

**Because the market says so. Brokers and managers in the electricity industry****Dominique Lorrain**<sup>a</sup>

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**Abstract :**

The role played in the electricity industry by the finance industry has received too little attention in research on the liberalization of technical networks. Three arguments are brought forward. First of all, despite any rational argumentation, these intermediaries must be seen as ordinary actors with their interests, constraints and cognitive limits. Secondly, they have played an important part in transforming what used to be a tightly regulated industry. Their power mainly derives from their ability to influence the definition of the “right” policies and the production of information prior to decision-making. It takes the concrete form of an oligopoly power over two basic steps: big operations in the capital market and the ability to make comparisons between firms, sectors and countries and thus recommend the “right” allocation of resources. Thirdly, this quite real power does not have mechanical effects on utilities since it also reflects a state of equilibrium within the firm, as the case of Suez proves. The relation between markets and firms is more interactive than it seems at first glance.

**Mots clés:** Industrie électrique; Industrie financière; Intermédiaires financiers; Securities firms; Private equity; Suez; Pouvoir d'influence; Rationalité; Calcul

**Keywords:** Utilities; Finance industry; Brokers; Securities firms; Private equity; Suez; Power to influence; Rationality; Calculations

Phenomena such as the privatization of public bodies, the extension of the market to Communist bloc countries and the explosion in information technologies are viewed as emblematic of the economic history of the 1990s, distracting attention from one other particular characteristic of that period – the role of the increasingly powerful global finance industry. However, if we are to believe analyses of the ‘new economy’, these brokers are located precisely at the intersection between the factors essential for growth: technical and institutional innovations (Boyer, 2002).

In 2001–2002, the ‘new economy’ braked sharply. The values of all firms tumbled. Some failed; several of these were in sectors that had been deregulated in the 1990s (Kahn, 2004; Defeuilley, 2004). The figures are striking. Standard and Poor's Composite Index, which had fluctuated between 1400 and 1500 throughout the year 2000, fell, reaching 800 in Autumn 2002 – a drop of 47% (Thomson Datastream, Financial Times December 30, 2002: 9)<sup>1</sup>.

The world found out just how artificial some forecasts had been. Several sensational collapses (Enron, Arthur Andersen, WorldCom) and some very serious difficulties for energy traders highlighted deviant practices that had long been referred to – euphemistically – as “institutional creativity”. In these years of runaway enthusiasm, several control mechanisms had failed to function. Accountancy firms responsible for certifying accounts did not reject certain deals. Analysts were not worried by increased debt or some of the more opaque legal set-up arrangements. The securities firms found the finance needed. The principle of separating the roles of analyst and banker within investment banks, or consulting and auditing activities inside the big accountancy firms, which was intended to regulate conflicts of interest, did not work. In practice, the *Chinese wall*, a central principle of self-regulation of the legal and financial professions (Lazega, 1994), proved to be full of holes. In order not to jeopardize confidence, which was already seriously shaken, the authorities rapidly adopted new legal controls like the Sarbanes-Oxley Act of July 2002 in the United States (Capron, 2005). Several directors of major firms, who were directly implicated, were brought before the courts.

This recent history (of which the above is just a quick sketch) has now started to be documented<sup>2</sup>. The way it is explained reflects a picture that is simple and, in the end, reassuring. Drawn in by the optimism of the ‘new economy’ and the prospects offered by liberalization, some actors overstepped the bounds and “the safeguards failed”. The problem with this approach, which focuses on crises and deviant behaviours (Aglietta and Rebérioux, 2004: 306; Cohen, 2005), is that it emphasizes the exceptions. Concentrating on a few emblematic managers and on faulty accounting is a way of evading description and understanding of the ordinary work of the whole chain of actors covered by the generic term “markets”.

But there is another question we can ask. What happens in normal situations? This is the angle that this article aims to develop, taking the electricity sector as its starting point. This sector exemplifies the opposite of the ‘new economy’. Firms in the sector are very old, some dating from the late 19th century. Industry practices are very strongly framed by public rules. This is a long-term business with substantial fixed assets and more stable demand and technologies. However, at the point when our analysis begins, an astonishing policy reversal became evident<sup>3</sup>. From 1996 to 2000, the major electricity firms went in for diversification policies. This represented the first market consensus. Then, in 2002–2003, they abandoned this strategy abruptly, disposed of a lot of assets and tried to go back to specializing in their core activity. Both these totally opposing policies were implemented by managers, but the part played by brokers – whether in design, preparation or financing – was at least as great. Such a U-turn in analysis leads us to question the bases of their rationality and the way a consensus is constructed. When these agents refer to ‘the market’ in their studies, what are they making the market say?

Our central argument here is that the use of quantification and rational objectivization, promoted by brokers to justify their recommendations – a posture which is itself broadly inspired by standard microeconomics – must not eclipse other arguments developed by economic sociology (Menger, 1997) or by the history of enterprises (Chandler, 1977). What is called “the market” in fact conceals both the existence and the work of market intermediaries (Cochoy, 2002). They do not just make transactions run more smoothly. They also have their own interests, their own views of things, their own strategies. There are no superior actors who might enjoy ‘a view from the top’ and so tell others what the “right” policies are; all actors are situated in the marketplace, with their own interests, their own resources and their own cognitive limits.

When we describe brokers, and the finance industry, as ‘just another party’, we mean that they too are competing with the other parties involved to exercise their bit of power in commanding firms and defining industrial strategies. Such competition sets them very broadly in opposition to managers. This is a very long story, which goes back to the turn of the 20<sup>th</sup> century – the moment of transition from individual firms to large organizations that had gone public, leading to the separation of management power from ownership power. The current rise in the power of brokers is a continuation of this change, introducing the power to influence.

This argument about competition to command firms was lost from view, in discussion of this topic, for two reasons. Firstly, these actors have a tendency to account for their actions by mobilizing a vein of rationality and a sophisticated mathematical apparatus that gives them the strength of evidence (Galbraith, 2004). Secondly, their power is not primarily (visible) ownership power, but the (diffuse) power to influence, whose strength results from mastery of a long chain of decisions – background papers, evaluating firms and projects, consolidation by the equity method, financing, risk hedging. Investment represents only one kind of action on their part; theirs is often a minority interest (in

percentage terms), but it can be the perfect culmination of their earlier work.

In putting things this way, our approach to tackling these questions is to maintain that the argument that markets are rational should not lead to the issue of power – whether ownership power, management power or the power to influence – being eclipsed. This original category, though perhaps rather crude, has been somewhat lost from view by the social sciences as they have developed explanations that go beyond the standard economic model. Of course, we share the ideas that the market is not already there and that it needs institutions, that both the long term and the anthropological substance of the actors must be introduced into the equation, that there are limits to the workings of rationality and that the actors follow a principle of satisfaction more often than one of maximization. All this is true, but by weighing the actor down with all these characteristics, we run the risk of forgetting that someone who manages to define rules, organize a trading framework and develop evaluation criteria holds a great deal of power.

After a brief presentation of the finance industry we shall explain its role in developing a preliminary consensus for the electricity sector and then in the dramatic shift that followed. Next we shall discuss the work of these brokers, in order to highlight the internal principle which – even more than the deviance of the actors – explains the change in consensus. Having reached this point, the idea that this industry is characterized by a bigger kind of power, combining influence and ownership, seems compelling. Are we witnessing the emergence of a global industry capable of organizing asset trading to the detriment of managers in big firms? We discuss this in the final section of our article, taking the case of Suez as a starting-point. It will become apparent that the demands of markets do not apply uniformly. Managers have resources that allow them to translate these demands and to respond to them according to their internal constraints.

### **1. A highly concentrated industry**

A few facts will enable us to situate the process by which the economy has increasingly moved onto a financial basis, as well as the power of brokers. Between 1983 and 1999, total world market capitalization increased tenfold (Megginson and Netter, 2001). Capitalization of stock-market-listed US firms represented 50% of GDP in 1980 and about 150% 20 years later. Within this trend, the share held by banks and insurance companies fell. In contrast, as Aglietta and Rebérioux (2004) have shown, “pension funds and mutual funds owned less than 3% of (US) shares in 1950 and almost 40% by the late 1990s”; “non-bank” intermediaries raised money directly without taking deposits (Allen and Santomero, 1998). And another financial actor emerged during the 2000s: private equity investment funds. In 2005, these attracted capital of \$293 billion worldwide, exceeding the record established in 2000, and were set to achieve almost \$400 billion for 2006<sup>4</sup>. Several of them raised sums of between \$5 and \$15 billion; in fact, their impact was very much greater if their use of debt is

taken into account. With a conservative ratio of 25% capital to 75% borrowings, \$10 billion has the real impact of \$40 billion.

In addition, this is an industry where certain segments are highly concentrated. At the top, a group of 10 investment banks dominates merger and acquisitions operations and share and bond issues throughout the whole world. They are the big names in international finance. Six of them stand out; all these are American – more precisely, Wall Street – firms (Table 1). Their financial analysts' opinions are highly valued. When it comes to asset takeover, private equity funds (for the most part also American) challenge or support them. There too, a few names dominate the market: Apollo, Blackstone, Berkshire Hathaway, Carlyle, Cerberus, KKR. Both 'families' maintain close links with pension funds, commercial banks and insurance companies that outsource their investment activities.

Table 1.  
The top ten investment banks (securities firms), 1997–2001

	<b>M&amp;A consultancy services (transactions)</b>	<b>Shares issued (total values)</b>	<b>Bonds issued (total values)</b>
(1) Goldman Sachs	4 562 189	(1) 246 680	(7) 363 781
(2) Morgan Stanley	3 598 391	(2) 182 310	(2) 472 975
(3) Merrill Lynch	3 266 910	(3) 161 509	(3) 471 601
(4) CS First Boston	2 720 861	(4) 139 384	(8) 361 153
(5) JP Morgan	2 503 485	(8) 58 687	(4) 446 802
(6) Salomon Smith Barney	2 161 591	(5) 121 895	(1) 490 008
(7) UBS Warburg	1 402 112	(6) 98 882	(6) 371 296
(8) Lazard	1 096 426	–	–
(9) Lehman Brothers	1 069 550	(9) 44 586	(9) 264 462
(10) Deutsche Bank	952 975	(7) 76 646	(5) 399 516
Nomura	–	(10) 43 267	–
ABN Amro	–	–	(10) 225 874

Figures in billions of dollars. Source: Thomson Financial ; *Enjeux les Echos*, January 2003, p. 75.

To complete our overview, we must mention the actors who play a part in organizing these markets. First and foremost, the rating agencies: numbering just three in the world (Moody's; Standard and Poor's; Fitch), these evaluate a firm's creditworthiness and thus the cost of credit. Their studies and their decisions have considerable impact. Auditing firms, whose job is to certify accounts, are another player; as their clients have globalized, they have developed worldwide networks; since the collapse of Andersen, only the 'Big Four' auditors remain. The actors often also make use of legal firms; these, too, are organized into networks. Finally, the work of consultants – a broad description that includes big consultancy firms, think tanks and major university research centres – flows into this industry upstream (McKenna, 2006).

This sketch outlines a global industry that produces economic analyses and conducts arbitrations between sectors of industry and between countries in real time. For the first time in economic history, there is a sector that operates worldwide, 24/7, every day of the year, measuring and comparing. Financial markets tower over the world of trading on markets, and have made the competitive equilibrium model a universal one. Those involved are professionals. They are quantifiers, calculating not only a firm's 'fundamental value', but also its debts and risks. Thanks to evaluation and updating techniques, everything can be reduced to figures, whatever the activity concerned. Detaching each operation from its intrinsic properties enables it to be formatted within a universal system, compared and rated. They rely on mathematical methods,<sup>5</sup> aided by the power of computers fuelled by information flows circulating through high-speed global technical networks. This industry bases its recommendations on promoting results backed up by figures and analytical rationality. Once something has been reduced in this way – turned into figures, expressed mathematically – then the markets can function like a gigantic universal commutator, tasked with directing the optimal allocation of scarce resources. These actors put sectors or countries that would otherwise not communicate in touch with one another. They have spearheaded a phenomenon in which the market model is disseminated to every continent and every sector (including the public services).

The recent formation of this finance industry has had enormous impact, therefore. It has reconfigured economic exchanges, shifting the balance of power. After a long period of domination by the managers of large firms (Berle and Means, 1932; Burnham, 1947; Galbraith 1968; Chandler, 1977), financial actors have reintroduced the power of ownership and established the power of influence.

## **2. Market consensus and back again**

Since the 1920s, the industrial model of the electricity sector had been that of an integrated vertical monopoly. A monopoly, because it makes no sense to duplicate networks. Vertically integrated in form, because the energy produced cannot be stored, and so production must balance demand at any time and at every point on the network; when this industry was developing, the most efficient way of coordinating these exchanges was through integration. In its pure form, this industrial model no longer exists.

The story begins in the late 1970s with a critique of integrated vertical monopolies. This charged them with being too opaque, having too much power and not always performing effectively. In the United States, where the firms involved were mainly private ones<sup>6</sup>, the system was reliable; however, comparisons between the different States highlighted price differences. Reformers and economists explained that the system could be more successful if it introduced competition and allowed efficient firms to export their skills (Joskow, 2000). In Britain, the Central Electricity Generating Board did not compare favourably with its Continental equivalents (Henry, 1997; Florio, 2004).

In the US, a first reform, adopted in 1978, allowed independent production under certain conditions. In 1992, a new energy law extended independent production to any actor, allowed utilities to expand internationally and outlined rules enabling “independent” electricity trading (Joskow, 2000). In 1996, regulatory provisions laid down rules that allowed separation of production, transport, distribution and retail sale. Application of these was to vary according to the State concerned.

The electricity sector in England and Wales was privatized in December 1990 and March 1991 (Yarrow, 1994). The new organizational arrangements separated functions. In place of an integrated structure, there was a system carved up into several firms listed on the Stock Exchange: three historical producers and some independent ones, one firm in charge of high-voltage electricity transmission and 12 distributors who (for a while) retained their regional monopoly. As had been the case in other sectors, the transfer involved a ‘golden share’ scheme, which froze shareholdings for a period of five years, until the end of 1995.

### ***2.1. Expand to survive***

So 1996 was an important year. Every observer knew that British firms could go to different shareholders and that the US electricity sector, which had been stable for 70 years, was entering a new period. Liberalization of the sector in the rest of Europe was looming. A consensus was developing: the historical operators would inevitably lose market shares; those who wanted to survive would have to redeploy. They had a choice between three options: expanding internationally, adopting a new model centred on wholesale trade and retail sale, or diversification. In each case, brokers would play an active role.

In the US, from 1993 onwards, an analysis developed according to which electricity firms must diversify and/or expand internationally. The American market was operating at full capacity (2% estimated growth over the period 1992–2000), while that of the emerging countries might still progress at more than 6% a year. Privatization of public bodies in the emerging countries, as well as in the former Soviet bloc, created opportunities. The whole thing was presented as the demise of a system that lacked dynamism, and its replacement by innovation. “US electric utilities, once the antithesis of entrepreneurship, are becoming key competitors in the rapidly burgeoning overseas market for electricity generation and distribution” (Asian Wall Street Journal, March 3, 1993: 3). A study by the Edison Electric Institute concluded: “Utility Companies Look Abroad for Growth”. The same message was delivered by the research departments of investment banks: a representative of Salomon Brothers who was tracking independent electricity production said “many executives are trying to figure out how to diversify and keep their business growing” (Asian Wall Street Journal, *op. cit.*).

Several major investment banks were preparing to become involved as brokers to electricity markets. A dozen applications were filed with the Federal Electricity Regulatory Commission; if all were

accepted, this would double the number of brokers. The market was still uncertain, since only California and Michigan had liberalized retail sale. The only experience of opening up a market was that of gas. “Morgan Stanley Group Inc. has ambitious plans to plug into an emerging new opportunity: brokering electricity” (*Asian Wall Street Journal*, August 3, 1994: 5). The Vice-President of Chase Manhattan Bank's Global Power Group forecast major changes over the next five years: the historical operators were going to relinquish their production capacities in order to concentrate on distribution, while others would carry on production and transport. An international partner in Andersen Consulting's utilities industry practice foresaw total competition in the long run, with “householders [...] using computers on top of their television sets to buy electricity from brokers, who in turn will be buying it on the commodity markets. Companies like American Express could well be major players. They are already brokers of financial services. They could be your broker for electricity, gas, and a whole suite of value-added offerings” (*Financial Times* May 1, 1995).

“Utilities: Merge, Diversify or Die” – this headline in the *Asian Wall Street Journal* sums up an opinion that was becoming more widely shared (October 7, 1995). The article mentions the mergers in the United States and cites diversification by Veba and by Scottish Power into telecommunications. “Such diversification is leading many investment analysts to reappraise their view of utilities, no longer considering them as solid, dull income stocks, but as dynamic growth companies ...Veba appears to be especially popular among analysts, with Morgan Stanley publishing a 'strong buy' recommendation on the stock earlier this year<sup>7</sup>”. There was a burst of optimism concerning new information and communication technologies; there was a proliferation of privatizations and awards of new licences in the telephone industry. For actors who had at the back of their minds the image of an open electricity sector, where contact with the end-customer was the critical link in the chain, going into new technologies made sense.

The reforms that spread throughout continental Europe from 1998 led to a vast restructuring of the electricity sector and overflowed into other sectors: gas, telecommunications and drinking water. The research departments of major investment banks produced an increasing number of positive reports about this diversification route. For a few years, a consensus was established.

However, a careful examination of points of view reveals that, behind the consensus on diversification, the actors were projecting two different visions. Managers of firms, principally in Europe, tackled diversification through the integration of new sectors into their historical activities – the multi-utilities approach. Investment bank analysts argued in favour of moving from a single integrated organization to one carved up according to functions: trading, asset management, services to customers. New actors could specialize by function and offer their services in several sectors (Warburg, 2000). This is the multi-service model, of which Enron became the figurehead (Deutsche Bank, 2000).

The term ‘multi-utilities’ refers to a public body or private company that manages several network services; these may, but need not, be in a single territory. Among businesses structured in this way are:

- Enel (Italy): electricity, gas, *telecommunications*, *water*<sup>8</sup>;
- Eon (Germany): electricity, gas, *property*, *water*, *telecommunications*;
- Italgas (Italy): gas, water;
- RWE (Germany): electricity, gas, *water*, *waste*, *building and public works*, *telecommunications*;
- Scottish Power (Scotland): electricity, gas, *telecommunications*, *water*;
- Suez (France and Belgium): electricity, gas, water, waste, *television*, *building and public works*;
- United Utilities (England): electricity, gas, water, *telecommunications*;
- Veolia Environnement (France): water, waste, heating, transport, *building and public works*, *telecoms*.

The term appeared around 1998-2000, when the big European electricity companies embarked on diversification policies. Following the initiatives of the two major German electricity companies and the two major French groups, others went in the same direction: Enel, Endesa, Iberdrola, Scottish Power (Defeuilley and Lorrain, 2005). Up to the end of 2001, creating “comprehensive services groups” seemed to make sense.

## **2.2. Back to the core business**

Yet this consensus was to be challenged. Events outside the electricity sector intervened, totally altering the landscape, and led to a complete overhaul of the development model. First to be affected was the new information and communication technologies sector; from March 2000, its tide began to ebb<sup>9</sup>. The overall situation was not to get any better, as the year 2001 saw the concentration of a series of increasingly negative events: the Winter 2000–2001 electricity crisis in California, the 9/11 attacks, the uncovering of fraudulent practices at Enron in October, the collapse of Railtrack in November and the crisis in Argentina in December. Each month brought its own ‘bad news’. This continued into 2002, with the bankruptcies of Enron and WorldCom and setbacks for several energy traders. The analysts revised their blueprints. After the optimism of 1995–2000, caution was now the order of the day. They started to look more seriously at risks, the fairness of accounts<sup>10</sup>, debts and off-balance sheet commitments. Many firms were ‘downgraded’ by the rating agencies. In just a few months, the consensus swung the other way. The new imperative became refocusing on core business – the ‘pure player’ – as firms shed recent acquisitions that had been presented at the time as strategic successes. Using various methods, they were to quit telecommunications, drinking water, property and construction (see above).

So the idea of multi-utilities had lasted five years: 1998–2002. Perhaps it can be read partly as a consequence of fashion, since there was a need to incorporate new diversification policies into a

representation that would give positive meaning to the practices. At a given moment, everyone was using the same words; it was as if company directors and their advisers needed simple words to lend meaning to what they were doing. Nevertheless, this dramatic analytical shift calls into question the model of rationality and the robustness of these analyses, despite the technical nature of their language and calculation tools.

Diversification strategies had been prepared by consultancies; financing for them had come through the markets; the firms' managers had by and large explained their strategy through different vectors: institutional information, presentation of quarterly and yearly reports, 'roadshows' supplemented by informal exchanges. Where they went, the financial markets followed. And then the thinking changed completely. Those who had consolidated were enjoined to deconsolidate and to specialize. None of the major firms escaped this diversification-reconcentration cycle. Such a reversal in so short a time leads us to question the soundness of the analyses. There had been no breakdown in the technologies. Demand had flagged very little. These were sectors suited to long-term activities. So how are we to explain the frenzy of sales in a sphere that should avoid turbulence? How are we to explain the move from diversification to pure player?

### **3. The work of brokers**

It is probably reductive to refer to 'the work' of brokers in the singular. There are many of them, spread across the whole world, working on different products: shares, bonds, debts, currencies, derivatives (swaps, options). Financial intermediation has created more products and thus more different ways of investing (Allen and Santomero, 1998). Indeed, a careful reading of reports about the electricity sector confirms that the methods employed vary. One analyst will develop a literature-based analysis of a firm's potential, supplemented by the use of standard ratios, while another team will use sophisticated quantitative methods to classify a scattering of firms according to different variables. Even so, our investigations have led us to believe that, overall, these actors do not have a spontaneous grasp of problems, as do the firms' engineers. Their organizing principles are not the same.

#### ***3.1. Valuing firms***

Let us consider how a financial analyst in a rating agency or an investment bank actually goes about the job. This is a person, often young, trained first and foremost in techniques of financial analysis, who must give an opinion on the value of a share and make a recommendation – to buy or to sell? Is the current price under-valued, over-valued or equal to the value? Several methods can be used; often, the calculation is based on 'the sum of the parts'. The relevance of the policy being pursued, its potential and the risks incurred are evaluated. A comparison is made with other firms in the same sector. The number of data to be taken into account in arriving at this comparison is significant. Fiscal and accounting rules vary from one country to another. Big firms are complex entities with movable

boundaries, since they are constantly buying and selling assets. For these reasons, from a technical point of view, valuing a firm is not easy. The person who produces the valuation is bound by it, and this poses risks, since the advice will be followed by thousands of banking executives worldwide, who will pass it on to their end customers.

Therefore the valuer's problem is gaining access to the maximum quantity of the most reliable possible information. For the financial analyst, the specialized firm is very much easier to understand and evaluate than the big conglomerate where the sub-sections impinge on one another. The conglomerate is an opaque body that is difficult to grasp. It involves a level of complexity that compromises the external observer's ability to judge it. Probably the most extreme form of this is represented by the major Japanese groups organized around a commercial company, a bank and numerous industrial firms (Hamon, 1995). Perhaps this would not be a hazard if their industrial model had not been constantly criticized despite these large conglomerates generating gigantic trade surpluses<sup>11</sup>. Therefore analysts recommend specialization of firms. They do so by asserting market principles and the 'natural' laws of economics, which are said to establish a superiority of the 'pure player' model over the diversified firm, although in fact the argument is also sociological. To be able to say what the value of each firm is, analysts have to make things as simple and as open to calculation as possible.

Behind this technical problem of calculation, which begs for transparency, the question of power is also in play. Who is in a better position to spread risks and combine share portfolios – managers or financiers? The conglomerate, like the integrated vertical firm, gives power to managers; on the other hand, transparency of accounts gives knowledge about the firm and offers an external actor the possibility of making recommendations. It is easy to understand that if a firm has published, on a quarterly basis, surplus and cash-flow accounts, breaking them down by sector and by country, then it will be totally transparent to analysts and to its competitors. And then what managerial slack is left for its directors (Cyert and March, 1963)?

### ***3.2. Reducing risk through consensus***

Analysts also have to produce fast, within a limited time. A former analyst has estimated that he had just 24–36 hours a year to study each firm. Therefore, in order to limit the risks, he made use of the consensus and situated his work by comparing it to his colleagues' evaluations. He took shortcuts in order to give an opinion, and relied on the enormous supply of information that circulates on the global information network. This "leads everyone to repeat what has been said, without retracing the data to their source; judgment is constructed by consensus" (Tétreau, 2005). With this peer-to-peer circulation, information is everywhere; it is impossible to know where the sources it has originally come from actually lie: firms, the specialist press, analysts. As long as the indicators conform to forecasts, the recommendations differ little. Conversely, profit warnings attract attention; when in

doubt, analysts apply a precautionary principle and reduce the stock's weighting.

This consensus, which frames and restricts the actor at work, also functions at the overall industry level. The actors share beliefs about the “right” industrial model. In the 1960s, there was the fashion for conglomerates; then came a very strong adherence to the new economy, followed by the recent return to favour of specialization and immediate results. Christopher McKenna has recently demonstrated the role of consultancy intermediaries in creating this fabric of “right” models and in disseminating them (2006). Other research has also stressed mimetism in decision-making; decision-makers fall into line with their main competitors' behaviours rather than making their own original analysis of the markets (White, 1981). The result is that, when the consensus changes, the whole community revises its spontaneous judgments and applies the new ones, sometimes roughly, to all firms and all sectors.

### ***3.3. A non-material economy***

One point common to all these brokers is that they do not have the direct power of ownership or authority, but a power to influence. They exercise it by claiming to make multiple, scattered, uncertain phenomena intelligible. For that they rely on rational arguments and mathematical formalization. If we consider trends in consultancy, we have to conclude that this method has its virtues. In the past, consultants were brought in to advise on the precise technical points of a strategy finalized by managers. Nowadays, they take part in developing the strategies (McKenna, 2006).

But how to gain access to the strategic decision-maker? One way of getting attention is to introduce the new idea – one that no internal adviser has put forward. The need for novelty, characteristic of this non-material industry, explains fashions in management (Midler, 1997) and, similarly, introduces a movement principle. In order to be influential, these actors develop behaviours in which they are constantly active. They think ahead, canvas the major firms, make presentations based on simulations. When the electricity sector entered its reform cycle in the mid-1990s, several major investment banks opened specialized departments. They produced studies and took part in conferences organized by think tanks, public authorities and development banks. Action ‘in’ the market – which remained the objective – was effected through upstream work ‘on’ the market. At this upstream stage, brokers very largely link their work to research centres and thesis research being conducted in universities. The result is that these consultancy and financial intermediaries should be described not as closed entities but as networks open to public centres and to the different places producing ideas that lay the groundwork for more effective operational reforms.

### ***3.4. Making deals***

The job of investment banks is to manage currencies, make share and bond issues and carry out mergers and acquisitions. Their approach is financial and comprehensive; they excel at combining

assets. Therefore, when they enter the world of infrastructures, this competence leads them to recommend stock market flotations, partnerships, mergers and buy-outs – a strategy consistent with the way they view markets. From their bird’s-eye view, the targets are fairly easy to identify.

By recommending such large combinations of assets, these brokers also construct their own market, since each transaction generates fees. “In the three busiest years, 1998 to 2000, [M&A] deals totaled nearly \$4 trillion – more than in the preceding 30 years combined” (Business Week, October 14, 2002). In part at least, these arose from the dynamic that followed the privatizations of public enterprises (Megginson and Netter, 2001). One research company established the top twenty firms in terms of generating the highest earnings for securities firms in 2001. Twelve of them were telecommunications firms, and they paid two thirds of the fees: these were sizeable sums, of between \$134 and \$250 million dollars (Financial Times May 31, 2006, Corporate Finance).

Fundamentally, these financial actors live off movement, buying and selling. “Analysts are not paid to state the true value of the businesses quoted. They are paid to stimulate their market as much as possible on a daily basis... To make an impression, they have to get in quick and pull out all the stops” (Tétreau, 2005). Liberalization policies were to increase the amount of potential trading. The electricity sector in England and Wales was privatized at the end of 1990; then the game stood still for five years while the ‘golden share’ rule applied. From 1996, the American electricity companies mounted their offensive; in a year and a half, they bought up eight of the 12 regional distributors and some power stations; over the period 1995–1998, they spent £15 billion. As electricity prices fell and competition in their domestic market increased, development plans were revised. These firms sold what they had just acquired, with the support of the same brokers. On average, their involvement had lasted just 3.7 years.

In the growth phase, “it was a contracts race, everyone was developing projects, there was plenty of capital, the rise in stock market valuations made transactions easier... You could not afford to be behindhand. Everyone was wondering what the next move should be. If you had no ideas, you were less valued” (finance executive, 2006). But the problem was that by making the same recommendations to all electricity firms at the same time, consultants caused a gigantic bottleneck. The effect of excess demand over supply was that prices rocketed (Lorrain, 2003). They rose to unreasonable levels, endangering the health of the firms: debts were too high.

At that point, the agencies revised their ratings. Firms that had had a good reputation found themselves downgraded. Since their creditworthiness had declined, money cost them more, and this played a part in reducing their incomes. They then entered a vicious circle, where a deteriorating situation caused a reaction that intensified the problem. In order to get out of this, they had no other choice than to reduce their debt as fast as they could by selling assets. But as several firms did this at the same time, the values of assets fell and some operations turned into a massive sell-off that allowed other actors — private equity funds — to gain a foothold in these markets. The whole system was clearly governed

by a movement principle, for securities firms in their quest for fees and for investors seeking better places to invest.

#### **4. Managers and the finance industry: the case of Suez**

The Franco-Belgian group Suez did not escape the overhaul of the consensus on the electricity sector. It can even be said to provide an emblematic case of the behaviour of the markets, since it experienced an abrupt, dramatic shift even though the fundamentals of the sector changed little. But it is also an example that enables us to decode what is at stake within a firm as a result of the demands of the markets.

##### ***4.1. What the markets demand***

From the time it merged with Lyonnaise des Eaux in 1997, Suez was positioned as a multi-utilities group with activities in electricity, gas, water and waste. In 2002, when Enron, the US trader that represented ‘the’ alternative model, was going bankrupt, the directors of Suez thought that events had proved them right, and they explained their approach: a cautious one, paying attention to transparency, industrial integration and specialization into four technical networks.

So the management delivered a message of coherence in industrial and financial performance. In his report to shareholders presented in May 2002, the Chairman, Gérard Mestrallet, declared: “With €2 billion in net income for 2001, SUEZ ranks second in terms of earnings among French industrial and commercial enterprises [...]. We are the only group in our sector in France whose long-term debt is rated A by the two major rating agencies. Our debt remains stable and well-balanced at the June 30, 2001 level. These figures demonstrate we have our growth under control while generating strong cash flow (€5 billion)<sup>2</sup>”. This solid position was confirmed at the year end. Commenting on the situation in an in-house magazine, the Chairman set out his strategy: “Standard and Poor's confirmed its A rating for our long-term debt unchanged in 18 months”, (*Terre Bleue*, No 18, November 2002, p. 5).

In other words, up to Autumn 2002, the rating was satisfactory; Suez was holding up amidst the turmoil that was weakening many US electricity companies. The Group released cash flows and relied on long-term contracts and solid positions. It positioned itself as a defensive security by remaining in ‘utilities’ and not being drawn to the telecomms boom. Throughout the whole of 2001 and the first half of 2002, the value of the share on the Paris Stock Exchange was around €33–34, and fluctuated very little.

But this positioning was very rapidly blocked. From Summer 2002, the share value fell; it lost ground several times in September and October, with a bottom price of €13.18. As the year drew to a close, it was at around €20. There was continually mounting criticism, and in November this reached inside the board of directors. In February 2003, it was the object of a speculative attack. In March 2003, the

share reached a low point of €8.68. There was an increase in negative analyses from the major investment banks' research centres: lack of coherence in the model, a better valuation if energy was separated from environment, too much debt, exposure to risks in emerging countries (CS First Boston, November 2003 and January 2004). A speculative fund based in New York – one that often works on behalf of others – increased the pressure.

What happened that was so important in this second half of 2002? Did the firm make some gigantic extravagant acquisition that would increase its debt? On a first reading, Suez was a focal point for several negative signs. Crisis had taken hold in Argentina, which had been the symbol of private management of public services in the emerging countries; the crisis introduced doubt. The analysts also wondered about the risks in other countries; things in Brazil were not great, with the devaluation of the *real*; things had been going badly for the Philippines and Indonesia since the financial crisis of Summer 1997. In the US, the Enron affair had made traders in energy suspect, and this was a business area that Suez was involved in, through one of Tractebel's subsidiaries. Furthermore, the slowdown in growth in 2002 reduced demand for electricity, while the fall in the markets had an impact on the value of portfolio holdings. Last but not least, debt remained high and it crystallized attention: "in the second half of 2002, we emerged in second position for debt on the CAC 40 Index, behind France Télécom, since Vivendi Universal had made its environment division autonomous, and the way its debt was perceived had changed" (Group executive, 2006). Let us now examine in more detail the argument that debt was central to this era.

Over the period 1998–2001, the Group invested a great deal, and its debt rose. While it was less than €15 billion in 1998, it reached €28 billion at the end of 2001, and remained at that level until June 2002 before diminishing (Table 2). But a closer reading of the figures also allows us to understand the perception of the markets. The Group is providing information about its net debt, a concept that corresponds to gross debt after "taking into account cash and cash equivalents and available-for-sale securities". The view may be taken that in a crisis situation, gross debt remains chargeable, while the return on "available-for-sale securities" falls, affecting net debt in the same way.

Table 2.  
Gross and net debt at 31 December (€ billions)

	1998	1999	2000	2001	2002	2003
Gross amount	15.56	25.62	32.20	33.76	34.54	26.69
Net amount		18.63	26.35	28.00	26.00	14.99

Source: Suez, Annual Reports (Reference documents), Notes on debt.

There was something else worrying the markets: the level of annual payments. Net debt had risen to €26 billion at 31 December 2002, with the main settlement dates falling in 2003 (€4.86 billion) and 2004 (€5.47 billion). Some people questioned Suez' ability to repay. In reality, the Group had free

cash flow of €5 billion a year and €7 billion operating profits<sup>13</sup>. It ran no risk of a liquidity crisis, as the financial community had been stunned to discover was the case for Vivendi Universal in Summer 2002. But during this period of hypersensitive markets, Suez' cautious strategy did not pay off. On the contrary, suspicion about some affected everyone else.

Even if the fundamentals are not in question, in order to explain the pressures on the share, we need to seek an explanation in the way that analysts looked at this firm. "Here, it's clearly a change in perception that explains the U-turn in analyses. In fact, we had no problems with financing, but the market was claiming that was impossible. We resisted for six months, throughout the second half of 2002, but in January 2003 came a change of course" (director of the Group, 2006). This means that the analysts, equipped with all their econometric tools, had been slow to read the situation and to react when the debt had increased in 1999, 2000 and 2001. And when they did react, late in 2002, they did so by dramatizing the situation, which also allowed them to press for their own preferred solution. The industrial model was called into question. Should the Group hang on to its environment business? The challenge was a tough one, both on the markets and within the board of directors.

Therefore, in six months, from Summer 2002 to early 2003, the markets' evaluation of this group was to be radically reversed. In January 2003, the management announced a very rigorous restructuring plan with major consequences for the industry. In order to reduce the debt and send tangible signals to the markets, Suez disposed of several large portfolio holdings and a lot of assets in the water division: "the Group sold a third of its water business" (director of the Group, 2006).

#### ***4.2. The interplay of managers and market***

At this point, one might conclude that the brokers have won, and attach this result to the thesis of the dominant influence of markets and conclude that the distribution of drinking water in emerging countries did not sit easily with the obligation to provide a return on capital invested (Lorrain, 2005, 2007). We would like to take up this argument again, and to show that although the finance industry clearly has some power, it is not exercised in an automatic fashion. Firms' policies are not the result of a unique, computational rationality derived from quantifiable analyses. The relationship of firms to political institutions, the influence of their competitors, the internal balance of power (Fligstein, 1990) and the values held by managers (Simon, 1989) must all be brought into the picture. In these interactions, managers find some room for manoeuvre, allowing them to negotiate with "what the market says". In other words, the results of the competition are not fixed in advance; the managers of firms have resources available to develop their own strategies. Things function dialectically and interactively. The history of Suez over this very short period (2002–2003) is high illustrative of the interplay of managers and the market. Let us put ourselves in the position that Suez management was in during 2001–2002. They had several problems on their agenda.

From 1997 and the merger between Lyonnaise des Eaux and Suez, Jérôme Monod, who had been the architect of the international expansion of Lyonnaise, was less involved in operational issues. He was chairing the supervisory board. Early in 2001, he finally retired, and several big names followed him. In a few months, the founding generation of the ‘internationalized’ Lyonnaise had left the Group. They knew the operations and the people at the head of each business perfectly, and had a natural authority. Gérard Mestrallet and those at Suez had a different history: their authority had to be confirmed.

The merger was presented as an operation balanced between two firms involved in infrastructures. Suez brought control of Société générale de Belgique, which in turn controlled 50% of Tractebel and through that, electricity and gas activities in Belgium. A cursory reading of this merger between two French firms might tend to see it as centring on France; it is clear that Monod’s aura contributed to this view. But from the outset, the Belgian authorities wondered about their energy independence: “Surely Tractebel risks being subject to the strategic directions of the French group?” (Fralon, 1997). The Group’s management had to handle the national sensibilities that were roused by the merger, which were easy to understand. Its challenge would be managing to integrate Société générale de Belgique smoothly; the directors had to send out tangible signals.

This expression of powers was demonstrated in the shareholding, in the balance of the board of directors and in the way management posts were distributed. One man played a significant role here, since he stood at the intersection of alternative interests: Albert Frère. With 7.2% of the shares and 12.5% of the voting rights, he was the Group’s leading shareholder, but in fact his influence was very much greater. For the Belgian establishment, he represented a guarantor; his agreement to any project meant it was more easily accepted. He also had links with other institutional shareholders. His industrial investments in several businesses in Europe and his links with the Quebec industrialist Paul Desmarais made him a person of influence, acquainted with the business world in France, Benelux and Germany, and gave him openings into the ‘Anglo-Saxon’ countries.

The equilibria established at the point of merger were not to last, since the management transformed what had been a conglomerate into a multi-utilities group. The interplay of transfers and integrations altered the landscape. Once the construction business had been sold and the communication business was being managed separately, the only part of the Lyonnaise legacy that was left was the environment business — water, property, urban district heating — while the integration of Société Générale de Belgique (Spring 1998) and then of Tractebel (Autumn 1999) changed the consolidation weightings and increased the proportion of energy within the Group (Table 3). At this point, the equilibrium between segments changed, all the more so because the energy business also pursued a policy of vigorous international expansion during these years. Therefore an entity which, at the beginning, thought of itself as an alliance between equals was to slide towards a two thirds/one third balance in favour of the energy business brought by Société Générale de Belgique. This new balance

of figures – and thus, new balance of power – was to become clearer at the time of the 2002–2003 crisis. The energy business seemed more profitable and less heavily in debt.

Table 3.

Percentage consolidation of the energy division

1997, before the merger	Suez/SGB 63.4%/Tractebel 50.3%/Electrabel 39%
March 1998, SGB consolidation	Suez/SGB 100%/Tractebel 50.3%/Electrabel 39%
Nov 1999, Tractebel consolidation	Suez/SGB 100%/Tractebel <sup>a</sup> 98%/Electrabel 40%

<sup>a</sup> In 2000, the consolidation level was 96%, 98% or 100%, according to the source. In 2002, SGB held 100% of Tractebel (Suez shareholders' newsletter, December 2005).

These factors, internal to the firm, broadly explain the management's responses to criticisms from the markets. Most of the strain was taken by the water business. Where certain contracts were concerned, this was a chance to put an end to operations that had got off to a bad start "but which we had not managed to get out of" (international executive, March 2006). In other cases, the response adopted was a less obvious one, if it is accepted that this sector functions by occupying strategic, long-term positions. Two 'water directors' were to quit the Group in a period of 18 months; both had been major actors in the international policy. The environment division would be headed up by the director who had led Tractebel and, previously, Electrabel. "Now some people are telling us that perhaps we did too much" (international executive, March 2006). Executives of a competing group were astonished at the vigour of this 'sanding-down' operation, since, amidst the turmoil, Lyonnaise had many intangible assets: returns on experience of existing contracts, a presence on every continent under every type of contract, involvement in complementary services — drinking water, sanitation, waste, heating — and a dual approach to markets, through local authorities as well as industry.

Therefore the choices made were in response not only to the expectations of the markets but also to the balance of power inside the firm. Assurances had to be given to the Belgian division; these would be delivered through careful attention from the board of directors, through a greater presence in management jobs and through the strategic character given to energy. This was to enable the friendly takeover, in Autumn 2005, of the 60% of Electrabel that Suez did not already own. Thus the management strengthened its authority over the energy division, as it had done over the environment division with a new company — Suez Environnement.

## 5. Conclusion

It seems to us that, with the emergence of a global finance industry, active and influential in all sectors, a new geometry has been established between the actors. For the 'quiet' world of network industries and public policy, this is a big change. Our interpretation argues for the development of systematic research that would explore the work of this chain of actors. Some have started to be documented: consultants (McKenna, 2006), law firms and economists (Dezalay, 1992; Dezalay and

Barth, 2006), traders (Godechot, 2001; Martin, 2002; Muniesa 2005). Beyond concrete knowledge, the central question is understanding which are the most effective types of industrial architecture for organizing network industries. For 10 years, reforms in the electricity sector, the topic of this article, have been based on implicit belief in the efficiency of open, competitive systems. But is this really justified? Where is the balance between openness and integration? In making choices about long-term commitments involving issues of security and social justice, should we be listening to financial markets or to managers who have connections with politicians? Our study raises serious doubts about the possibility of running this type of industry through derivative information systems.

Our investigation also gives us some keys to understanding how markets function. Behind the fiction of the invisible hand of supply and demand, adjusting to each other in an optimal equilibrium, we find the clearly visible hand of actors who have their own interests and their own cognitive limits and are subject to the influences of fashion. The savage cycles of the markets are not only explained by the actors' deviancies. Abrupt variations occur because, fundamentally, this finance industry functions on a movement principle: short-term movements arising from the arbitrations that are constantly taking place on a global market, long-term movements according to management fashions that lead to reshaping of asset portfolios<sup>14</sup> and constant movements because transactions generate fees.

Behind the comments on ratios and the sophisticated analyses, there is clearly a power battle over who is running the big firms and who is representing the shareholders. Is it still managers, continuing the historic transformation of the large firm reported by Berle and Means, Burnham or Chandler? Or, now there is greater internationalization of business, is it investment banks and specialized funds who fulfil this function? Evidence of this new rivalry is provided when these actors, who are often in the minority and committed only to the short-term, challenge the managers' policies.

But, as we have shown in one case, the balance of power is very often interactive. Except during crisis periods that increase tensions, managers can make use of the injunctions of the markets. So, in order to understand real policies, it is no good sticking to "what the market says"; it is also necessary to decode forces internal to the firms. In doing this, we can point to a general principle of decision-making in major institutions. The directors must be able to justify themselves by an indisputable external principle; this may be economic warfare, public policies or the market. Those who are running firms are currently functioning in market vein, in a similar way to politicians mobilizing 'the state' or 'the European Union' in order to act in their political space<sup>15</sup>.

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## Footnotes

<sup>1</sup> Falls in the Dow Jones Industrial Average were 47% following the First World War, between November 1919 and August 1921, 89% at the start of the Great Depression, between September 1929 and July 1932, and 45% in 1973-4, at the time of the first oil price surge (Financial Times, 22 and 23 September 2001).

<sup>2</sup> Hutton and Giddens, 2000; Lowenstein, 2001; Krugman, 2004; McLean and Elkind, 2003; Stiglitz, 2003; Galbraith, 2004; Greider, 2004; Aglietta and Rebérioux, 2004; Cohen, 2005.

<sup>3</sup> In 2003–2004, we conducted a survey on the major European electricity companies and their multi-utilities policy. The questions we asked related to the economics of that industry, but also enabled us to grasp the role of the finance industry. In 2005–2006, we set about developing this area using three approaches: continuously monitoring the major infrastructure firms; gaining access to 12 investment bank reports relating to this sector in the United States and in Europe; verifying our results through some 10 interviews with company directors, with those responsible for relations with institutional investors, and with bankers.

<sup>4</sup> Financial Times, 27 February and 19 October 2006.

<sup>5</sup> “Our group employs financial science that has been developed in the past 30 years, and market-proven financial technologies... These technologies have already been widely used in financial markets, but we want to bring them to bear in other areas like corporate finance or sovereign finance and risk management”, Robert Merton, *Financial Times*, May and October 2005.

<sup>6</sup> According to the International Energy Agency, 239 investor-owned utilities represented 75% of the sector's turnover in 1998 (Defeuilley, 2004).

<sup>7</sup> Veba then expanded into the mobile phone sector through Vebacom.

<sup>8</sup> Sectors which firms diversified into, but subsequently quit, are shown in italics.

<sup>9</sup> On 2 March 2000, France Télécom shares reached a high point of €219. The low point would be €8.6, in June 2002.

<sup>10</sup> The trend for compiling reports to shareholders, or the “10K Reports” required from US firms by the Securities and Exchange Commission, is one illustration of these new demands. They start by headlining the “Party responsible for the accuracy of the information in the Reference Document” and “Individuals responsible for the Audit” – information which was previously relegated to the end of the report. Caution is the order of the day. In the past, directors talked about their policy and especially any new operations; the presentation of audited accounts came at the end of the report. Since 2002, pension funds and investment banks have imposed a requirement to start from issues of method and of the validity of the figures put forward.

<sup>11</sup> It can also be observed that groups that have existed in the infrastructures sector for a century are large and diversified. Besides the multi-utilities mentioned and the Japanese *sogo-soshas*, this is true of industrial groups like ABB, Alstom, General Electric, Hitachi and Siemens.

<sup>12</sup> Report to Shareholders for the Financial Year 2001, p. 2.

<sup>13</sup> Announcement by the Chairman, Gérard Mestrallet, to the shareholders’ General Meeting in April 2003 (Financial Times, April 25 2003).

<sup>14</sup> See the work of economists who have modelled this problem of volatility of markets (Calvet, 2001).

<sup>15</sup> I would like to thank the journal’s referees for their valuable comments; I would also like to thank Christophe Defeuilley and Jean-Claude Thoenig.

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