

# **REFGOV**

*Reflexive Governance in the Public Interest*

## **Corporate Governance**

### **MARKET EFFICIENCY, RATIONALITY, STRUCTURES OF GOVERNANCE AND CAPITAL MARKET REGULATION**

Robert Cobbaut

**PRELIMINARY revised VERSION  
DO NOT QUOTE WITHOUT EXPRESS PERMISSION  
[robert.cobbaut@cpdr.ucl.ac.be](mailto:robert.cobbaut@cpdr.ucl.ac.be)**

Working paper series : REFGOV-CG-12

**Robert COBBAUT<sup>1</sup>**

**MARKET EFFICIENCY, RATIONALITY,  
STRUCTURES OF GOVERNANCE  
AND  
CAPITAL MARKET REGULATION**

**DO NOT QUOTE WITHOUT EXPRESS PERMISSION**  
**[robert.cobbaut@uclouvain.be](mailto:robert.cobbaut@uclouvain.be)**

---

<sup>1</sup> An economist and a lawyer, Robert Cobbaut is professor emeritus of Financial economics at the 'Université Catholique de Louvain – Belgium (UCL), director of research at the 'Centre de Philosophie du Droit (UCL), affiliate professor at EDHEC (France). He has been a consultant for research (2005-2006) at the 'Université du Luxembourg' (Luxembourg School of Finance).

## Abstract

The purpose of this paper is to examine in some depth the conceptual underpinning of the currently observable normative devices that have been set up for the regulation of financial markets. The foundational element of these collective practices is undeniably the ‘Modern Financial Theory’ with its two building blocks: the ‘Portfolio Theory’ of efficient diversification of financial investments, itself a foundational element for the ‘Capital Asset Pricing Model’, together with an axiomatic statement named ‘Efficient Market Hypothesis’ (*Section 1*). Understanding properly this latter axiomatisation in turn requires some epistemological investigation of the ways in which economists do conceive rationality (*Section 2*). To the various conceptions of rationality revealed by this critical inventory correspond three ways of envisioning market efficiency. The first two may be called ‘orthodox’ ones, while the third one deserves the qualification of ‘heterodox’ (*Section 3*). Either current, ‘orthodox’ or ‘heterodox’, does imply a specific conception of the societal function of financial markets (*Section 4*). The strong dominance of the ‘orthodox view’ may be considered the main causal factor of three significant evolutions that took place in the course of the last third of the 20<sup>th</sup> century: the ‘financialisation’ of the economy, a ‘stockholder oriented’ conception of Corporate Governance (*Section 5*), and a conception of financial market regulation pivoted on the twin concepts of market liquidity and informational efficiency. This conception is presently challenged by a broadened concept of both the nature of the firm and the function of financial markets, concept that may be roughly characterised as ‘stakeholder oriented’ (*Section 6*).

## 1. THE THEORETICAL UNDERPINNINGS OF THE ‘EFFICIENT MARKET HYPOTHESIS’

In the second half of the past century, financial economists have been developing a theoretical approach to the pricing of risk through competitive markets. The best known – probably because it is the simplest one – of the models developed within this current of theorization<sup>2</sup> is the discrete time,<sup>3</sup> stationary<sup>4</sup> and static<sup>5</sup> asset pricing model named “Capital Asset Pricing Model”<sup>6</sup> (hereunder CAPM). This model has become widely used by practitioners of finance and is the support – or at least the starting point – of the vast majority of the empirical studies performed since the mid-sixties by academicians with surprisingly robust, even if not undiscordant statistical results. It is thus understandable that, after the initial period of suspicion that surrounds every innovation, it has become the key reference, not only for the professionals of finance, but also for public regulators.

The base concept of CAPM, due to Markowitz’ formalized approach to portfolio management through what he has been calling “efficient diversification”<sup>7</sup>, is a purely statistical one: covariance. The extent to which it is possible to diversify, i.e. to reduce the level of risk of an investment position through an adequate (optimal) allocation of the investment budget among financial assets is inversely proportional to the average degree of co-variation (correlation) of

---

<sup>2</sup> We let aside purely empirical – i.e. atheoretical – models considered to be pertinent just because they are fitting some set(s) of field data.

<sup>3</sup> As opposed to models in continuous time.

<sup>4</sup> ‘Stationarity’ means that the probability distribution of every state variable in the model does not change over time.

<sup>5</sup> The term ‘static’ does mean that the model is designed to explain the change of a given phenomenon over a given period of time (in other words, between two ‘points’ in time), as opposed to a ‘dynamic’ model, which is intended to explain a set of successive changes.

<sup>6</sup> The CAPM states that, on equilibrium of a competitive financial market, the expected return of a risky financial security  $j$  [ $E(R_j)$ ] is equal to the riskless rate of return ( $R_f$ ), which has the yield on government short term notes as a proxy, plus a risk premium equal to the market risk premium, i.e. the difference of the expected return [ $E(R_M)$ ] on the ‘market portfolio’, an optimally weighted combination of all risky securities, and the riskless rate of return, multiplied by the beta coefficient of security  $j$  ( $\beta_j$ ):

$$E(R_j) = R_f + [E(R_M) - R_f] \beta_j$$

The beta coefficient itself is measuring the portfolio risk of security  $j$ , i.e. the portion of  $j$ ’s global risk that cannot be diversified away, even in the ‘efficient’ combination of  $j$  with all the other risky securities in the ‘market portfolio’ ( $M$ ). In this context, ‘efficiency’ means, on the one hand, that the weights of the securities in the market portfolio are such that the risk of this portfolio is minimal and, on the other hand, that for all the other levels of risk, the maximum of expected return is reached with a linear combination of this portfolio and the riskless asset. The attainable ‘risk-return’ combinations are a function of the whole set of covariances (correlations) between pairs of securities.

<sup>7</sup> The technical tool – in mathematical programming terms – being an algorithm that determines what Markowitz has called the ‘efficient frontier’, i.e. the locus of asset combinations with the highest level of expected return on investment for a given level of risk.

the returns of the financial assets available for investment. For every individual investor, this allocation process is governed by a systematic confrontation of her preferences – her system of attitudes towards risk, formalized in some “utility function”<sup>8</sup> – with the characteristics of the ‘objects of choice’ (the financial assets available for investment). These characteristics are considered as purely exogenous, fully objective data. This latter trait of full ‘objectivisability’ of the model is of utmost importance since, as stressed by Bossaerts (2002, p. xi), the development of a statistical methodology for testing this asset-pricing theory “that is remarkably robust and requires surprisingly little information about the historical environment (...) was accomplished at the cost of a strong auxiliary assumption, namely, the ‘Efficient Market Hypothesis’ (EMH)”, which is itself the specific expression in the field of financial economics of a more general hypothetical statement in the main stream of economic theory, called ‘rational expectations hypothesis’ (REH). The REH has been initially formulated by Muth (1961, p.316): “(...) expectations, since they are informed predictions of future events, are essentially the same as the predictions of the relevant economic theory”. The key word in this sentence is ‘informed’, which justifies the qualification of expectations as rational: before making a decision well advised agents will ‘rationally’ gather and process information. Indeed, the REH is made of two hypothetical statements. The first one is of a cognitive nature: agents’ *ex ante* beliefs are on the average unbiased with respect to the adequate theory. The second one is of a technical – or equivalently: descriptive – nature: the statistical distributions of the data measuring the model’s variables are stationary.<sup>9</sup> Before coming in more detail to the variants of EMH, the financial transpose of REH, it is thus indispensable to investigate in some depth the economists’ understanding of the concept of rationality itself.

## 2. HOW ECONOMISTS DO UNDERSTAND RATIONALITY

The REH, which is grounding the EMH, is itself grounded in the axiom<sup>10</sup> of ‘substantive rationality’. This concept has been forged by the Nobel laureate in economics Herbert A. Simon (1976, p.130) who has defined it as follows: “Behaviour is substantially rational when it is appropriate to the achievement of given goals within the limits imposed by given conditions and constraints”. It is worth specifying the exact meaning of the notion of

---

<sup>8</sup> Fixing for every point in the ‘risk-return’ space the increase in expected return that is required by the investor in order for him to agree with a given increase in risk.

<sup>9</sup> For further detail, especially about the concept of ‘conditional expectation’ (with respect to a given information set), see Sheffrin (1983, chapter 1).

<sup>10</sup> An axiom is a proposition that is self-evident or is at least accepted as such, and on which or on a set of which an abstractly defined structure is based.

appropriateness in the neo-classical current of economic theory, which is the dominant one in economics to such an extent that those who are not sharing its premises are granted with the label of ‘heterodox economists’. In the mainstream of economics, thus, the rationality of behaviour “... depends upon the actor in only one single respect – his goals. Given these goals, the rational behaviour is determined entirely by the characteristics of the environment in which it takes place” (ibid., pp.130-131). What does such a statement more precisely imply? It postulates that the whole set of pertinent information is available, so that a rational decision maker will be able, with respect to a given situation: to describe exhaustively the set of possible future events and to assess their (stationary) probability distribution; to describe exhaustively the possible courses of action; finally, to associate with every pair constituted of one action and one future event a measurement in terms of subjective utility. In such conditions, she will be able to determine the optimal decision in the full strength of the term, i.e. the course of action with the highest mathematical expectation of her utility, this maximization being precisely the goal that the decision maker is working towards. Under specific conditions that define a ‘perfectly competitive market’ and that will be sketched out hereunder, the set of equilibrium prices – the set of prices such that supply and demand will be simultaneously equal for every ‘commodity’ traded in the market (more compactly: the set of prices that will clear the market) – will be Pareto optimal, i.e. will maximize the collective ‘welfare’ – defined as the sum of individual utilities – of the market’s participants, given their initial endowment.<sup>11</sup> The first requisite for a market to be ‘perfectly competitive’ is that there will be a large number of participants, each one of them being in ‘atomistic’ position, i.e. unable to induce a change in price by her sole transactions.<sup>12</sup> The second requisite is that the set of rules governing market transactions – in other words, the market’s ‘microstructure’ – will be in compliance with the Walrasian conditions, in short: will be at least analogically an auction market. If the markets for all economic goods are ‘perfectly competitive’, then the resulting equilibrium may be called ‘general equilibrium’. In order to be able to derive such a general equilibrium, one has to make so many restrictive hypotheses that the resulting general model becomes highly unrealistic. General equilibrium remains thus a purely theoretical construct<sup>13</sup>. Nevertheless, a global model in which every interaction does take place through

---

<sup>11</sup> In more rigorous terms, “an economic allocation of society’s initial resources and technological possibilities will be said to be Pareto optimal if there is no alternative way to organize the production and distribution of goods that makes some consumer better off without making some consumer worse off” (Mas-Collel & al., 1995, p.313). It should be kept in mind that a specific Pareto optimal allocation will correspond to every initial endowment. .

<sup>12</sup> In other words, every participant in the market will be ‘price taker’, and by no means ‘price maker’.

<sup>13</sup> For more extensive developments on market theory, see for example Mas-Collel & al. (1995, Part four).

the unique mediation of the price system remains the ultimate horizon of meaning of economics conceived as a normative discipline, as it is by the neo-classical main stream of economic thought. This thought pattern is particularly influential in neo-classical financial economics, where ‘allocational efficiency’ of the market, a synonymous for a Pareto-optimal allocation, is considered as a natural joint by-product of the strong form of its ‘informational efficiency’ and of its ‘operational efficiency’, concepts that will be defined and discussed in the next sections.

As one may figure out, the ‘perfect competition’ model, in order to be considered operative, supposes not only that the full set of pertinent information about the objects of choice will be available without cost, but also that every market participant will possess the cognitive and computational abilities to handle the complex set of relations inherent to the decisional situation facing the whole set of market participants. In the vast majority of such situations, ‘substantive rationality’ will hardly be a realistic assumption. This is the reason why Simon (ibid., p.131) has proposed ‘bounded rationality’ as an alternative concept. However, based on his experience as an operational researcher, he has recognized that this posture was by far too static, and therefore too ‘pessimistic’. As a matter of fact, individuals and groups of people are capable to progressively better identify, through an individual and collective ‘learning process’, the main determinants of the result they are striving for and are thus in a position to obtain if not optimal, at least increasingly ‘satisficing’<sup>14</sup> results. He has thus proposed a third way, the concept of ‘procedural rationality’ (ibid., p.131): “Behaviour is procedurally rational when it is the outcome of appropriate deliberation. Its procedural rationality depends on the process that generated it”<sup>15</sup>. We will discuss later the specific implications for the regulation of financial markets of the above described epistemological postures with respect to rationality. In order to understand properly the different perspectives in which the regulation of financial markets has been envisioned, we have to examine beforehand (in a third section), with their respective underlying concept of rationality as the Theseus’ thread, the various ways in which EMH has been approached in the financial literature. Borrowing to some extent the specific vocabulary of the tests of efficiency of the financial markets<sup>16</sup>, we will

---

<sup>14</sup> This specific word points at courses of action that will satisfy the minimum requirements for achieving a particular goal.

<sup>15</sup> “When psychologists use the term ‘rational’, it is usually procedural rationality they have in mind. William James (1890, chapter 22), for example, uses rationality as synonymous with ‘the peculiar thinking process called reasoning’. Conversely, behavior tends to be described as ‘irrational’ in psychology when it represents impulsive response to affective mechanisms without an adequate intervention of thought” (Ibid.)

<sup>16</sup> What is known as Fama’s typology of efficiency tests : see Fama (1971,1991)

present in succession what we could call the ‘strong’ and ‘weak’ forms of the ‘substantive’ approaches to market efficiency adopted by the mainstream economic theory, and finally the ‘procedural approach’ to this problematic that has been adopted by ‘heterodox economists’.

### 3. THE VARIOUS VISIONS OF CAPITAL MARKET EFFICIENCY

#### a. The ‘strong form’ of the efficient capital markets hypothesis

By the expression ‘strong form of the EMH’, it is meant that theorists in this current not only adopt an epistemological posture of ‘substantive rationality’, but specify this conception in a theory of financial asset valuation called ‘fundamentalism’. This theory may be synthesized as follows. There are three basic categories of determinants, called ‘fundamentals’, of the value of a productive firm: the resources available, the technologies available to transform<sup>17</sup> the former and the tastes of the consumers who constitute a solvent demand for the products of this transformation. According to the ‘substantive rationality’ axiom, the ‘fundamentals’ of a given economic activity are perfectly identifiable and their exact system of relations with the economic value of this activity is fully specified. The rationality of the economic agents will therefore consist in that they have a ‘common knowledge’ of the adequate theory to solve specific decision problems. More precisely, there exists a consensus on the fundamental determinants of the value of the goods which are the object of exchange, so that under given conditions of collective organization of the exchange process – the ‘ideal type’ being the ‘perfectly competitive market’ – the market’s equilibrium prices will be the unbiased monetary expression of the ‘true’ economic value of the goods exchanged. The differences between observed prices and the corresponding (unobservable) values will be purely random quantities with an expected value of zero that is called ‘white noise’ by the statisticians. As a result of the competition for making profits among a great many rational operators who will identify and adequately process every piece of the fully available set of pertinent information, the latter will thus be instantaneously not only exploited but adequately incorporated into the prices, in brief: will be fully ‘reflected’ in the market prices system. Consequently, today’s observed price will be the best possible estimate of tomorrow’s price.<sup>18</sup> The unique cause possible for a change in price to occur from one transaction period to the following one is the

---

<sup>17</sup> In the broadest meaning of the word; transportation is for example an economic transformation.

<sup>18</sup> The ‘informed’ reader will identify the two facets of the same conceptualization: the ‘random walk’ property of efficient prices, which is one of the key concepts of EMH, and the statistical concept of ‘conditional expectation’, which is the key concept of REH.



disclosure of new information, i.e. of a fact that was totally unknown and fully unpredictable at the moment when the current price has been formed. The idealized vision of an ‘informationally efficient market’ is that of an economy in which all agents are fully rational and will consequently react instantaneously and in a fully adequate way to the coming out of any new – i.e. fully unexpected and unpredictable – information. To the extent, which is large, that this vision is shared by both practitioners and theorists of finance, it is quite understandable that the main concern of regulators – still strengthened by the recent scandals – will be to assure investors of the accuracy, quality and completeness of the information disclosed by the issuers of financial securities.

In the ‘fundamentalist’ perspective, the value of a financial asset<sup>19</sup> is axiomatically stated as the discounted present value<sup>20</sup> of expected future income, using a properly risk adjusted discount rate.<sup>21</sup> For example, the value of a share of common stock is defined by the so-called ‘dividend discount model’ as the discounted value of expected future cash dividends, the discount rate being the risk adjusted cost (rate of return required by the providers) of equity capital, based on a statistical estimate using a CAPM-type econometric model. It should always be kept in mind that the definition of value used for instance is a statement that is purely axiomatic, and thus without any direct empirical grounding. This does not mean that ‘fundamentalism’ lacks any pertinence. There exists without doubt a link between the value of the financial assets issued by a firm and its capacity to generate profits, itself linked to its capacity to conceive, produce and market goods or services for which there exists a substantial solvent demand. The future periodic incomes of its activity are of course risky, but may be anticipated to some extent. However, historical episodes called ‘financial bubbles’ have been taking place, particularly in the recent past. They are characterized by market conditions in which there have been tremendous discrepancies between the stock market prices and the values estimated using the fundamental model: even when the valuation process was based on overoptimistic estimates of future income and on discount rates incorporating the tenuous risk premiums implicit in the risk structure of current interest rates, they resulted in estimated values that remained well below recorded stock market prices.

---

<sup>19</sup> A financial asset – or equivalently a capital asset – is a right of some kind (shareholder right, debtholder right, etc.) on a flow of future monetary income.

<sup>20</sup> The present value of a future income is defined as the amount of money that has to be invested now at a compound interest rate equal to the required equilibrium risk adjusted rate of return on investment in order to obtain at its date the expected future income.

<sup>21</sup> This notion is conceptualized in CAPM as the sum of the riskless rate of return (reward that is required, even in perfect certainty, for delaying the use of a disposable monetary income) and of a risk premium proportional to the undiversifiable risk – measured by the beta coefficient – of a given investment position.

From a purely formal point of view, Blanchard and Watson (1982) have demonstrated that the fundamental valuation polynomial equation<sup>22</sup> has an infinite number of solutions, the ‘fundamental solution’ being always one of them, a theoretical result that is undoubtedly interesting, though difficult to explain positively<sup>23</sup>. Given this feature, the authors have surprisingly proposed the use of the expression ‘rational bubble’ to designate both the set of solutions to the valuation equation and the explosive evolution of observable prices. P. Roger (1991, pp.53-55) has demonstrated that imposing to the set of solutions drastic restrictive conditions will result in a ‘unique fixed point theorem’. Whenever these restrictive conditions may be fixed in an appropriate way, the ‘fundamental solution’ will be the unique root of the equation. But this way of proceeding is paradoxical as long as rationality is conceived as applying the fundamental model which, as a fully general solution to the valuation issue, is not compatible with any such restriction. The very problem raised by this ‘strong form’ of the EMH is not that much that it may lead to empirical results incompatible with the CAPM,<sup>24</sup> but that, from its ‘substantialist’ conception of rationality, comes out a strictly dichotomous, and thus narrow-minded interpretation of stock market behaviour: market participants are either rational – i.e. fundamentalist – or irrational, i.e. radically unable to provide a logically articulated justification for their behaviour. The compacted version of the latter statement is just that ‘markets sometimes get crazy’, which is far from an acceptable scientific explanation. Moreover, ‘financial bubbles’ are assimilated with natural phenomena, which may happen unpredictably, even when everybody has been applying the ‘correct’ pricing

---

<sup>22</sup> Considering a finite horizon of T periods, the equation may be written as follows :

$$V_0 = \sum_{t=1}^T \frac{I_t}{(1+k)^t} = \frac{I_1}{(1+k)^1} + \frac{I_2}{(1+k)^2} + \dots + \frac{I_T}{(1+k)^T}$$

where :  $V_0$  = present value [at time (t = 0)]

$I_t$  = income at time t

k = risk adjusted discount rate

<sup>23</sup> Since there is not any *a priori* reason to consider that the fundamental solution could not be one of these multiple solutions.

<sup>24</sup> We are laying deliberately aside the voluminous literature about the ‘anomalous evidence’ obtained when testing EMH [For a synthesis, see e.g. Fama (1991)]. Beyond the numerous and delicate problems of statistical methodology they bring about, the basic problem raised by these ‘anomalies’ stems from the fact that empirical tests of EMH consist in their vast majority of a ‘joint test’ of the CAPM and of the EMH which is grounding it, so that any failure leads exclusively to reject the CAPM as the appropriate explanatory model of the set of field data used in testing. With respect to the EMH, one remains in a situation of indecidability.

model, and not at all as the result of a specific behaviour adopted by the ‘actors of the market’.

The more revealing trace of this dominant epistemological posture – rather infrequently formulated in explicit terms – lies in the comments provided for the results of many empirical studies – in particular the highly praised ‘event studies’ – where there is a total assimilation of two concepts – value and price – that can be linked only in an axiomatic way: any move in financial prices is qualified as either a ‘value creation’ or a ‘destruction of value’.

#### b. The ‘weak form’ of the efficient capital market hypothesis

The American economist Sanford Grossman has been the first one, in 1977, to question the strong form of REH, forging the concept of ‘noisy rational expectations’,<sup>25</sup> that he has applied specifically to financial markets in 1980 in a paper co-authored with Joseph Stiglitz and provocatively titled ‘On the Impossibility of Informationally Efficient Markets’. When the formal model elaborated by the authors is somewhat complex, their reasoning is rather simple. It is based on two propositions and on their respective corollaries. Even if information is costless, processing it is costly, at least in terms of opportunity costs, so that some market participants will have an interest in ‘free riding’: they will consider that, even if they do not do anything, a number of the other will process the information, so that the latter will be reflected in market prices. The trouble is that every individual has an interest in free riding, so that, in full rationality, nobody will process the information. This is called since 1977 the ‘Grossman’s paradox’. The second basic idea developed in the 1980 paper is that if the ‘fundamentals’ are not the unique determinants of supply and/or of demand of financial assets, rational expectations will be ‘noisy’, i.e. affected by some perturbations which are by no means ‘white’ – neutral – noises. Active investors (those who process the information) will in this case possess an informational advantage over those who limit themselves to observe ‘noisy’ prices. In that case, a rational agent will invest in data processing provided she will be expecting what is called an ‘excess return’,<sup>26</sup> that will compensate her for the cost of processing: on an operationally efficient market,<sup>27</sup> the equilibrium price will be fixed at a level which, for every active investor, will equalize the marginal gain in return and the marginal cost of processing information. When conditions are such that a sufficiently high

---

<sup>25</sup> The term ‘noisy’ is a metaphorical transpose of the technical jargon used about radio-electrical interference phenomena (‘parasitical noise’).

<sup>26</sup> Return in excess to the equilibrium value predicted by the fully rational fundamental valuation model (for instance, CAPM).

<sup>27</sup> In terms of ‘microstructure’, as specified above.

number of investors will have an incentive to process information, equilibrium price will reflect correctly, or at least without systematic bias, the pertinent information<sup>28</sup>.

Grossman and Stiglitz do not describe the noise generating behaviours, nor do they specify the ways in which they are affecting the equilibrium prices. This will be the case of the ‘behavioural finance’ current that has adopted a more complex vision of financial market behaviour than the ‘unanimism’ that characterizes the ‘strong form’ of EMH. It does incorporate into the pricing models the fact that some investors are not fully rational, so that their demand or supply of risky financial assets is affected by their beliefs – eventually borrowed from ‘gurus’ – or emotions, both of which being obviously not justified, or at least far from fully justified by economic ‘fundamentals’. In the finance jargon, these investors are metaphorically called ‘noise traders’. In contrast, the fully rational investors (the ‘informed traders’ in Grossman’s language) will behave as ‘arbitrageurs’. They will perform arbitrages, i.e. complex trades involving at least two assets, and which are structured in such a way that they will not require any net commitment of funds and will – at least in a fully efficient context – be totally riskless, but nevertheless profitable. Whenever the number of rational operators who will undertake such arbitrages will be high enough, the existence of such an opportunity for a ‘windfall gain’ will draw the market prices back to the fundamental values, thereby making of investment in the stock market a ‘zero sum game’. This is the most lenient and optimistic variant of the weak form of the EMH: from the hypotheses underlying the ‘strong form’ model, the only one that will have to be relaxed is the postulate that the price adjustments will be instantaneous. Of course, this once again requires the Manichean statement that people are either fully rational or fully irrational. One should keep in mind that, as in the ‘strong form’ case, there are some further requisites, like the immutability of the institutional environment, or equivalently its full neutrality, which remain most of the time implicit in the ‘behavioural finance’ literature, presumably because they are considered self-evident.<sup>29</sup>

Other postures do exist in the ‘behavioural finance’ current that we will not present in full,<sup>30</sup> but illustrate with three examples. The first two are exemplifying alternative or at least more refined concepts of rationality; the third one is pointing at the role of institutional structures.

---

<sup>28</sup> Formally speaking, the minimal number of active investors required for this to happen is a separating equilibrium in a model of signaling.

<sup>29</sup> As it is the case, for instance, in the whole neo-classical current.

<sup>30</sup> For an exhaustive description of the sub-currents in behavioral finance, see Shleifer (1999)

De Bondt and Thaler (1985) examine a case of what we could call ‘truncated rationality’. Their contention is that the great majority of investors, even those who may be considered as ‘reasonably rational’ – i.e. having a rather precise idea of the nature of ‘fundamentals’ and of their impact on prices – do systematically react too optimistically to good news and too pessimistically to bad news, in short: have a more or less pronounced tendency to ‘overreact’. In this case, even if the description of agents’ behavior has more nuances than in the Manichean reference case, we are led back to a concept of relative inefficiency that just consists of the ‘non-instantaneousness’ of price adjustments.

The second example deals with what is called ‘liquidity trading’, the fact that some market operators are selling some of their stockholdings, not because those assets have become for them either intrinsically undesirable or inappropriate as portfolio components, but just because they are for some reason short of means of payment. According to the strong form of EMH, such a behaviour, although constantly observable, will be considered irrational, because the sale is not justified by ‘fundamental’ motivations since, it is always possible in an efficient market, to borrow money with financial assets as a collateral. In this case as in the previous one, the price inefficiencies – the ‘noise’ – generated by ‘irrational’ investors will be counteracted by the ‘arbitrageurs’.

The third example is more interesting. Let us consider the case of a long-lived bubble, like the one that blew up in October 1987. Suppose that, in the course of the spring of 1986, some investment fund manager had come to the conviction that the stock markets as a whole were severely overpriced and had coherently decided to short<sup>31</sup> his whole position. The uncertainty about the moment when the bubble will be blowing up is for such a strategy a first source of riskiness: since it would neither have been advisable nor eventually possible to realize the short sale through a medium term contract, the periodical renewal of the position with short term contracts would have entailed a significant level of transaction costs, mainly due to margin calls on short positions. But this not the most serious risk to which our fund manager would have been exposed. If he was submitted, as it is usual, to quarterly performance evaluation, he would finally have had a record of six poor or even negative performances

---

<sup>31</sup> Selling short, i.e. borrowing from a ‘market maker’ financial assets that one considers overpriced and selling them immediately with the hope that, at the moment when one will have to turn them back to the lender, the repurchase price will be lower than the current price, is typically what we will be calling below ‘speculative behavior’. But doing the same when you are already holding and will be going on holding the same assets is ‘hedging’ behavior: the loss on the current position will be exactly offset by the gain on the short sale.

before the crash would occur, when his competitors would have displayed in a row very positive records of about 15% on an annualized basis. The most likely bet about this situation is that our man would have been fired by Christmas 1986 at last. In other terms, he would have been exposed to a specific type of risk that we could call ‘competitive risk’, which is linked to the structural characteristics of the fund industry as an institution. In the neo-classical current of economics, such characteristics are ignored or at least let aside because they are assimilated to stable natural phenomena. The paradox is thus that, when ‘short termism’ – a behavioural characteristic *stricto sensu* – gains influence up to the point that it becomes a cultural feature shaping social institutions, it is no longer incorporated into the ‘behavioural finance’ models because it has become structural. Indeed, it is highly likely that under such circumstances all the fund managers will be ‘riding the surf’ or ‘following the herd’, according to the metaphor to which you give preference. We will come to see in the next sub-section that this may be – or even has to be – regarded as procedurally rational behaviour.

The more recent developments of ‘behavioural finance’ consist in models<sup>32</sup> that mix up the CAPM ‘fundamental’ market factor model with a behavioural approach where ‘mispricing factors’ like overreaction, overconfidence, or tendency to extrapolate, ... are substituted by measurable economic or financial, sometimes even sociological proxy variables. Most studies in this sub-current are thus multi-factorial econometric models adding to the basic risk premium commanded by the beta factor, and supposed to reflect ‘the fundamentals’, some risk premia commanded by ‘mispricing factors’. Such empirical studies, besides being always suspect to be data specific, will never be an acceptable substitute for a comprehensive theoretical model. One should also notice that most of the extensions of financial modelling that have been developed recently stem from synergies with behavioural psychology, in particular studies about the impact of group pressure.<sup>33</sup> One of the main reasons of this affinity seems to be that this kind of construct in behavioural psychology is rather easily transposable into the multifactor linear structure of the ‘Arbitrage Pricing Theory’ (APT). For instance, APT is a purely formal theory where the linearity constraints imposed to the statistical model can be translated into a single and extremely general economic constraint on the terms of the exchange, which defines equilibrium pricing as absence of arbitrage

---

<sup>32</sup> See, for example, Daniel, Hirshleifer and Subrahmanyam (2001).

<sup>33</sup> For a synthesis of such studies, particularly prized during the nineties, see Moschetto (1998).

opportunities, without any relation – even indirect, like it is the case for CAPM<sup>34</sup> – to real economic variables.

The contribution of ‘behavioural finance’ to a deeper knowledge of financial markets’ functioning is undeniable. Nevertheless, most researchers in this current are kind of ‘middle-of-the-roaders’. When building up either empirical models or theoretical constructs, they will systematically consider that, at any moment, a significant portion of the investors are rational enough for at least the ‘weak form’ of EMH to be taking acceptable account of the observable behaviours. The ‘fundamentals’ at least implicitly remain, if not the fully efficient, at least the basic determinants of prices, supplemented by some behavioural determinants. The latter are in fact considered as noise factors, the presence of which is due to the defects of financial communication: lack of exhaustiveness and/or consistency, lack of accuracy, etc., all defects that an adequate regulation of disclosure will be able to remedy. In brief, the vast majority of the ‘behavioural finance’ current may be regarded as an effort to enrich the basic pricing model with behavioural variables without dissenting from the mainstream ‘modern finance theory’ about its foundational concept of substantive rationality.

#### c. Heterodox approaches to market behaviour and asset pricing

Heterodox approaches are above all positive approaches: they consist of identifying actors’ behaviour and unveiling its internal logic, in other words: their rationality, in its procedural concept. The common trait of these approaches is that they consider a plurality of possible logics of action. The ‘fundamentalist’ approach is one of them, and is one of the most pertinent – maybe even the most pertinent – but it has to ‘cohabit’ with other pertinent logics. This statement is raising two main questions. First: how is it that a ‘logic of action’ that is not the only conceivable one, and should thus be in perpetual competition with multiple other logics, has succeeded in becoming not only the key reference, but even the unique reference for the majority of market operators? Second: what will be the modalities of the ‘cohabitation’ of logics of action? In order to answer those two questions, heterodox theorists do mobilize three complementary concepts: ‘mimicry’, ‘convention’ and ‘self-referential dynamic’.

---

<sup>34</sup> In purely formal terms, CAPM, due to its linear structure, may be regarded as a univariate modality of APT inside of which no theoretical justification is invoked for the presence of the two factors (one of them – the riskless return – being known with certainty, and the other one – the return of the market portfolio – being random) used to ‘explain’ the level of the individual assets’ return.

In a situation characterized by ‘radical uncertainty’, i.e. when I am no longer capable to synthesize with probabilistic statements the information I am processing,<sup>35</sup> mimicking the behaviour of someone else who seems to have greater ability than I have to make sound judgments about the situation becomes a procedurally rational behaviour, according to the meaning given to this expression by Herbert Simon. If the procedure for selecting the person to mimic has been reasonably thought out, the most likely outcomes are a slight risk of being worse off and a much greater chance to be at least a little better off. Of course, the probability of an extreme damage is never non-existent but, in a situation of ‘radical uncertainty’, such a catastrophic event will most probably affect the collectivity as a whole. The higher the ‘radical uncertainty’, the higher will also be the ‘mimetic polarization’. In a paper about ‘mimetic contagion and speculative bubbles’, Orléan (1990) has demonstrated, based on highly plausible behavioural and institutional hypotheses, that: 1°) diversity of opinions is decreasing when the variability – and thus the uncertain character – of the ‘fundamental value’ is increasing; 2°) the higher the degree of polarization of opinions, the higher will be the prices’ variability; 3°) the set of equations describing this process of ‘mimetic specularity’ has a multiplicity – but not an infinity – of equilibrium solutions, the ‘fundamental’ solution always being one of them; 4°) notwithstanding some path dependency, it is impossible to predict which one of the equilibrium solutions will obtain; 5°) even if it is certain that the bubble will blow up within a finite period of time, it is practically impossible to predict the timing of this ‘corrective’ reaction. ‘Speculative bubbles’ thus originate in some degree of generalization of a circumstantially rational behaviour. In a paradoxical way, it is the defensive behaviour of some agents in a situation of strong uncertainty that triggers the conditions of possibility of this divergent phenomenon that will be amplified by speculative behaviour, itself reinforced by the ‘herding’ behaviour mentioned above.

If ‘mimetic contagion’ does explain the genesis of the diverging processes named ‘bubbles’, their sometimes long-lasting persistence may be explained by the emergence and stabilization of a complex – and therefore difficult to grasp – mode of coordination named ‘convention’. The American philosopher D.K. Lewis defines it as “...a solution (among other possible ones) of a coordination problem, that, having succeeded in concentrating on itself the agents’ imagination, tends to recur with regularity”<sup>36</sup>. We could not present here in detail the

---

<sup>35</sup> As it would be required in an approach grounded in a concept of ‘substantive rationality’.

<sup>36</sup> D.K. Lewis (1969), p.12.



processes of emergence, evolution and disappearance of such complex normative systems.<sup>37</sup> We will restrict ourselves to mentioning that the robustness of a convention will depend primarily on the fact that it is widely recognized as legitimate. We are provided with a deeply illuminating example by the last stock market ‘bubble’ to date, which has affected in the very beginning of the present century the so-called ‘new economy stocks’. The convention consisted for instance of an overoptimistic assessment of the future prospects of new industries like biotechnologies and e-commerce. For the first time in financial history, the correction process did not consist in a burst but in an agonizingly slow decrease in the prices of this category of stocks, that took about one year and a half. The slowness of this adjustment has made it possible to gather evidence that the triggering factor of the revival of ‘radical uncertainty’ and the consequent rejection of the convention, has been the accumulation of facts that could not be interpreted according to the convention, as for example the series of spectacular bankruptcies of companies in the e-commerce.

The dynamic of the price system generated by the processes that have been described above is what is called ‘auto-referential dynamic’: “in an auto-referential system, the magnitude with respect to which the elements are positioned is itself the product of the interaction of elementary strategies. This magnitude could not be defined, but circularly”.<sup>38</sup> In other words, “equilibrium, i.e. a *fixed point*<sup>39</sup> of the auto-referential process, is obtained when the reactions of the actors to the representations they are building for themselves of the reality they are plunged in generate by a composition effect a reality that is in conformity with these representations”.<sup>40</sup> For a market price system, what it is about is “... the double move by which, on the one hand, economic actors do react to the representation of the price system they are building for themselves and by which, on the other hand, the *composition*<sup>41</sup> of those reactions, according to the rules of the market, generates a system of effective prices. ‘Equilibrium’ is reached whenever the reality coincides with the representation”.<sup>42</sup> This is the conceptualized form of what Keynes has expressed with the famous metaphor of the ‘beauty contest’:

“... professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the

---

<sup>37</sup> For a systematic and ‘panoramic’ exposition on this topic, see Orléan (1994).

<sup>38</sup> Orléan (1990), p.291.(our translation).

<sup>39</sup> In italics in the original text.

<sup>40</sup> Dupuy (1982), p.149 (our translation).

<sup>41</sup> In italics in the original text.

<sup>42</sup> Ibid. p.140 (our translation).

competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view. It is not the case of choosing those which, to the best of one's judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligence to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees".<sup>43</sup>

Heterodox economists propose a vision of the efficiency problematic that is essentially characterized by the contention of the plurality of rational attitudes that Keynes, in the famous chapter 12 of his *General Theory*, was ranking into two broad categories. The first one is made of the investors who can be qualified as *speculators* and whose activity does consist in interpreting market's psychology, in other words: in "... foreseeing changes in the conventional base for valuation a short time ahead of the general public".<sup>44</sup> The second one is made of those to whom the term *enterprise* may be associated and whose activity does consist in "making superior long-term forecasts of the probable yield of an investment over its whole life".<sup>45</sup> We have said that the economists belonging to the 'behavioural finance' current, while elaborating more sophisticated typologies, consider, at least implicitly, that the 'fundamentalist' approach is the only one to be rational, whereas heterodox economists, who adopt a positive posture instead of a normative one, consider that there are various types of investment behaviour, each one of them being grounded in a specific 'logic of action', and that the key problem is therefore understanding in depth what can be the results of the composition of these logics. If the behavioural postures adopted by the stock market operators in response to the risks they perceive are such that they will induce a change in the conventional valuation regime, we are led to conclude that "the quoted price has no other reality than that of the transitory consensus it does crystallize at a given moment".<sup>46</sup> In other words, the market is conceived of, in this perspective, as a collective device aimed at 'building up consensus' over one price, but not necessarily at producing 'true' valuation.

As for Keynes (1936, p.155), he has penetratingly observed that financial speculation<sup>47</sup> is "... the inevitable result of investment markets organized with a view to so-called 'liquidity', a

---

<sup>43</sup> Keynes (1936), p.156.

<sup>44</sup> *Ibid.*, p.154.

<sup>45</sup> *Ibid.*

<sup>46</sup> Orléan (1999), p.33.

<sup>47</sup> Characterized as follows: "... it is not sensible to pay 25 for an investment of which you believe the prospective yield to justify a value of 30, if you also believe that the market will value ['price' would have been preferable for the sake of full clarity] it at 20 three months hence" (Keynes, 1936, p.155). For instance, you should rather sell it short and be long later on.

feature that brings about “the predominance of speculation over enterprise”<sup>48</sup>, a state of affairs he forcefully disapproves and lyrically stigmatizes:

“Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of ‘liquid’ securities. It forgets that there is no such thing as liquidity of investment for the community as a whole. The social object of skilled investment should be to defeat the dark forces of time and ignorance that envelop our future”.<sup>49</sup>

This is also one of the favourite arguments of those who deplore the ‘de-coupling’ of financial economy from real economy through the stimulation of parasitic activities to the detriment of wealth creating activities. Such a preoccupying issue, with respect, among others, to the definition of the goals and means of public regulation deserves a more in depth examination which will be topic of our next section.

All the developments made in the present sub-section strongly suggest that ‘informational efficiency’ is compatible with any financial dynamic whatsoever, as well as with ‘compositions’ of such dynamics. In this respect, an interesting case of composition, which accounts for Grossman’s paradox, is described and modelled by Orléan and Tadjeddine (1998) in a paper which offers renewed perspectives for the study of financial dynamic. The long cycles of financial markets show an oscillation with an alternation of periods during which the ‘fundamental values’, as defined by the standard rational expectations model, are if not the unique determinant at least the main attractor of the price system, and of episodes during which there are severe discrepancies (generally overpricing) followed in all such episodes, except – as already mentioned – the very last one to date, by brutal readjustments that always raise discussions of the question whether there has been an ‘excessive correction’. These results come to back up the conclusion that looking at the observed prices is by no means a sufficient condition for making efficient decisions in the financial markets.

#### 4. THE SOCIETAL FUNCTION OF FINANCIAL MARKETS

Financial exchange markets have been for a long time markets for commercial paper, initially called ‘bills of exchange’. They did not become Stock Exchanges until the ‘corporation’<sup>50</sup> status had become an open legal regime. Indeed, in the old regime (before 1789), ‘joint stock

---

<sup>48</sup> Keynes (1936), p.160.

<sup>49</sup> Ibid.

<sup>50</sup> In the English language, a “corporation” was originally a body of people that, for some purpose, had been given a legal existence distinct from the individuals who compose it. A “corporation” is thus a fictitious person. As a corollary, a distinct legal person, even if fictitious, may own a distinct patrimony.

companies' had been created by royal decree. The first ones were charter companies that had been set up to finance and manage colonial expeditions. Since such expeditions were highly risky ventures, one had to invent a brand new mode of financing their equity capital. First, one had to split this equity into a high number of shares of common stock with a low face value, in order that this equity capital could be subscribed by many people, including relatively small savers, since no individual investor was daring to subscribe for an important amount of money. Second, in order to hold the investment risk at an acceptable level, so as to make the issue attractive enough to gather the required amount of subscriptions, one had to grant to the shares of common stock the privileges of shareholders' 'limited liability' (to the amount of their contributed capital) and 'unrestricted negotiability' of the shares. These are the two main characteristics of the 'joint stock company' (*société par actions*). It must be recalled that up to that time, the partnership had been considered to be the sole acceptable concept of a legal vehicle for joint private economic projects. This latter legal form is characterized by: 1°) unlimited liability: all the partners are fully (i.e. on their whole patrimony, and not only on the assets they have dedicated to their business activity) and jointly liable (this means that the creditor(s) may choose to sue all or part, including a single one, of the partners) for all the obligations validly contracted by the legal entity they have formed; 2°) restricted entry and exit: the partnership contract is formed *intuitu personae*; transfer of shares by one of the partners requires unanimous consent of the other ones to the person of the transferee. Abandoning the two constitutional features that were widely considered as the necessary conditions for a legal regime of the association of private interests to be both equitable and collectively secure must be considered as a major and even revolutionary legal and financial innovation. For the first time in the modern era, one was facing the necessity to invent a collective structure that would simultaneously allow for 'centralizing' – i.e. not only gathering but also unifying command over – unprecedented huge amounts of finance capital, and designing a brand new risk sharing device.

The new legal status has nevertheless remained for a long time restricted to projects of public interest, like for example the railroads, and subject to the suspicion aroused by scandals like the bankruptcy of the so-called 'Law system'<sup>51</sup>. In France, the 'joint stock company' (*société par actions*) became one of the building blocks of the 1807 Code of commerce, but was

---

<sup>51</sup> See e.g. M.D. Bordo (1998, p.III-143)

submitted to governmental authorization, in order that the character of public interest of the new enterprise could be ascertained.

In France, it was not before 1863<sup>52</sup> that the ‘joint stock company’ became an open legal regime created by a purely private contract with a unique reservation: in order to publicize this contract in a way that would assure legal security to any third party, the acquisition by the newly created entity of the opposable quality of a ‘legal person’ ought to be submitted to a formal procedure of registration. The basic legal conditions to adopt the status of a ‘joint stock company’ were: 1°) that the founders be at least in the number of seven, and that the number of shareholders of the company never be less than seven; 2°) that the amount of the firmly subscribed equity be at least equal to the legal minimum. From the facts that the minimal amount of the equity has been relatively moderate from the very beginning,<sup>53</sup> and that there has never been any limitation to the unevenness in shareholding<sup>54</sup>, one may infer that the collective goal of such a drastic reform has been to give a strong incentive to entrepreneurship. This conclusion is strengthened by the subsequent evolution of commercial law: creation of the hybrid legal concept of what could be called ‘partnership with limited liability’ (*société à responsabilité limitée- SARL*<sup>55</sup>) and, very recently, introduction of the concept of ‘unipersonal company’. In the latter case, the legislator’s intention is most clearly to make it possible for an individual to separate his or her private and business patrimonies, while one of the very basic principles in the Latin laws has been up to a recent past the unicity of the patrimony: one single legal person, be it a physical person or a legal entity, was not allowed to hold more than one patrimony.

After having opened to small shareholders the capital of big industrial companies, one has rapidly realized that if assuring investors of a tolerable level of patrimonial risk was undoubtedly a necessary condition for attracting the expected massive subscriptions, it was by no means a sufficient condition. Small – because not affluent – shareholders needed in addition the opportunity, in case of bad luck, to ‘liquidate’ – i.e. to transform into the most liquid asset: the currency – some of their shareholdings instead of having to ‘liquidate’ hastily

---

<sup>52</sup> Several countries of continental Europe have adopted the same legal regime at about the same moment, while it had already been common law in Great Britain for decades.

<sup>53</sup> And has become evermore moderate since, due to the decline in purchasing power of the monetary unit.

<sup>54</sup> It has been from the beginning fully legal that one single individual would be holding all the shares but six.

<sup>55</sup> The Belgian initial denomination (*société de personnes à responsabilité limitée-SPRL*) is even more revealing of the hybridisation introduced into the legal system. The Belgian present legal denomination is: *société privée à responsabilité limitée*, with an unchanged acronym.

– and thus with a high risk of a substantial loss – some more precious or indispensable items of their belongings. Organizing an efficient secondary market for capital assets was thus the additional and inescapable condition for the extension to small savers of financial personal property. This is – as Keynes had perceived it fairly well – the essential function of stock exchanges: to assure the ‘liquidity’ of financial investments, as the adequate response to the collective will to set bounds to individual risk in order to attract to the stock exchanges a volume of finance capital that would be high enough to provide a sufficient amount of risk capital to the productive<sup>56</sup> firms. As summarized by Orléan (1999, p. 33), “liquidity rests on the will of the community to be organized in the market form in order to transform individual bets on uncertain future income into immediately available assets”. Keynes is drawing our attention to the doubly artificial character of this collective construct which in turn reveals the doubly paradoxical character of liquidity. On the one hand, the productive real capital constituted thanks to the issuance of financial assets remains necessarily immobilized. ‘Fundamental value’, which has to be estimated over the entire useful life of the industrial and/or commercial project, is thus involved in this paradox. On the other hand, as pointed out once again by Orléan (Ibid.), “the market as a whole cannot get rid of the issued financial assets”. Shares of common stock are thus sharing with money the peculiarity of being the expression of directly social wealth that no individual actor is allowed to destroy. As a consequence, they acquire the character of a ‘quasi-money’ that may be used as the currency to pay deferred salaries (stock option rights, pension funds) or business acquisitions.

The key question thus becomes how to react on this paradox. Should we, as most people do today, identify market efficiency with liquidity and unconditionally advocate a degree of market liquidity as high as it is made possible by the available technologies? Should we, on the contrary, tread in Keynes’ footsteps and share his anathema to the ‘fetish of liquidity’ for leading to the highly detrimental predominance of the speculator’s logic over the entrepreneur’s logic, which cannot cause anything but lowering the propensity to invest – i.e. to bet on long term future? It does not seem judicious to adopt either extreme thesis. On the one hand, the attractiveness of short term speculative gain will deter people from trying to “defeat the dark forces of time”. On the other hand, decreeing that financial assets should be held by the initial subscriber for the whole presumed lifetime of the real investments they have financed would for sure deter many, if not most potential investors to participate in the

---

<sup>56</sup> In the largest acceptance of the word.

formation of the indispensable risk capital of the enterprises. A sound pragmatism will obviously command to organize in the best interest of the collectivity the ‘cohabitation’ of enterprise and speculation through regulations that maintain the latter within acceptable limits. Debates like the contest about the ‘Tobin tax’ are exemplifying how it is difficult to construct solutions to such problems that will be both sufficiently ‘contextualized’ and nevertheless enforceable. Anyway, for the case under discussion, “there is no doubt that an increase in liquidity in turn increases the opportunities for fruitful speculation, and that the latter is frequently developed to the detriment of the creation of real value by investments requiring that we collectively assume their strong irreversibility”<sup>57</sup>. On the above-mentioned double paradox, we can conclude with André Orléan (*ibid.*, pp. 33 and 54) that, on the one hand – as already mentioned, “the quoted price has no other reality than that of the transitory consensus it does crystallize at a given moment” and that, on the other hand, “the seduction of liquidity is destructive of entrepreneurial logic”. Determining the collectively efficient balance between liquidity and irreversibility, in other words: between speculative and entrepreneurial logics, has thus to be considered as a political issue requiring explicit regulation.

##### 5. ‘FINANCIALIZATION’ OF THE ECONOMY AND CORPORATE GOVERNANCE<sup>58</sup>

In terms of economic history, the post-World War Two period may be divided into two sub-periods. The first one (1945-1975) has been named the ‘Thirty Glorious’. It has been marked by the extension of the ‘Fordist’ regime of accumulation, whose major traits may be sketched out as follows:

“The regime of growth of the Fordist era was characterized (...) by the industrialization of the production of consumer goods, particularly of durable consumer goods (automobiles, electrical appliances, etc.). The institutional apparatus – particularly labour laws and social legislation (...) and the financial system (which accomplished the ‘bancarization’ of the population through the development of retail banking and the correlative development of consumer credit), were remodelled in order to facilitate mass consumption as the functional response to the capacity for mass production then in the process of being developed. A new wage system, whose prototype had been conceived by Henry Ford as the indispensable

<sup>57</sup> Aglietta and Cobbaut (2003), pp.101-102.

<sup>58</sup> This section is a partial synthesis of Aglietta and Cobbaut (2003)

counterpart to the automated production chain of automotive vehicles, was gradually instituted and perfected. The basic concept was stable, long-term and full time employment with all its ‘accessories’: replacement revenue in case of illness or layoff; compensation for unemployment; retirement systems that ensured one’s capacity for consumption beyond the period of professional activity; opportunities to anticipate future revenue through credit”.<sup>59</sup>

The second sub-period may be named ‘patrimonial regime of growth’. At a moment when Fordist methods of production were reaching their limits, a new impulsion has been stemming from the possibilities offered by ‘telematics’, the offspring of the cumulative effects of technological progress in information technology and telecommunications. ‘Telematics’ has been the condition of possibility of the three major technico-economic features of this new era: globalization of the financial system, ‘tertiarization’ of the economy, integrated rationalization of the entirety of the ‘value chain’ in manufacturing industries. From 1982 to 1997 in the United States, the structural part of total investment went from 45% to 23%; that of non-computerized equipment remained stable at 43%; that in IT went from 12 to 34%. The evolution we have just described took place at very different paces and according to very different variants on each side of the Atlantic. “Regarding the same dates as above: the gross margin on capital employed increased everywhere by half (from 12 to 18% in the United States, and from 10 to 15% in Germany and France); however, while the productivity of invested capital reached the index number 140 in the United States, it only reached 113 in Germany and 107 in France. As regards the sharing of the return on investment, measured by the increase in the share of profits, the table is reversed: 104% in the United States, 129% in Germany, and 138% in France”.<sup>60 61</sup>

In this context, the first significant move towards ‘financialization’ of the economy and ‘patrimonial regime of growth’ has taken place within the wage system. The uniform Fordist wage regime (prevalence of full time employment of indeterminate duration) entered in a process of segmentation among ‘*polyvalent stable*’ workers, who have to co-specialize to a high degree their human capital with the assets of the enterprise<sup>62</sup>, ‘*professionals*’ whose

---

<sup>59</sup> Aglietta and Cobbaut (2003), p.88.

<sup>60</sup> Ibid., p.89.

<sup>61</sup> There is an everlasting structural difference in dividend policy between US and Western European firms: dividend payouts are significantly lower in the USA (see: Cobbaut, 1969).

<sup>62</sup> These workers, who have stable employment because of the high degree of co-specialization of their human capital with the company’s productive structure, are nevertheless polyvalent because they are organized in flexible teams that ‘sell’ work-in-process or services to other ‘business units’ in the same company or group. The



human capital is only weakly firm specific<sup>63</sup>, and workers with only basic skills and thus exposed to ‘*market flexibility*’.<sup>64</sup>

This ongoing process of segmentation of the labour market has not been – and still is not – clearly perceived and understood by most management teams. As a consequence, the same incentive scheme has been applied, though with varying intensity, to all segments of the workforce. It consists of ‘aligning’ the interests of workers with those of shareholders by providing the former with an access to shareholding, either direct or indirect, i.e. through the medium of various types of institutional investors. The main innovative character of the post-Fordist wage regime – which is in full contradiction with the social balance of power established since the end of the 19<sup>th</sup> century – is that, at the present time, an ever increasing number of people, through direct or indirect, individual or collective, immediate or deferred shareholding, is sharing in some way and to some extent the entrepreneurial risk. So that an increasing portion of the population has an interest in ‘well-behaved’ stock market prices. Dualization of society is by no means a new phenomenon, but its form has been changed. Dualization is no longer between capitalists and ‘proletarians’, but rather between beneficiaries of – at various degrees – and excluded from – with a correlatively precarious standing – the ‘patrimonial society’.

The emergence of such a ‘patrimonial regime of growth’, in which shares of common stock have become for the firms a currency to pay salaries and retirement pensions or business acquisitions, is setting up a link between the management of individual patrimony over the total span of the life cycle and corporate governance. ‘Institutional investors’ have emerged over the last three decades as the ‘pivotal’ category of financial actors, up to the point that they are widely considered as ‘universal owners’, i.e. the legitimate representatives of the entire category of small shareholders. As a consequence, even if they assume a ‘hands-off’ attitude<sup>65</sup> with respect to the management of the companies they have invested in – which is the case of the majority of them – the managers and the board of directors of these companies

---

typical example of such a productive scheme is provided by the second generation automotive assembly lines in the motor-vehicle industry, with Toyota as the main innovator and precursor.

<sup>63</sup> The workers in this category (researchers, ‘developers, creative people in marketing, ...) are essentially mobile. Companies have thus to keep these workers and to motivate them, through adequate incentive mechanisms (e.g. stock options plans), to serve the interests of the shareholders and not just their personal gain.

<sup>64</sup> For some details, see Aglietta and Cobbaut (2003), section 2.3.1; for a fully detailed description, see Beffa, Boyer and Touffut (1999).

<sup>65</sup> Abstaining from exercising their voting rights and from applying for a seat in the board of directors when their shareholding would justify such a candidacy.

will be inclined to infer from their sole presence among their shareholdership that they are unconditionally requiring a minimum level of performance in terms of either the level of the return on equity or of a given type of dividend policy, or even that they will react positively to every dismissal decision. Even if such beliefs may be considered to some extent as part of the ‘finance mythology’ – managements’ behaviour is not that clean-cut – they nevertheless reflect the effective evolution of mentalities about the ultimate goal of business companies: there is nowadays a large consensus on the statement that it does exclusively consist in creating ‘shareholder value’. The ‘modern financial theory’ is the intellectual foundation of this consensus. As we have seen already, it defines the price of an asset – which in turn is considered by the EMH as an unbiased estimate of the true economic value of this asset - as a function of both a flow of expected future income and of a risk-adjusted discount rate that is the opportunity cost of invested finance capital. The dominant view in financial economics is considering, in a direct inference from the strong form of the EMH, that CAPM is providing the analyst with a fully objective measurement of this opportunity cost, so that the only delicate point in applying the ‘valuation theorem’ is the estimate of the flow of future income, which in turn is crucially depending from the quality – at the limit point, the ‘transparency’ – of the financial information investors are provided with by the issuing firms. In turn, as mentioned above, ‘allocational efficiency’ is viewed as a natural by-product of ‘informational efficiency’. If one considers, with the heterodox economists, that, on the contrary, the market is a collective device aimed at ‘building up consensus’ over one price, but not necessarily at producing ‘true’ valuation, the CAPM equation is irremediably reduced to a pure arbitrage equation<sup>66</sup> – i.e. a purely formal condition for equilibrium of the pricing system. This valuation equation having – as we know – multiple solutions, ‘informational efficiency’ is thus “compatible with any financial dynamics whatsoever”.<sup>67</sup>

The technical criteria presently used by the vast majority of financial analysts for measuring the firms’ performance - Economic Value Added (EVA), Shareholder Value Added (SVA), Price-Earnings Ratio (PER), etc. – are based somehow on the market price of common stock, which is the basic ingredient of ‘shareholder value’. They may be interpreted by means of two contrasting thought models. For the mainstream economists, they are reflecting the expectations of the substantively rational economic agents and are thus a sound basis for incentive mechanisms of corporate governance aimed at aligning the interests of the whole set

---

<sup>66</sup> See sub-sections 3a and 3b.

<sup>67</sup> Aglietta and Cobbaut (2003), p.100.

of firm's stakeholders with respect to an objective estimate of economic value created. For the heterodox economists, they are reflecting a 'convention'<sup>68</sup> that "... owes everything to the construction of a new power relation that establishes the absolute priority of the owners – i.e. the shareholders – in the distribution of revenue"<sup>69</sup> and accordingly reduces corporate governance to the set of rules and incentive devices aimed at assuring this prevalence. Shareholder value is "... the product of a recent, but influential, structural history that has recast market finance and the concerted management of collective savings into the dominant institutional mould"<sup>70</sup>.

## 6. THE REGULATION OF FINANCIAL MARKETS

Regulating financial markets means providing an appropriate answer to three questions: Should we regulate at all? On what points should we regulate? How should we regulate?

Except ultra-liberal defenders of the 'free' – i.e. totally unregulated – market as the unique regulating device of the whole economic activity, everybody – and this includes without any exception political decision makers – does agree that there should be some degree of public regulation of markets' structuring and functioning. Most people are conscious that markets are by no means natural objects, but rather collective constructs aimed at realizing some societal goals and therefore requiring some framing by public policy makers. Designing an efficient system for channelling savings towards economic entities in structural need of funds is undeniably one of the main societal goals for the attainment of which there is a requirement that the collectivity will establish the 'rules of the game' and create the conditions for their enforcement. For anyone who has of this 'game' a democratic conception, regulation will primarily consist of assuring equal opportunities to every participant. It is thus mandatory that all participants in a market will have an equal access to the whole set of pertinent information and will be protected against price distortions based on private information: insider trading, price manipulations by 'market makers'<sup>71</sup>,... For those who are in agreement with the 'rational expectations hypothesis' (REH), this is what financial market regulation has to be restricted to. Rational investors who have been given access to the whole set of pertinent

---

<sup>68</sup> i.e., as exposed above, a solution to a coordination problem that is – at least potentially – in competition with other ones. As for the dynamics of such a competition, see Orléan and Tadjeddine (1998).

<sup>69</sup> F. Lordon (2000), p.139.

<sup>70</sup> R. Boyer (1999), p.139.

<sup>71</sup> Who in principle are bound to maintain a 'fair and orderly market'.

information will be able to assess the ‘true value’ of the assets to be exchanged (informational efficiency); unbiased composition of their individual decisions will be assured by an adequate structure of the system of transactions (operational efficiency of the ‘market microstructure’).

The conditions for operational efficiency are particularly interesting to re-examine in the light of heterodox theses. As a matter of fact, the ‘market making’ system, adopted by a significant part of the stock markets and by the vast majority of the markets for financial derivatives, deserves serious criticisms. The first one is that it does transgress the ‘law of one price’,<sup>72</sup> since the ‘bid’ and ‘ask’ prices of the various market makers will most of the time be different. The common counter-argument against this criticism is that, in an efficient market, the competition aroused by an adequate microstructure among the ‘specialists’ of the same stock will be such that these differences will tend to be slight. The common counter-answer is that, in contrast with this ‘price driven system’, the alternative method of a fully centralized – and most of the time computerized – ‘order driven’ auction market will provide at any moment a unique unit price for every ‘commodity’. The other important objection is that, especially when the market is not very active, the market makers will be able and thus tempted to take personal advantage of the information provided by their order book. While recognizing the inconveniences of the ‘order driven system’, its defenders claim that these are of little weight in comparison of its superior performance as ‘liquidity provider’. We will let aside the contest borne from the fact that this superior level of performance is challenged by a significant – even if a minority – number of empirical studies in order to place the emphasis on the point of view of heterodox economists who are challenging the reasonableness of the quest for an ever increasing degree of market liquidity. This indefinite liquidity fever is precisely the condition of possibility of ‘self-referential dynamics’: the stock market’s set of relative prices – the risk adjusted interest rates – will no longer provide at any moment the investors with signals on the basis of which they will be able to make judicious investment decisions that will allocate properly the scarce resources of the collectivity. If heterodox economists are right, the ‘building site’ to be opened urgently is the one of the prevention of the major drifts of the valuation system. This site is nowadays practically empty. One must recognize that the difficulties and obstacles to overcome are all the more important that there is a high degree of interdependence of the various facets of the problematic. To exemplify this, we will restrict ourselves to making a brief allusion to the

---

<sup>72</sup> Which is an alternative wording for the equilibrium requirement that, at any moment, the price of all the items of a given ‘commodity’ will be exactly the same.

twin problematic of the exchange rates, another price dynamics which is closely connected to the dynamic of financial prices and made still more complex – if not incoherent – by the inexistence, highly paradoxical in a ‘globalized economy’, of a worldwide currency.

The issues raised by the sole financial sphere are themselves multiple, intertwined and all the more complex that they are partially resting on ‘conventions’, i.e. ways of thinking and acting that people in most instances do not even conceive of questioning, notwithstanding the fact that they are not self-evident. Conversely, as we have already exposed, conventions may be in some other cases rapidly wiped out by the accumulation of counter-evidence. In order to illustrate alternative ways of conceiving financial markets regulation, we will sketch out three paths for reflection about possible new visions of the problematic of regulation.

Our first two suggestions are in direct link with the liquidity issue and, more precisely, with its two structural conditions, that have been examined above. The first one is about the ‘unrestricted negotiability’ of the shares of ‘joint stock companies’. Of course, the negotiability of the shares of common stock is presently restricted in some instances, for example in order to avoid adverse selection when there is a contribution of capital in kind, or in order to avoid that tax exemptions could be obtained through fictitious transactions. Beyond that, it seems conceivable to extend such restrictions to situations in which it is collectively desirable that the founders and initial subscribers would behave as ‘patient capital’, i.e. investors who would assume the irreversible situations they have been creating in the real sphere. As for the second one, ‘limited liability’, i.e. the fact that, in case of damages caused by the company, the injured parties have no right to make a legal claim on the private patrimony of the associates, it is quite conceivable to generalize the principle of making companies – and not only physical persons – suable for criminal offence and also subject to civil liability for serious tort in the absence of any criminal offence, or even in the absence of any fault. As a matter of fact, it does happen frequently that persons damaged by some action of a company cannot be fairly compensated due to insufficient solvency of the directors and/or managers who, as organs of the company, have been making decisions that constituted either a criminal offence or a breach of a duty.

Our third example illustrates how, in connected fields, with indirect but important influence on the operation of financial markets, an action on mentalities modelled by conventions could be determinant. One could thus, in a somewhat sketchy way, paraphrase Keynes as follows:

‘Of the maxims of orthodox corporate governance none, surely, is more anti-social than the fetish of shareholder value, the doctrine that it is a positive virtue on the part of corporate managers to base all their decision making upon the exclusive consideration of shareholders’ interests. The social object of skilled management should be to act in an understanding of the company’s interest that takes into account in a way that would be at once the most equitable and the most efficient possible the interests in part convergent, but in part divergent of all stakeholders in the company : shareholders – considering besides that they are far from being an homogeneous category – but also the workforce (subject to the same consideration, as we have seen above), customers, suppliers, debtholders (public authorities, banks and the other ones), local community and larger collectivities to which the company belongs, ...’ Though still a minority, an increasing number of voices are rising up to question the unilateralism of the majority position in matters of corporate governance, commonly called ‘shareholder approach’, and to advocate a ‘stakeholder approach’, based not only on ethical arguments of equitableness and solidarity, but also on efficiency arguments. Indeed, for some economists like Zingales (1998, p.499), it is an efficiency requirement that “all the parties who are mutually specialized” – and who are thus, at least potentially residual claimants – be recognized as belonging to the firm, while the main stream of economics, along with the ‘contractarian’ legal current, does consider that only the shareholders belong to the firm, because they are the only ones to be parties in the contract that gives birth to the ‘corporation’. On the other hand, the minority ‘institutionalist’ legal current does consider that the founder members of a corporation are performing a unilateral act of adhesion to an institution of society. In addition to that, both categories of lawyers will disagree with the vast majority of the economists, who consider the shareholders as the owners of the firm. In legal terms, shareholders are the owners of a bundle of transferable rights that are either materialized or symbolized by shares (when the shares themselves are dematerialized).

The concept of the firm proposed by Zingales is an interesting but somewhat ‘acrobatic’ attempt to fit an institutionalist dimension into an intellectual construction pivoted on the concept of contract. Anyway, asserting like he is doing – even if it is indirectly or implicitly – that all categories of stakeholders have somehow and to some extent their say in and about the firm is paving the way to a significant evolution of collective representations of the value of the firm and of the dynamic of financial market prices.

After having justified the social need for a public regulation of financial markets and developed arguments in favour of widening the scope of this regulation to issues of another nature than just assuring distributive justice among investors, answers to the third question we had been raising about the modalities of regulation must also be evoked. The nature of the problematic of regulation and the objectives we have suggested above for its widening are calling for a high degree of ‘contextualization’. What do we mean when using this fashionable neologism? In our conception, the context is not just what it is for most economists: an environment conceived as a set of constraints that have to be taken into account as realistically as possible in a formal model of decision making. For us, the context is the complex common field of action for the various stakeholders in a social institution, who are thus involved, with a more or less clearly defined role to play, in a collective – and thus necessarily cooperative – action. Consequently, the various actors will have to enter in a dense interaction – in a process of collective learning – in order to improve, extend and communalize their perception of the context in which they are operating. This common perception will be in turn a necessary condition for their capacity to select, among the multiple ‘possibles’ offered by the context, the way in which they will create a new form of life fitting the common normative aims they will have progressively elaborated. As we shall see below, one of the main lessons to be learned from regulatory failures is that this condition, though necessary, is by no means a sufficient condition. The ‘effectuation’ in the social reality of the normative finalities of the actors must be conceived as requiring the integration of learning and of reflexive adaptation processes. This backward motion of the thought on itself, named ‘reflexivity’, is far from being an automatic operation, in particular when the matter is a collective one, and a fortiori an institutional one. It does require specific incentives. As it is clearly argued by Bratman (1992, p.37): “The conditions of production of a common meaning cannot be deduced from rules laid down in the minds but from ‘shared intention’. (...) In order for the cooperative dimension called for by this shared intention to be achieved, it is necessary that various institutional arrangements be put into place to coordinate intentional actions, coordinate planning and structure relevant bargaining.” Such an organizational framework, he argues, is indispensable to favour the triple commitment which is the concrete expression of ‘shared intention’: mutual responsiveness, commitment to the joint activity and commitment to mutual support. In other words, the pragmatic conditions of success of what he calls ‘shared cooperative activity’ are procedural ones. Proceduralization, however, is a multivocal concept in the specification of which two main pitfalls have to be carefully avoided. The first one may be called ‘mentalism’, which is very clearly

characterized by the above quotation from Bratman (“...rules laid down in the minds...”) and may be illustrated by more than one regulatory failure. As explained by Maesschalck and Dedeurwaerdere (2001) about the failure of ICANN,<sup>73</sup> due to a loss of trust in the capacity of this institution to carry out its mission, the institutional devices designed to improve ‘social cooperation’ have been focused on the unique question of the ‘justification’ of the cooperative behaviour that the incentive mechanism had to ensure, and no attention has been paid to the specific conditions which orient the use of the rule. This requires that the actors be capable not only to create and maintain, along the lines exposed by Bratman, a climate of mutual trust, but also to develop, in the words of Schön and Rein (1994, pp.206-207), “the ability to put [themselves] in the other part’s shoes” as well as “the ability of double vision”, i.e. “the ability to act from a frame while cultivating awareness of alternative frames”.

The second pitfall is ‘idealism’. As exposed by Cobbaut (2006, p.5), the ‘idealistic’ pitfall may be illustrated by theoretical constructs (Habermas, Rawls, Latour,...) considering that ‘confidence’ may be obtained on formally procedural grounds by providing the actors with the opportunity to participate in the deliberative construction of the public space, but without paying any attention to the problematic of the ‘capacitation’ of the actors to interact in such a way that they would build up a common perception of the problem to be solved. The ‘idealistic’ bias in such models stems from their systematic tendency to hypothesize a probable consensus rather than always considering the eventuality of a possible dissensus, a posture that is especially questionable in contexts characterized by weak legitimacy.

The expression ‘reflexive governance’ may be used to point at normative devices that stimulate actors to collective learning processes, making thereby possible ‘decentralised’ processes of production of norms and assuring a better adaptation of the systems of norms to the specificities of the contexts of action in order to enable various categories of social actors to solve the problems with which they are confronted in a genuinely democratic manner, i.e. in an interactive process which will be at once more efficient and more equitable than the currently prevailing solutions. In other words, public or common interest should not be defined *a priori* as derived from a pre-conception of the interest of the collectivity as such or of the interests of given (individual or collective) actors but rather *a posteriori*, “as the result

---

<sup>73</sup> The ‘Internet Corporation for Assigned Names and Numbers’ (ICANN), a non-profit and non-governmental organization set up to control the assignation of names and numbers and thereby to identify the users of the web.



of mechanisms that should be organised in order to maximise the potential of reflexivity of the actors involved in governance”.<sup>74</sup>

In order to illustrate in the specific field under study the above general comments of epistemological nature, and check whether and to what extent there has been in this field an advance towards ‘reflexive governance’, we will briefly examine three initiatives of normative nature aimed at regulating some subset or some dimension of the financial system: the work of the ‘Lamfalussy Commission’, whose task has consisted in elaborating a methodology for the implementation of the ‘Financial Services Action Plan’ (FSAP) of the European Union (EU); the elaboration of the ‘International Financial Reporting Standards’, the famous IFRS norms, set up by the International Accounting Standards Board (IASB); the work of the ‘Lippens Commission”, non-governmental initiative for the elaboration of a code of Corporate Governance for the companies listed on the Brussels Stock Exchange (Euronext Brussels).

The ‘Lamfalussy method’ is grounded in two principles: 1°) as a preliminary to the elaboration to any EU directive in the field of FSAP, organizing a consultation process of all categories of stakeholders; 2°) as to the content and form of any normative subsystem, establishing guidelines rather than directly prescriptive or prohibitive rules, that are always highly ‘bypassable’. The operationalisation of the first principle has been focused on the constitution of ‘groups of experts’ rather than widely open discussion forums, generating an a priori suspicion that there has not been as much variety of expressed points of view as could have been expected and that the opportunities for mutual adjustment of the various perceptions of the problems to be solved have been much fewer in number than it would have been the case in alternative and more reflexive processes. With regard to the second principle, it is clear that there has been some evolution towards what is now called ‘reflexive law’, which is by the way a rather ambiguous concept whose meaning crucially depends on the meaning attributed to the concept of reflexivity. Except for the self-evaluation report of the first phase of FSAP recently published by the European Commission itself, there has been to date – as far as we know – no evaluative research on the FSAP process.

---

<sup>74</sup> Cobbaut (2006), p. 8.

An important step in the elaboration of the International Accounting and Financial Reporting Standards has been a call for comments on the projects elaborated inside IASB. Reactions expressed by the various categories of stakeholders have been numerous, especially about the proposed rules for valuating financial instruments, the now famous IFRS 32 and 39 norms that have given rise to a fierce controversy over the principle of the ‘full fair value’, initially put forward by the IASB working group. A research project, still in process, has reached the provisional conclusion that the solution that has been finally reached (the ‘fair value option’) is a shaky compromise and that this unsatisfactory settlement is attributable to the characteristics of the consultation procedure set up by IASB. As it is the case in the ‘Lamfalussy method’, reactions to the regulations proposed by IASB were expressed in written form and processed by the working group itself, so that there have been no interactions, and thus no adjustment process whatsoever among the people or institutions who have expressed reservations about or even disagreement with the proposed rules. The most interesting feature to notice about those reactions is that many of them were ambivalent. On the one hand, they were expressing, either explicitly or implicitly but unambiguously, their adhesion to the Efficient Market Hypothesis while, on the other hand, rejecting – sometimes drastically – a mode of valuation (the ‘fair value’ method) directly derived from this hypothesis. No attempt – like, for example, organizing a large public debate – has been made to remove this ambiguity.

The ‘Belgian Code on Corporate Governance’ (BCCG) for companies listed on the stock exchange, elaborated by the ‘Lippens Commission’ is the result of the joint initiative of three different bodies: an independent administrative authority, the ‘Commission Bancaire, Financière et des Assurances’ (CBFA), Belgian SEC, and two private bodies: the ‘Federation of Enterprises in Belgium’ (FEB) and the ‘Euronext’ Stock Market. The BCCG has thus been conceived as an articulation of public regulation (for the most important part, the Commercial Law and the Company Law) and self-regulation through an agreement between the three most influential bodies. The problem is tackled exclusively from the investors’ point of view, the main aim of CG being for instance defined somewhat loosely as “supporting long-term value creation”.<sup>75</sup> Analyzing the content of the code brings up the evidence that shareholders’ interest is, if not the unique, at least and by far the core preoccupation of the authors of the code, which is in total compliance with the dominant view of CG, pivoted on the convention

---

<sup>75</sup> The Belgian Code on Corporate Governance – BCCG (2004), p.7 (Preamble).

of ‘shareholder value’ and on the organizational design theory<sup>76</sup> grounded in an incentive contracting and property rights view of the theory of the firm. The key statement of the latter theoretical approach is that the optimal organizational design consists of attributing all residual rights to decision making<sup>77</sup> to the supposedly unique group of actors<sup>78</sup> – the shareholders – who is bearing the residual business risks: the fact that the shareholders will be striving to maximize their own – residual – surplus will by the same token maximize the probability that all the other stakeholders, who take precedence over the stockholders, will be given their (contractually defined) due.

As for the concept of regulation adopted by the authors of the BCCG, its normative content consists of three types of statements, hierarchically ordered:

1°) The *principles*, that are “broad enough for all companies to be able to adhere to them, whatever their specificities, [and that] all companies should apply without exception”,<sup>79</sup>

2°) The *provisions*, that are “recommendations describing how to apply the principles”<sup>80</sup> and that are submitted to the ‘comply or explain’ system. This means that “... while it is expected that listed companies will comply with the Code’s provisions most of the time, it is recognized that departure from the provisions of the Code may be justified in particular circumstances”<sup>81 82</sup>, in which such companies “should determine what they consider to be the best rules in their specific situation and provide an explanation in the Corporate Governance Chapter of their annual report”.<sup>83</sup>

3°) “The provisions are supplemented with *guidelines*, which provide guidance as how the company should implement or interpret the provisions”.<sup>84</sup> Mostly qualitative, the guidelines are therefore not submitted to the ‘comply or explain’ system.

The normative system briefly described above is an example, though still simplistic, of how a normative device may be designed in order to be an incentive to ‘reflexivity’, thereby susceptible of producing more sharply contextualized systems of norms. Yet, the efficiency of

---

<sup>76</sup> See Fama and Jensen (1983 a and b)

<sup>77</sup> This means: all the rights that have not already been attributed to someone else by the law or some private contract.

<sup>78</sup> For conflicting theses, see for example Blair (1995) and Blair & Roe (1999).

<sup>79</sup> BCCG, p.8 (Preamble).

<sup>80</sup> Ibid.

<sup>81</sup> Ibid.

<sup>82</sup> Examples provided in the same preamble are: companies new to listing, young growth companies, smaller companies, holding and investment companies.

<sup>83</sup> BCCG, p.8.

<sup>84</sup> Ibid.

such a device might be low, due for example to a merely formalistic collective use of stereotyped explanations. In the case of BCCG, the lack of any pre-structured follow-up system undeniably generates such an apprehension.

The three examples briefly analyzed above<sup>85</sup> show how already existing systems for the regulation of financial markets do contain procedural elements that may be considered rough and incomplete sketches of what a contextualized ‘reflexive governance’ system could consist of. They are nevertheless far from producing the network of interactions among the various categories of stakeholders that would meet the procedural requirements for pragmatic efficiency of normative devices that are supposed to induce behavioural changes in the way of using collective institutional tools like financial markets. In our view, this is mainly due to the purely ‘mentalist’ conception of regulatory devices, i.e. the belief that limiting oneself to providing a rational justification of the norms – without simultaneously creating the pragmatic conditions for an effective change in collective behaviour – will by itself necessarily produce concrete effects in conformity with the expectations of the norm-setters<sup>86</sup>.

---

<sup>85</sup> Each one of them would deserve in depth investigation.

<sup>86</sup> See : LENOBLE, J. and MAESSCHALCK M. (2006), “Beyond Neo-institutionalism and Pragmatist Approaches to Governance”, Synthesis Report, REFGOV project, CPDR-UCL

## BIBLIOGRAPHY

AGLIETTA M. and COBBAUT R. (2003), “The ‘Financialisation’ of the Economy, Macroeconomic Regulation and Corporate Governance”, in: COBBAUT R. and LENOBLE J. (eds), *Corporate Governance – An Institutional Approach*, Kluwer Law International, The Hague-London-New York.

BEFFA J.-L., BOYER R. and TOUFFUT J.-Ph. (1999), *Les relations salariales en France : Etat, entreprises, marchés financiers*, Fondation Saint-Simon, Paris.

BLAIR M.M. (1995), *Ownership and Control*, The Brookings Institution, Washington (D.C.)

BLAIR M.M. and ROE M.J. (eds) (1999), *Employees and Corporate Governance*, The Brookings Institution, Washington (D.C.).

BLANCHARD O.J. and WATSON M.W. (1982), “Bubbles, Rational expectations, and Financial Markets”, in: WACHTEL P. (ed.), *Crises in the Economic and Financial Structure*, Lexington Books, Lexington (MA).

BORDO M.D. (1998), “John Law”, in: EATWELL J., MILGATE M. and NEWMAN P. (eds), *The New Palgrave: A Dictionary of Economics*, Macmillan, London, and Stockton, New York, p.3-143.

BOSSAERTS P. (2002), *The Paradox of Asset Pricing*, Princeton University Press, Princeton and Oxford.

BOYER R. (1999), “La politique à l’ère de la mondialisation et de la finance : le point sur quelques recherches régulationnistes”, in: *L’année de la régulation-3*, La Découverte, Paris, Collection “Recherche”.

COBBAUT R. (1969), *La politique de dividende des entreprises belges et américaines*, Dunod, Paris.

COBBAUT R. (2003), “Introduction”, in: COBBAUT R. and LENOBLE J. (eds), *Corporate Governance – An Institutional Approach*, Kluwer Law International, The Hague-London-New York.

COBBAUT R. (ed.) (2004), “L’efficience des marchés financiers”, *Reflets et Perspectives de la Vie Économique*, vol. XLIII, n°2.

COBBAUT R. (2006), “Contextual Pragmatism and Reflexive Governance: A Methodological Note”, Working Paper, Centre de Philosophie du Droit (Université catholique de Louvain) and Luxembourg School of Finance (Université du Luxembourg).

DANIEL K.D., HIRSHLEIFER D. and SUBRAHMANYAM A. (2001), “Overconfidence, Arbitrage and Equilibrium Pricing”, *Journal of Finance*, vol.56, n°3.

DE BONDT W.F.M. and THALER R.H. (1985), “Does the Stock Market Overreact”, *Journal of Finance*, vol. 40, n° 4.

DUPUY J-P. (1982), *Ordres et désordres : enquête sur un nouveau paradigme*, Seuil, Paris.

EUROPEAN COMMISSION, General Directorate for Internal Market, “Evaluation of the Financial Services Action Plan (FSAP) – (07.11.2005),  
[http://ec.europa.eu/internal\\_market/finances/actionplan/index\\_en.htm](http://ec.europa.eu/internal_market/finances/actionplan/index_en.htm)

FAMA E.F. (1970), “Efficient Capital Markets: A Review of Theory and Empirical Work”, *Journal of Finance*, vol. 25, n° 2.

FAMA E.F. (1991), “Efficient Capital markets II”, *Journal of Finance*, vol. 46, n° 5.

FAMA E.F. and JENSEN M.C. (1983 a), “Agency Problems and ‘Residual Claims’”, *Journal of Law and Economics*, vol. 26.

FAMA E.F. and JENSEN M.C. (1983 b), “Separation of Ownership and Control”, *Journal of Law and Economics*, vol. 26.

GROSSMAN S.J. (1977), “The Existence of Futures Markets, Noisy Rational Expectations, and Informational Externalities”, *Review of Economic Studies*, vol. 44.

GROSSMAN S.J. and STIGLITZ J.E. (1980), “On the Impossibility of Informationally Efficient Markets”, *American Economic Review*, vol.70.

JAMES W. (1890), *Principles of Psychology*.

LEWIS D.K. (1969), *Convention: A Philosophical Study*, Harvard University Press.

KEYNES J.M. (1936), *The General Theory of Employment, Interest, and Money*, Macmillan, London.

LORDON F. (2000), “La ‘création de valeur’ comme rhétorique et comme pratique : généalogie et sociologie de la ‘valeur actionnariale’”, in: *L’année de la régulation 4 (Fonds de pension et ‘nouveau capitalisme’)*, La Découverte, Paris, Collection “Recherche”.

MAESSCHALCK M. and DEDEURWAERDERE T. (2001), “Autorégulation, éthique procédurale et gouvernance de la société de l’information”, *Carnet n° 91 du Centre de Philosophie du Droit (UCL)*.

MAS COLLEL A., WHINSTON M.D. and GREEN J.R. (1995), *Microeconomic Theory*, Oxford University Press, New York, Oxford.

MOSCHETTO B-L. (1998), *Mimétisme et marchés financiers*, Economica, Paris.

MUTH J.F. (1960), “Optimal Properties of Exponentially Weighted Forecasts”, *Journal of the American Statistical Association*, vol. 55.

ORLÉAN A. (1990), “Contagion mimétique et bulles spéculatives”, in: CARTELIER J. (ed.), *La formation des grandeurs économiques*, PUF, Paris.

ORLÉAN A. (ed.) (1994), *Analyse économique des conventions*, PUF, Paris.

ORLÉAN A. (1999), *Le pouvoir de la finance*, O. Jacob, Paris.

ORLÉAN A. and TADJEDDINE Y. (1998), “Efficacité informationnelle et marchés financiers”, in: PETIT P. (ed.), *L'économie de l'information – L'enseignement des theories économiques*, La Découverte, Paris, Collection “Recherche”.

RAJAN R.G. and ZINGALES L. (2000), “The Governance of the New Enterprise”, in: VIVES X. (ed.), *Corporate Governance*, Cambridge University Press.

ROGER P. (1991), *Les outils de la modélisation financière*, Paris, PUF, Collection “Finance”.

SCHÖN .D.A. and REIN M. (1994), *Frame Reflection*, NYC, Basic Books.

SHEFFRIN S.M. (1983), *Rational Expectations*, Cambridge University Press.

SHLEIFER A. (2000), *Inefficient Markets: An Introduction to Behavioral Finance*, Oxford University Press.

SIMON H.A. (1976), “From Substantive to Procedural Rationality”, in LATSIS S.J. (ed.), *Method and Appraisal in Economics*, Cambridge University Press.

ZINGALES L. (1998), “Corporate Governance”, in: NEWMAN P. (ed.), *The New Palgrave Dictionary of Economics and the Law*, Macmillan, New York, vol. 2.