td>active management. […]</td>
</tr>
<tr>
<td>hard to borrow, and we took those out. […] and then we tried to respect</td>
<td>Everybody said: : s*** if Société Générale, or BNP, or Crédit Agricole [some</td>
</tr>
<tr>
<td>the UCITS. And now we have a basket that people agree is a good basket to</td>
<td>major French investment banks], etc is launching something and we do not, this is</td>
</tr>
<tr>
<td>trade, more liquid.” (Head of marketing department – ETF issuer 3)</td>
<td>not good for us”, (Paris Stock Exchange – A former Executive 1)</td>
</tr>
<tr>
<td>- “On the buy side the person who trades the market, like a hedge fund,</td>
<td></td>
</tr>
<tr>
<td>sees it very differently from the multi-asset class, portfolio manager</td>
<td>“Normally, when regulators come up with things like Mifid 2 there are usually</td>
</tr>
<tr>
<td>who buys an ETF. The multi-asset class, the portfolio manager looks at</td>
<td>like consultations. They come and talk and we give them feed-back. But also</td>
</tr>
<tr>
<td>the ETF at a couple of figures: tracking error, bid-offer those two</td>
<td>other thing which we are trying to do is for example get people like Bloomberg to</td>
</tr>
<tr>
<td>things make all the difference for him. But he cares about the bid-offer</td>
<td>consolidate, to pick up any OTC volume. […] So, what we want, in an ideal</td>
</tr>
<tr>
<td>just in order to get in so it doesn’t impact his tracking error too much</td>
<td>world, is all the different tickets for the same item to be consolidated in one</td>
</tr>
<tr>
<td>right. And then, he just cares about tracking error. Whereas the hedge</td>
<td>place and then people can see the true</td>
</tr>
<tr>
<td>fund cares about bid-offer, volumes,</td>
<td></td>
</tr>
</tbody>
</table>

14 BOAT is owned by nine banks -- ABN AMRO, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, Merrill Lynch, Morgan Stanley and UBS.
OTC, on exchange, overlap between these two markets, all these things.” (Head of marketing department – ETF issuer 3)

- “Because within Bloomberg there are functions where you can actually pick up OTC trades. You had this project called Boat[14] which is like a consortium between various banks and they can do reporting of OTC activity in line with MiFid. And some banks have to report on to Bloomberg tickets. Normally, you have if its French equity it’s like FP as the ticket there is also a ticket called XP and here this is a bond ticket. And some brokers are already reporting here. […]There are other market participants like Turquoise. All of these guys are seeing activity; they want to try and consolidate to get everyone to give an overall picture.” (Head of the ETF issuer 1)

Promotion

- “Between Euronext and Lyxor we made a communication partnership, we choose a Public Relation agency that constructed the communication plan in France and Europe. […] In terms of promotion we had an important advertising budget, many road-shows, and many meetings with retail investors around France, a lot of collaboration with brokers especially a partnership with online brokers to promote the products. We were also, automatically, in all conferences.” (The former Executive - Paris Stock Exchange)

- “Paris stock exchange made a real effort by human means and develops the project naming: Nextrack [name of the segment dedicated to ETFs] as well as overall liquidity. So that’s one thing which we have been pushing people like Bloomberg to do.[…] It’s a sort of discussion, lobbying. To say, like: why don’t you do this? And I can imagine probably all banks are doing this.” (Head of the ETF issuer 1)

- “One of the difficulties we faced and had to solve was the regulation. We had discussions with the COB [the Commission des Opérations de Bourse, the former French equivalent of the SEC] on what could be done so that the exchange price do not deparst too much from the fund’s value. The regulator was concerned about the possibility of an excessive difference between both values.” (Paris Stock Exchange – A former Executive 2)

- “I had the support of my marketing supervisor who believes in the project and who had a marketing approach. We, in Paris Stock Exchange we hadn’t this marketing approach, we were rather technical, we had projects for setting technical rules, but we were not marketing and customer orientated. She [the supervisor] permits to give a weight, a breath and thus the means to launch this project.” (An Executive - Paris Stock Exchange)

- “The promotional effort played a major role. Asset managers were reluctant because they saw the product, in the beginning, as a competitor. I think there was a huge
“Tracker” which is the ETF word that has been launched and used in Paris Bourse.” (Head of ETF issuer 5)

- "Mass marketing promotion techniques such as commercial teams, freephone service and websites all dedicated to retail investors.” (Head of the ETF issuer 1)

work done by the different marketing teams from Lyxor, iShares and others. There was this effort dedicated directly to asset managers but also to private banks. What is important is all the work done through the retail channel in the specialized press such as ‘La Vie Financière’ and so on.” (Broker – Investment bank 1)

- "I classify newspapers according to whether they are intended for a wide audience, namely: Les Echos, La Tribune, or retail investors such as: La Vie Financière, Le Revenu; or magazines targeting professional investors like: L’Agefi, Option Finance, Financial Times, and finally some media such as BFinance targeting a special kind of institutional investors.” (Head of communication – ETF issuer 1)

- "Issuers put a lot of pressures; they send press releases and invite us to conferences.” (Journalist 2)

- "Journalists don't write just anything about ETFs. If they compare our products with those of our competitors in a somewhat negative way, we call them to ask why they have compared two products that can't be compared. Above all we ask why they have written about our products without calling us.” (Head of communication – ETF issuer 1)

- "If an advertiser arrives and puts a large sum on the table, they can ask for pages of editorial comment to go alongside the advertisements.” (Journalist 4)

Appendix 2: Analysis of press articles between 2000 and 2009:

<table>
<thead>
<tr>
<th>Year</th>
<th>Large public and professional investors</th>
<th>Institutional and professional investors</th>
<th>Retail investors</th>
<th>Thematic/year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2001</td>
<td>50</td>
<td>0</td>
<td>3</td>
<td>Success and description of US ETF market; advantages and characteristics.</td>
<td>53</td>
</tr>
<tr>
<td>2002</td>
<td>15</td>
<td>3</td>
<td>6</td>
<td>Trend of French ETF market; advantage of diversification</td>
<td>24</td>
</tr>
<tr>
<td>2003</td>
<td>18</td>
<td>3</td>
<td>2</td>
<td>Success in France; new ETFs</td>
<td>23</td>
</tr>
<tr>
<td>2004</td>
<td>13</td>
<td>0</td>
<td>4</td>
<td>Advantages: simple, flexible and PEA; different strategies to invest in ETFs</td>
<td>17</td>
</tr>
<tr>
<td>2005</td>
<td>29</td>
<td>4</td>
<td>63</td>
<td>Two new ETFs on CAC40; suggestions to retail investors, new active ETFs; Study depicts little use of ETFs by retail investors</td>
<td>96</td>
</tr>
<tr>
<td>Year</td>
<td>Month</td>
<td>Day</td>
<td>Page</td>
<td>Text</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>12</td>
<td>26</td>
<td>34</td>
<td>Trend; new ETFs; Success of ETFs, entrance of foreign issuer; Study shows that professional and institutional investors are interested in ETFs</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>12</td>
<td>32</td>
<td>55</td>
<td>Wide range of ETFs; unsuccessful within retail investors but promoters insist on flexibility and simplicity; three studies shows an increase use of ETFs among professional investors; ishares differentiate it’s pure replication from Lyxor’s synthetic replication</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>19</td>
<td>47</td>
<td>67</td>
<td>Advantages of ETFs: simple, transparent and liquid; synthetic Vs pure replication; success of ETFs; two new foreign issuers; Wide range of ETFs; creation of fund of funds based on ETFs</td>
<td></td>
</tr>
</tbody>
</table>

Appendix 3: Argument showing the listing benefits on NextTrack (NextTrack – Admission to trading document, 2000)

“NextTrack offers the following benefits:

- A wide range of top-quality, popular trackers;
- Access to a vast professional and retail market;
- Active, ongoing marketing and PR support from Euronext (in close co-operation with issuers of trackers);
- Euronext’s commitment to ongoing education of the investment community with regard to trackers;
- Competitive fees;
- Designated liquidity providers that offer liquidity, small spreads and neutrality with respect to the trackers traded on NextTrack;
- A full data dissemination service, including web pages, and intraday NAV (net asset value; see appendix 1), creation and redemption files;
- A one-stop-shopping service with a unique, integrated platform for trading, clearing and settlement: trackers can be bought, cleared and settled by means of one trade and be combined with derivatives at a single marketplace (service to be provided in the near future).”