# The Mechanisms of Corporate Governance in the United States: An Assessment\*

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Summary: 1. Introduction; 2. The shortage of large active investors in American publicly held firms; 3. The mechanisms of corporate governance in the United States; 4. Incentive-based compensation contracts; 5. Debt; 6. Concluding remarks.

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This paper aims at evaluating the mechanisms of corporate governance currently at work in the United States. Section 1 turns its focus to the reasons accounting for the still relative scarceness of large shareholders in American publicly held companies. The analysis thereafter concentrates on assessing the efficacy of each of the pillars purportedly buttressing the American system of corporate control. The paper argues that the evidence provided by the existing corporate governance literature supports the following propositions: 1) the legal and regulatory framework actually restrains the scope for expropriating minority shareholders, though at the cost of inhibiting institutional investor activism; 2) as a rule, the board of directors do not comply with their mandatory duty of overseeing management, although some progress has recently been made, with directors in several companies becoming less submissive to chief executive officers; 3) the market for corporate control encounters a great number of difficulties (ranging from legal hurdles to high transaction costs and to serious free-riding problems), which are sufficient to cast a cloud on its reliability as a means of repressing managerial inefficiencies and rent-seeking: 4) competition in the product and capital markets is likely to produce effects only in the long-run.

Este artigo tem como objetivo avaliar os mecanismos de governança das empresas nos Estados Unidos. A seção 1 focaliza as razões da ainda relativa escassez de detentores de grandes blo-

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cos de ações nas empresas norte-americanas de capital aberto. A análise prossegue concentrando-se no exame da eficácia de cada um dos supostos esteios do sistema de governança corporativa naquele país. Argumenta-se que a literatura disponível permite identificar as seguintes características nesse sistema: 1) o sistema regulatório-legal restringe, de fato, o potencial para a expropriação de acionistas minoritários, ainda que ao custo de inibir o ativismo de investidores institucionais; 2) os conselhos de administração, como regra, não cumprem seu papel de efetivamente monitorar os executivos, embora mais recentemente possam ser identificados casos em grandes corporações em que tenham sido mais pró-ativos; 3) o mercado de controle das empresas esbarra em vários tipos de dificuldades (desde empecilhos legais a custos de transação elevados e problemas de free-rider), suficientes para limitar sua capacidade de coibir ineficiências e rent-seeking dos executivos; 4) a competição nos mercados de produto e de capital pode coexistir por um longo tempo com expropriação dos acionistas e gestão inadequada.

#### 1. Introduction

At the beginning of the nineties, the American system of corporate finance and governance was strongly blamed for its presumed bias towards short-term financial concerns, stemming from shareholders' pressures for immediate profits.<sup>1</sup> Critics contrasted the American model with that prevalent in Japan and Germany, where a consensus-building approach was supposed to cope successfully with the interests of different stakeholder groups in the company. The development in these countries of co-operative relationships among the firm's managers, creditors, employees, suppliers and clients was regarded as an efficient approach to redressing some important market failures, allowing to lower transaction costs by mitigating informational asymmetries as well as encouraging relationship-specific investments, particularly in human capital.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>IRI (1993) claimed that American managers are essentially concerned with the level and trend of earnings disclosed by quarterly balance sheets, since these figures strongly influence shareholders' expectations, on which share prices hinge. See also Akiuz (1993, pp. 22-23).

<sup>&</sup>lt;sup>2</sup>Porter (1992) identified several competitive disadvantages in the American system of investment vis-à-vis its German and Japanese counterparts. For him, regulation preventing ownership concentration coupled with preference for liquidity led institutional investors to have diversified portfolios and to be attentive exclusively to short-term financial performance – rarely taking part in boards of directors and having neither direct influence on, nor germane informational exchanges with, managers. Therein lay the reason, he claimed, for the low level of investment in intangible assets and technological capabilities made by American publicly held companies.

Over the last decade, however, a number of interrelated events have turned the tide in favour of the American model of corporate governance. On the one hand, the sustained growth of the American economy since 1992 and its incontestable technological leadership in key sectors have been largely ascribed to the strength of its capital markets. It is widely claimed that legal protection for investors affords ample availability of funds at low cost to firms, especially young, high-growth ones. On the other hand, low economic growth and unusual high jobless rate have made Germany and Japan to be mostly recalled as embodying lax corporate governance devices, disrespect to shareholders, and venture capital shortage. Deeper international integration in financial markets brought about by deregulation and breakthroughs in information technology has in turn contributed to keep investors abreast of and sensitive to firms' returns. Moreover, the drawbacks involving concentrated ownership, namely the huge scope left for controlling shareholders to expropriate minority shareholders, have been lately highlighted by several analysts (La Porta et al., 1997, 1998, 1999). All these factors have prompted an increasing number of publicly traded companies in different countries to adhere to the now much hailed market-friendly approach to corporate governance, supposedly prevailing in the United States.

Even though much has been said about the greater efficiency of the American model of corporate governance as well as about the need for mimicking it, a broad evaluation of how this model actually works has not yet been made. The general intent of this paper lies in attempting to reduce this major gap.

American mechanisms of corporate governance aim primarily at coping with the agency problem between shareholders and managers.<sup>3</sup> Ample residual rights of control left to managers because contracts are incomplete vest them with great discretionary power, which may be used to their own private benefits at the expense of shareholders. Prominent among these agency costs are shirking, excessive pay, asset diversion, "agency goods" consumption (like perquisites), and wasteful empire-building – the pursuit of a path of growth and diversification unconcerned

Conversely, investment decisions in German and Japanese corporations were supposed to take the long view, being based essentially on technical and productive issues. See also Lazonick and O'Sullivan (1996) and Roe (1998a, p. 340).

<sup>3</sup>The standard argument for justifying the shareholder model is that employees and creditors, unlike outside investors, are already well positioned and protected to receive the right reward for their contribution to enhancing firm's value. Contrariwise, some authors claim that corporate governance schemes neglecting non-owner stakeholders' interests may lead to sub-optimal level of firm-specific investments. Hence, corporate governance should encompass arrangements affecting stakeholders' incentives to make irrevocable firm-specific investments. See Blair (1995) and Milgrom and Roberts (1992). On the difficulties surrounding the "stakeholder society", see Tirole (2001).

with profitability. Management may furthermore take decisions with a view to entrenching themselves in the firms, making their dismissal costlier. For example, they may include takeover deterrences (such as golden parachutes and poison pills) in the firm's statute or choose investment projects rendering them indispensable. Discretion is also facilitated by the "business judgement rule", which refrains courts from second-guessing directors and managers' business decisions when considering shareholders' lawsuits.

The purportedly most important mechanisms for tackling these forms of managerial slackness and opportunism are: a) monitoring provided by large shareholders or creditors; b) the legal and regulatory environment; c) the board of directors; d) market-based instruments, embracing competitive markets for product, capital and corporate control; e) compensation contracts based on high-powered incentives; f) and debt commitments. Pinpointing the most effective devices working in American corporate governance scenery has raised a great deal of controversy. While OECD (1996) and Maher and Anderson (1999) advocate that hostile takeovers play a key role in disciplining management, Roe (1998b, p. 16) stresses that American corporate governance is strong in competition and "passable" in takeovers and board of directors. Shleifer and Vishny (1997, p. 772), in turn, observe that, for the most enthusiastic upholders of the American corporate governance system, takeovers and the legal protection for minority investors "are viewed as sufficient" to control executives.

On top of reviewing these claims, this paper evaluates the potential reach and the actual efficacy in the American corporate context of each of the aforementioned governance mechanisms. Next section turns on the reasons for the existence of relatively few large investors and their disincentives to monitor management in American companies. Section II analyses the limits underlying each of the chief governance mechanisms operating in the American corporate environment. The last section summarises the main conclusions of the paper, asserting that the U.S. corporate governance system as a whole is far from invulnerable, leaving plenty of room for managerial opportunistic behaviour.

# 2. The Shortage of Large Active Investors in American Publicly Held Firms

It is frequently claimed that concentrated shareholdings in, or debt claims on, companies grant their holders incentives and power to monitor managers and to

participate actively and independently in company's strategic decisions.<sup>4</sup> Owing to greater dividend rights, large shareholders would be spurred to use their control rights to bring pressure to bear on managers to be efficient, alleviating therefore the collective action problem, as monitoring costs (such as those related to information search) are dwarfed by potential benefits from control (Jensen and Meckling, 1976). "Voice" would be exerted either through creditors' threats to refuse renewing the loans or, regarding large shareholders, via board of directors or shareholders' general meetings. Nonetheless, large-block shareholders may also act counter to the best interests of the firm, using their power over the board of directors to expropriate or consume firm's wealth – setting excessive compensation for themselves, consuming perquisites, contracting relatives, or diverting resources to firms they control through price-biased trading.<sup>5</sup>

Corporate ownership structure in the United States is recurrently presented as being overwhelmingly scattered.<sup>6</sup> In fact, in contrast with Japan, France and Germany, the lion's share of publicly held companies' equity capital in the United States is owned by households, with non-financial enterprises and banks holding starkly smaller fractions (see table 1). It should be noted, however, that the ownership of a reasonable number of U.S. publicly held corporations involves sizeable, and even majority, blocks of shares – partly due to the 1980s wave of leveraged buyouts and hostile takeovers.<sup>7</sup> These large-block shareholders are individuals, corporations, and institutional investors.<sup>8</sup>

<sup>&</sup>lt;sup>4</sup>Shleifer and Vishny (1986, p. 465) contend that large shareholders raise expected profits via monitoring and "the more so the greater their percentage of ownership".

 $<sup>^5</sup>$ La Porta et al. (1997, 1998, 1999) emphasise that concentrated ownership is generally driven by expropriation purposes, being as a rule the result of minority shareholders' poor legal protection.

<sup>&</sup>lt;sup>6</sup>Out of the sample of the largest twenty firms (by stock market capitalisation) at the end of 1995, sixteen had no shareholder controlling more than 10% of the votes in the United States, against seven in Germany, six in France, and ten in Japan (La Porta et al., 1999).

 $<sup>^7</sup>$ Holderness and Sheehan (1988) refer to a survey of NYSE, AMEX and OTC firms as of April 1984 reporting that nearly 20% of them had at least one nonofficer owning more than 10% of the common stock and nearly 15% had at least one officer owning more than 10% thereof.

<sup>&</sup>lt;sup>8</sup>Institutional investors have held an increasingly larger share in American publicly traded companies' overall equity capital, reaching 44% at the end of 1995. Relative to GDP, their holdings of shares rose from 38% in 1992 to 92% in 1998 e 105% in 1999 (provisional figure) (OECD, 2001, tables 1 and 2). Friedman (1996) argues that institutional investors, especially pension funds and mutual funds, are steadily "crowding out" individuals as owners of equity shares in the United States: individual investors owned 90% of all equity shares outstanding in 1950, whilst the individually owned share was just 50% in 1994.

Table 1
International comparison of share ownership profiles - Percentage of total shares in circulation held by different sectors, end-1995

Sectors	Germany	USA	Japan	UK	France
Non-financial sectors	61.0	51.4	53.9	33.9	80.8
Households	14.6	36.4	22.2	29.6	19.4
Enterprises	42.1	15.0	31.2	4.1	58.0
Public sector	4.3	0.0	0.5	0.2	3.4
Financial sectors	30.3	44.5	35.8	52.4	8.0
Banks	10.3	0.2	13.3	2.3	4.0
Insurance enterprises and	12.4	31.3	10.8	39.7	1.9
pension funds					
Investments funds and	7.6	13.0	11.7	10.4	2.0
other financial institutions					
Rest of the world	8.7	4.2	10.3	13.7	11.2
Total	100.0	100.0	100.0	100.0	100.0

Contrary to the Berle and Means' widely known prediction, Holderness et al. (1999) finds that ownership by insiders (officers and directors) of exchange-listed firms in the United States rose on average from 13% in 1935 to 21% in 1995. For explaining this increase in managerial stock ownership over time, they test the hypothesis that it results from changes in firm characteristics affecting costs and benefits of using managerial ownership as a monitoring device. Lying behind this hypothesis is the idea that the firm's ownership structure reflects a choice of the control devices that maximises firm value. Five firm characteristics are analysed: size, age, regulation, leverage, and the volatility of the firm's operating environment. While the first four appear to hold their effects on insider ownership in both periods, the effect of firm volatility changes: managerial ownership is inversely related to firm volatility in 1935 but increases nonlinearly in it sixty years later. The authors claim that lower volatility added to greater hedging and diversification opportunities in both human and financial capital allowed by innovations in financial markets along with advances in financial theory in the last two decades have reduced the costs to managers of increasing shareholdings in their own firms. Furthermore, they argue that the possibility of hedging most of risks outside managerial control has strengthened insider ownership as a device to overcome the agency problem because firm performance has become a more accurate proxy for managers' efforts and competence.

It is often asserted that top executives' shareholdings, besides providing them with high-powered incentive to be efficient, signal the market that their concerns are aligned to maximising company's profits. Nonetheless, it could be argued that even wealthy officers and directors hold only a trifling fraction of a publicly held company's equity capital, owing both to their relatively modest personal wealth and to the desire to diversify it. Thus, potential gains from opportunism (such as diversion of cash flows) are expected to far exceed the returns coming from dividend rights. Another shortcoming that may result from big managerial shareholdings is that the higher they are, the higher the premiums to be paid by potential bidders for the company's takeover, lowering therefore the probability of hostile bids. Hence, increases in managerial ownership stake may elevate the firm's ex ante market value providing they do not translated into premium mounting to the point of reducing the probability and profitability of bids.

In this regard, Holderness and Sheehan (1988) find evidence inconsistent with the expropriation hypothesis of majority shareholdings. <sup>10</sup> They show that most of the NYSE- or AMEX-listed corporations with majority shareholders were surviving over the period examined (1978-1984), contradicting the prediction of the hypothesis that they primarily expropriate or consume corporate wealth – which would have led them to be eliminated in the market competition. On top of that, if majority shareholders aimed exclusively at expropriation, it would be expected that their stake should be slightly above 50%, but the average majority holding was actually 64% for all firm-years in the sample. Moreover, the findings indicate that trades of majority blocks of stock were typically followed by substantial turnover among top managers and directors and by significant increases in stock prices (an abnormal 12%), regardless whether there were simultaneous tender offers for minority shareholders. Contrary evidence, however, is found by Bhagat et al. (1998), who document that relational investing – the long-term ownership of substantial blocks of shares – is generally not associated with improved share price or operating performance.

In the sample examined by Holderness and Sheehan (1988), 90% of individual majority shareholders and representatives of 94% of corporate majority shareholders are either managers and/or directors. They interpret this finding as

<sup>&</sup>lt;sup>9</sup>Hubbard and Palia (1998, p. 612) survey some empirical studies supporting the hypothesis of the non-linear relationship between managerial ownership and firm performance.

<sup>&</sup>lt;sup>10</sup>They investigate 114 corporations with majority stockholders listed on the New York Stock Exchange or the American Stock Exchange. Corporations are classified as having a majority stockholder when one individual or entity owns at least 50.1% but less than 95% of the common stock. They remark that majority-shareholders corporations are not necessarily small, including firms such as Shell Oil U.S.A., BIC Corporation, and Continental Airlines.

concentrated ownership being motivated by benefits associated with managerial large-block holdings, rather than merely benefits from more effective monitoring. As regards investment policies, the frequency of corporate-control transactions, accounting returns, and Tobin's Q, Holderness and Sheehan find that majority-owned and diffusely held firms are statistically similar, differences appearing only between firms with corporate and individual majority shareholders.<sup>11</sup>

With respect specifically to the monitoring role of large investors in the United States – be they financial institutions or non-financial companies – it seems to be strongly curbed by the legal and regulatory framework. This arrangement is considered as the main reason behind both the relatively dispersed corporate ownership pattern and the institutional investors' failing to get the same importance in monitoring as that they have in the volume of funds under their control.

The major pieces of legislation discouraging concentrated shareholdings and monitoring by large financiers in American companies are the Securities Act of 1933, the Securities Exchange Act of 1934, and the Investment Company Act of 1940. All of them were essentially devised to prevent insider trading and ensure all investors equal access to "timely, comprehensive and accurate information" on companies (SEC, 1999). Notwithstanding the benefits arisen from better protection for outside investors, these laws also have the drawback of reducing the incentives to hold large stakes in companies. First, any investor whose shareholding passes the 5% threshold of the publicly traded company's capital is obligated to notify the Securities and Exchange Commission (SEC), making clear his intention and the origin of resources. Second, any shareholder keeping close contacts with executives is legally responsible for their decisions. Third, in order to restrain insider trading, controlling shareholders must wait six months between purchase and sale (or sale and purchase) of shares.<sup>12</sup> Fourth, should a creditor on a firm wherein she also owns an equity stake have some influence on its administration that may be proved as such, the status of her credit can be downgraded (that is, the debt may be reclassified as subordinated) if the firm goes bankrupt.

<sup>&</sup>lt;sup>11</sup>For example, trades of majority blocks give rise on average to greater abnormal increases in stock price when individuals, rather than corporations, are either buyers or sellers. Contrariwise, transfers in control are more frequent when majority shareholders are corporations than when they are individuals. In fact, the authors document higher average salaries and bonuses paid to officers who are majority shareholders vis-à-vis those paid in diffusely held firms. The differential, however, is small and of marginal statistical significance to account for the substantial amounts of money needed to achieve majority ownership.

<sup>&</sup>lt;sup>12</sup>Section 16(b) of the Securities Exchange Act obliges any shareholder holding a stake exceeding 10% of the company's equity capital to transfer to the firm any eventual capital gains resulting from "purchase/sale or sale/purchase sequences occurring within 6 months". See OECD (1996) and CCL. Center for Corporate Law (2000).

Other types of regulation and legal rules have further contributed to hindering the emergence of large corporate financiers. Antitrust laws together with rules related to taxation on dividends discourage ownership links among non-financial companies. Financial institutions face, in turn, a number of hurdles to directly hold large equity stakes in companies. The Banking Act of 1933 (known as the Glass-Steagall Act) is partially to blame for the negligible equity stake banks have owned in non-financial companies.<sup>13</sup> With respect to loans, banks cannot lend more than 15% of their capital to a single borrower – unlike Japan and Germany, where the thresholds are, respectively, 30% and 50%. Large-scale issues of debt securities by high credit-rating companies also help explain why their relationship with banks has been kept at arm's length. Banks' disposition to exert control over major corporations is additionally inhibited by the bankruptcy law, as it imputes legal responsibility on banks if they influence companies' decisions. From the foregoing, no wonder that American corporate governance has not relied on relationship banking as a mechanism for mitigating managerial moral hazard – as supposedly has the German system.

As for institutional investors, one could expect that their command over a big and rapidly growing fraction of the overall financial assets would drive them to break with their traditional reluctance to have a "voice" in decision-making process of companies wherein they have stakes, circumventing thus the free-rider problem surrounding small investors. Yet American regulatory rules have significantly restrained them from taking on a more prominent role in controlling companies. Beginning with life insurance companies, they are not allowed to own shares worth more than 20% of their total asset portfolio nor hold a stake exceeding 2% of it in a single company. Should they influence company's decisions, they will also be subject, in the case of bankruptcy, to the subordination of claims. Likewise, mutual funds and pension funds have some incentives to keep distance from companies' management. Mutual funds lose tax exemptions and the right to call themselves diversified if they possess more than 10% of the company's overall equity or concentrate more than 5% of their assets on a single company. In addi-

<sup>&</sup>lt;sup>13</sup>The Glass-Steagall Act, prohibiting commercial banks from participating in underwriting corporate securities and in broker-dealer activities, was repealed in November 1999. Neither potential risk-reduction benefits resulting from fragmentation nor greater informational transparency can account for the long permanence of that law, the explanation lying in the political economy realm rather than in microeconomics. Roe (1994) stands out among those upholding the thesis of the politically motivated regulatory framework governing U.S. financial and non-financial companies.

<sup>&</sup>lt;sup>14</sup>U.S. life insurance companies are regulated at the state level. They have held around 4% of the U.S. companies' equity capital. See Prowse (1994) and OECD (1996).

tion, one mutual fund interested in controlling more than 5% of a single-company equity capital needs the SEC's approval.  $^{15}$ 

Concerning pension funds, the largest institutional participant in U.S. capital markets, they comprise three modalities. Pension funds sponsored by private companies, the biggest among them, are supervised by the Department of Labour and subject to the Employee Retirement Income Security Act (ERISA). The amount of assets managed by these private pension funds has grown astonishingly over the last decade, thanks chiefly to demographic changes along with tax incentives for both companies and employees. A second type of pension funds covers municipal and state governments' employees, being subject to state laws. Finally, there are retirement schemes organised by trade unions under the oversight of the Department of Labour and subject to the Taft-Hartley Act of 1947. Retirement savings can therefore be piled up either through public or private pension funds sponsored by employers or trade unions, or through personal savings account – like Individual Retirement Accounts (IRAs) and 401(k) plans.

All these modalities of pension funds have to abide by the "prudent man" principle, whose main legs are the portfolio diversification and the adoption of "seasoned" decisions – those that similar institutions would have made (OECD, 1997). The ERISA, for example, requires that private pension funds hold diversified portfolios, placing on them a great deal of fiduciary responsibility if their representatives affect the administration of companies. They are not allowed furthermore to own stakes exceeding 10% in the company sponsoring the pension plan. Prudence and fiduciary considerations are highly conducive to risk-averse behaviour, partly accounting for pension funds' widespread practice of indexed (or S&P membership) portfolios.

Despite these constraints, institutional investors' activism has unequivocally progressed since the late eighties, <sup>17</sup> boosted to a great extent by regulatory chan-

<sup>&</sup>lt;sup>15</sup>The volume of equity amassed by mutual funds increased 25.4% a year over the period 1991-1997, twice the average growth rate of all financial institutions' total assets, enlarging their share from 5.0% to 12.7% (own calculations based on figures drawn from BGFRS (1999)). While in 1982 there was nearly one equity mutual fund shareholder account for every ten U.S. families, by 1998 there were almost two accounts per family (Shiller, 2000). This outstanding growth has been partly due to the 401(K) pension plans, which authorises employees to make contributions to a tax-deferred retirement account through regular payroll deductions (subject to an annual limit). Employers often supplement these contributions, also motivated by tax incentives. Employees can choose between managing themselves their accounts or investing the money through mutual funds.

<sup>&</sup>lt;sup>16</sup>At the end of June 1998, pension funds controlled 27% of all U.S. financial assets, 25% of the publicly traded equities and 11% of corporate bonds (Hubbard, 2000, p. 300).

<sup>&</sup>lt;sup>17</sup>Institutional investor activism has been generally carried out through lobbying for legal

ges. Firstly, in 1988 the Department of Labour laid down that the exercise of voting rights is part and parcel of private pension funds' fiduciary duties. Pension funds' voting rights have thenceforth to be dealt with as an asset. Lying behind this decision seems to be the potential detrimental effects raised by the increasingly greater imbalance between the big chunk of corporate equity capital owned by pension funds and their trifling control over firms. Comprehensive guidelines for proxy voting were also adopted with the intent of rendering private pension funds' sponsors or their external fund managers liable to the effects of exercising their proxy voting on the funds' portfolio value. These rules tried to improve monitoring by alleviating the burden of the "prudent-man" responsibilities. However, plenty of room remains for doubting whether private pension funds have enough incentives to comply with this requirement as well as whether the Department of Labour is well equipped to monitor the voting process. Anyway, this regulation has given rise to a buoyant market for proxy voting services, whose suppliers may turn out to be another relevant player in the U.S. corporate governance scenery. 18 According to Black (1998), a recommendation of the Institutional Shareholder Services (a private enterprise offering proxy voting advice and voting services to institutional investors) "can make a 15-20% difference in the support that a shareholder proposal receives", because of both the proxy voting rights it exerts on behalf of clients and the shareholder-clients who follow its recommendations.

By heightening dissenting shareholders' voting power, proxy contests may enable them to object board's decisions and even to promote the wholesale replacement of top management. However, proxy solicitations and shareholder resolutions to be voted at the annual meetings have been traditionally few and inconsequential in the United States (as will be pointed out below, there is compelling evidence that shareholder proposals have no meaningful effects on share values). The reason is quite plain: it is difficult and costly for a dissenter to win over support of a critical number of small shareholders. Shareholders usually lack information to know whether the dissenters can perform better than the incumbent management, making it difficult for dissenters to persuade shareholders their victory will benefit them. In addition, the public-good feature of monitoring weakens the incentives for a shareholder to take the initiative of co-ordinating the contest. Whereas costs

changes, submission of proxy proposals against takeover deterrents, letters sent to boards, straight pressure on managers to improve the firm's performance, attempts at winning other shareholders over to vote with them, disclosure of "watch list" of underperforming firms, and challenging management in the press.

<sup>&</sup>lt;sup>18</sup>As OECD (1995) reports, "this network of institutional investors and advisory services has become a major participant in corporate governance, enabling institutional investors to fulfil their voting duties without a need for detailed attention to corporate governance issues".

are exclusively borne by dissident shareholders, benefits, if any, are shared among all, tender offers being preferable in this respect. Conversely, management can debit expenditures on proxy solicitations to companies.

The SEC's 1992 decision to reform proxy rules mitigated some of these obstacles to institutional investor activism. The new rule allows a shareholder both to communicate with an unlimited number of other shareholders (the prior limit was ten) and to discuss voting issues and other company matters, only requiring that the conversation subject is notified to the watchdog. In reality, both the SEC and the Congress were strongly lobbied by institutional investors to pass their proposals, since the latter would significantly reduce the costs to must other shareholders' support and to co-ordinate proxy campaigns. Nonetheless, shareholders are entitled to take this initiative provided they own less than 5% of the firm's capital and are not pursuing control.

Rule 14a-8 of the Securities Exchange Act in turn allows submission of share-holder proposals without entailing for the dissenter the underlying outlays of "preparing its own proxy and soliciting its own proxies". However, its scope for challenging management is rather limited, since submissions have to be made six months before the shareholder meeting and the argument supporting the proposal to be included in the proxy statement companies distribute for their shareholder meetings cannot exceed 500 words (OECD, 1995). According to Black (1998), this rule fails deliberately to empower shareholders to nominate candidates for the board. No less important, ease of exit ensured by the high liquidity of the U.S. securities markets renders the recourse to proxy fights even more unattractive.

Besides some regulatory relaxation, institutional investors' drift into pro-active behaviour has been propped up by their increasing acknowledgement that "voice" – monitoring and pressure on managers to enhance performance – may be more rewarding than "exit" – which implies picking other individual shares. Given the chunky stake held by institutional investors in capital markets and the attendant price-effects of exiting, challenging inefficient management may turn out to be the only way to increase returns.

Indeed, some public pension funds have stood out in the task of overseeing management, even though the exercise of voting rights is not mandatory for them. Pioneering institutional investor activism in the mid-1980s, they have been at the forefront of shareholder proposals ever since – most of which involving the elimination of takeover defences. Private negotiations with managers are another recourse they have used to tackle badly performing firms. Activism exerted by private pension funds and mutual funds has not, however, followed suit, conceivably because of the larger scope for conflicts of interest they face when defying

management, besides the free-ride on the expenses made by activist public pension funds (Romano, 2001, p. 179; Black, 1998).

Among the most active public pension funds in corporate governance issues is the California Public Employees' Retirement System (CalPERS), established by law in 1932. Being a defined benefit retirement plan, it is the largest American public pension fund and the third largest in the world – its assets amounted to US\$170 billion at the end of October 2000. The bulk of its portfolio is concentrated in equities (43.2% in domestic and 18.6% in foreign publicly traded shares, and 4.6% in private equities), owning stakes in nearly 1,600 companies only in the United States (CalPERS, 1999). CalPERS along with the Teachers Insurance and Annuity Association – College Retirement Equity Fund (TIAA-CREF) – the world's largest pension fund, with assets worth US\$290 billion – "have been the most vociferous actors on governance issues" (OECD, 1996, p. 126). 19

Notwithstanding these important steps towards institutional investor activism, there still remain a number of stumbling-blocks. To begin with, should institutional investors keep close contacts with management and board of directors, they still may be reclassified as "insider". Accordingly, unless a massive overhaul of the regulatory framework is undertaken, active large shareholders will have to pay a high liquidity toll. Moreover, though a necessary condition to make institutional investors more pro-active in correcting managerial failures, regulatory changes may be nonetheless insufficient. Non-legal barriers also hamper them from being more involved in corporate governance, from co-ordinating their actions, and from solving the agency problem between ultimate investors and management. Most of institutional investors, especially investment advisors and mutual funds, operate as agents for other investors. As agents themselves, they may also have incentives conflicting with those of their principals, who moreover cannot perfectly monitor their agent institutions' decisions. As stressed by Black and Coffee (1994), the rather limited scope for institutional investor activism is also related with "imperfect information, substantial co-ordination costs, (which) persist even when financial intermediaries aggregate large blocks of stock so as to possess the 'clout' that the Berle-Means shareholder lacks . . . (and) agency costs at the fund-manager level (that) may be no less important than at the corporate-manager level, with the fund-manager focused more on performance relative to its rivals than on absolute performance.". Contrariwise, Friedman (1996) posits that increasing institutional

<sup>&</sup>lt;sup>19</sup>Every year CalPERS and the Council of Institutional Investors (that represents more than a hundred public employee funds, managing assets of US\$1.5 trillion) publish a list indicating the poorly-performing companies ready to be "targets for governance initiatives" (Black, 1998). CalPERS (1999) reckons that its governance actions in the United States in 1996 yielded additional returns of almost US\$ 150 million in 1996.

ownership has contributed to constrain managerial leeway by enhancing share-holder activism in U.S. corporations.

In fact, the empirical literature has not so far found any meaningful effect of pension fund activism on firm performance (Romano, 2001). In this respect, Karpoff (1998) provides an in-depth survey, based on 20 empirical studies, of shareholder activism's motivation and effects in the United States. Most available evidence he reviewed allows the following conclusions about the effects of shareholder activism: a) activist efforts produce negligible impacts on earnings, capital expenditures, top management turnover, CEO compensation, or the likelihood of a control change; b) shareholder activism is often followed by an abnormally high rate of asset divestitures, company restructurings, and/or employee layoffs, being difficult however to isolate its contribution from that of, for example, the threat of a hostile takeover; c) shareholder activism frequently prompts some firms to adopt specific but rather limited changes in their governance rules – such as confidential voting or rescission of poison pills; d) there is slight evidence that shareholder activism has induced more changes in target companies over time; e) no evidence supports the contention that shareholder proposals prompt observable short-run increases in firm values or earnings; f) announcements of negotiated settlements or non-proposal pressure are on average followed by increases in share value; g) firms that attract shareholder activism are typically large and show high institutional ownership levels; their prior market-adjusted stock returns tend to be poor, but not significantly lower vis-à-vis those of other firms in the same industries; and their earnings performance also tends to be poor.

Thus, according to Karpoff (1998), shareholder activism's effects are overall negligible, although non-proposal pressures and negotiated settlements appear to produce some effects on share values while shareholder proposals do not. No telling explanation for the difference in the effects brought about by those two types of shareholder activism is available. Nor is – either because there lacks empirical research or because the evidence available is ambiguous – for the following questions: What are the activism's long-run effects on target firms' stock returns? Have shareholder proposals become more effective over time? What are the sanctions imposed on managers who resist activists' pressure for changes? Does the target firm that rejects a shareholder proposal become more vulnerable to hostile takeover bids?

Gompers and Metrick (2001), in turn, show that institutional investors managing at least \$100 million – embracing banks, insurance company, mutual funds, investment advisors (large brokerage firms), pension funds and university endowments – almost doubled their fraction of the market value of all equities over the

period 1980-1996 – from 28.4% to 51.6%. In addition, they find that large institutions, in contrast with other investors, reveal a stable preference for shares of larger firms and that are more liquid and have relatively low past returns. This combined with the changing pattern of compositional ownership should imply higher demand for large, liquid stocks over time, as well as higher price of large stocks relative to small stocks. Indeed, these authors show regression evidence documenting that the level of institutional ownership in a stock at the end of a quarter has positive predictive power over its future return.<sup>20</sup> Therefore, increases in the prices of shares of large corporations can be merely a response to larger institutional ownership (demand shocks) rather than a reflection of efficiency improvement resulting from institutional activism.

In the light of the evidence discussed above, it is at least questionable that institutional investor activism will become a reliable mechanism for restraining managerial opportunistic behaviour before long. Thus far, it appears to be at best a complement to the workings of other corporate control devices.

## 3. The Mechanisms of Corporate Governance in the United States

This section appraises the efficacy of the main governance mechanisms operating in the American corporate landscape. They can be classified into five major categories: law, internal mechanisms of control, market instruments (encompassing competitive markets for capital and product as well as hostile tender offers), performance-based compensation contracts, and debt.

## 3.1 Legal protection of shareholder rights

In spite of inhibiting large financiers from making managers liable, the American regulatory framework seems to protect small investors from managerial wrongdoing. Indeed, the legal protection of non-controlling investors in the United States has been widely acknowledged as the world benchmark. According to a scale presented by La Porta et al. (1998), that country showed the highest international score concerning both the efficiency of the judicial system and "the rule of law". Well-designed legal rules coupled with the long tradition of "the rule of law" (punishing with stiff penalties those violating, for example, rules proscribing

 $<sup>^{20}</sup>$ They claim that the growth in the institutional share of the market, by provoking "demand shocks" for the stocks preferred by institutions, can lie behind the reversal of the premium paid to small companies before 1980. This premium averaged 4% per year over the period between 1926 and 1979, whereas since 1980 large stocks have received a significant premium.

insider-trading) have been the linchpin of the shareholders' confidence that their rights will be respected (OECD, 1997).

Until recently, requirements that companies complied with general accepted accounting standards together with mandatory disclosure rules (imposed by the 1933 Securities Act) were supposed to provide investors with reliable information, enabling them to evaluate the company's actual risk.<sup>21</sup> Regulation Fair Disclosure (Reg FD), put in place in October 2000, was regarded as further strengthening outside investors' legal rights, since it requires that companies disclose any material information to all investors simultaneously, forbidding managers from tipping and favouring a few investors and analysts. However, the recent succession of scandals involving some leading American corporations has placed the whole of American corporations' financial accounts under suspicion. Top managers of companies such as Enron, WorldCom, Dynegy, Adelphia, Xerox, Tyco International, Global Crossing, and Qwest Communications resorted to sophisticated accounting trickery with a view to embellishing their reported financial results.<sup>22</sup> Overall, bogus accounting has benefited from auditors' connivance to keep contrivances hidden during astonishingly long periods of time. Even more ominous than the scope and duration of the tricks is that a great part of them were not illegal – such as the use of off-balance-sheet vehicles. No wonder that now a cloud of mistrust hangs not only over rules of disclosure and accounting standards (in particular over the Financial Accounting Standards Board, the main setter of accounting standards), but also over regulators, auditing firms, and credit rating agencies.

As far as auditors are concerned, the ability of free markets to afford them the right incentives and to audit them has long been called into question on account of both the structure of the auditing market (dominated by just five big firms) and conflicts of interest (Stiglitz, 2002). Given the broad range of services beyond auditing offered by accounting firms and being such services (for example, consulting on technology systems, law and tax planning) much more rewarding, these firms may be far from independent as auditor. Bearing in mind this adverse incentive, Arthur Levitt, then the SEC chairman, put forward in 2000 the proposal of splitting off consulting and auditing. Probably by fear of the Congress's oppo-

<sup>&</sup>lt;sup>21</sup>With respect to the quality of accounting standards, La Porta et al. (1998) reported that the United States lagged behind only Sweden, Finland, Norway, Australia, Canada, Malaysia, Singapore and the United Kingdom. It is noteworthy that Stigler regarded disclosure requirements as adding no substantial gains to investors, reason for which he contended they should be voluntary (Ramseyer, 1998).

 $<sup>^{22}</sup>$ For example, in order to overstate cash flow and profits, WorldCom's chief financial officer treated the costs of leasing space on competitors' phone lines as investment expenditures, instead of as ordinary business expense (Romero and Norris, July  $2^{nd}$  2002).

sition, the new guidelines issued in November 2000 fell far short of the original proposal, just requiring that companies disclose the amount paid to auditing firms for non-auditing services and prohibiting auditors from operating and supervising their clients' information technology systems. At that time, some analysts strongly blamed such regulatory pusillanimity (*The Economist*, November 18<sup>th</sup> 2000).

Apart from these recent occurrences, the United States still appears to excel in legal protection of investors, <sup>23</sup> which is a critical factor for the high liquidity of its capital market and for the vast amount of external finance available at a relatively low cost to its firms. The downside, however, of this protective environment lies, as already emphasised, in the weak incentive to monitoring arisen from the ease of exit.

An issue that has provoked a great deal of controversy is the implications of the U.S. corporate legislation, established at the state level. The absence of a mandatory corporate law, allowing companies to choose among various states' corporate charters, might entail a "race to the bottom", since states offering managementfriendly laws - those most fitted to cheat shareholders - would attract the bulk of companies. But this possibility is refuted by some authors, who contend that inter-state competition together with competition in capital markets ensure the protection of shareholders' interests. They argue that, being the price of a share the net present value of its expected returns, companies picking states whose laws governing internal corporate affairs harm shareholders would face higher costs when trying to issue new shares. Furthermore, these companies would be more vulnerable to hostile takeovers. States in turn would have to offer lower fees. Conversely, others advocate that state competition for corporate charters may provide states with incentives to offer a body of corporate law that excessively protects incumbent managers. They generally ground this claim on the fact that almost half of all U.S. publicly held companies are registered in the state of Delaware. Firms incorporated in this state are, in addition, free to choose the percentage of voting capital needed to call for shareholders' extraordinary meetings, whereas in 27 other states that threshold is set at 10% (La Porta et al., 1998, p. 1128).

<sup>&</sup>lt;sup>23</sup>For reckoning and comparing the extension of shareholder rights embodied in legal rules in each country, La Porta et al. (1998) constructed an "antidirector rights index", composed of six shareholder-friendly rules. American laws lack only the rule of pre-emptive right to new issues, appearing clearly at the top of the international ranking (besides, for example, the United Kingdom and Canada). Nonetheless, it should be added that the rule of one share-one vote is not mandatory too, leaving scope for managerial entrenchment inasmuch as its absence makes more difficult the operation of the market for corporate control (Grossman and Hart, 1988).

Bebchuk and Ferrell (1999, p. 51), focusing essentially on state takeover laws, assert that state competition for corporate charters helps "explain why state law has evolved in the regrettable direction that it has".

Despite the unsettled debate about state corporate legislation and the weaknesses in market transparency recently revealed by the wave of accounting malfeasance, laws and their enforcement seem to reasonably protect outside investors from exploitation by self-dealing insiders. Most important, given companies' fragile internal control system, the legal framework appears as crucial to the adequate working of the securities markets. We now turn our attention to unravel why mechanisms of internal control have failed thus far to cope with the agency problem in American companies.

## 3.2 Internal mechanisms of corporate control

Even though the boards of directors were originally conceived of actively managing the company on behalf of shareholders, their assignments have been limited to nominate, advise, oversee and, if they deem necessary, dismiss managers. Senior executive officers, in turn, have been who effectively run the company, rather than merely executing boards' decisions. Accordingly, boards are chiefly viewed as the first line of resistance against managerial slackness and opportunism.

One could expect that the efficiency with which boards carry out their mandatory duty rests critically on their composition, since it defines the actual degree of autonomy directors have vis-à-vis management. In the United States, boards are preponderantly composed of either inside senior executives or appointees of the chief executive officer (CEO), who customarily is also the board's president. Needless to say that extensive overlaps between the composition of the board of directors and that of the board of management added to the nomination of directors by CEOs may sap directors' actual accountability to shareholders. All the more so when the CEOs also assume the chairmanship of the board, leaving it under the strict control of those it is supposed to monitor, since directors usually assent to their chairman. The "club ethos" (cronyism) generally involving relationships between senior executives and directors is expected to further weaken board's disciplinary edge. Nonetheless, most empirical studies find weak correlation between board independence and firm performance (Romano, 2001). This may partly be explained by the fact that outside (nonexecutive) directors are themselves routinely CEOs in other companies (mainly great suppliers or customers), giving rise to conflicts of interest. Moreover, long-serving chief executives are likely "to have appointed the executive directors and brought in his chums as 'independent' nonexecutives" (The Economist, October 30<sup>th</sup> 1999). Therefore, unless management overtly misconduct, directors will probably be submissive to their decisions, rather than responsive to shareholders' concerns.

Besides, U.S. corporations' directors seldom meet, and when they do, information on which they rely to make decisions is scarcely, selectively, and untimely provided by managers, who in addition control the agenda of the meeting (OECD, 1995; Milgrom and Roberts, 1992, p. 315). Usually serving on multiple boards, nonexecutive directors lack time to appropriately comply with their duties. The recent case of Xerox illustrates this point: the majority of its directors hold a place on at least four other boards.

As directors typically have little or no participation in the company's capital, their financial incentives to control managers are weak (OECD, 1996). Insidertrading regulation, in turn, induces shareholders to eschew sitting on boards or even requesting of them any information. As for legal incentives, should directors breach their fiduciary duties, shareholders may, in principle, file class action suits against them. By means of "derivative suits", U.S. corporate laws entitle shareholders "to sue 'derivatively,' on behalf of the frm, against managers or directors profiting at the company's expense" (Ramseyer, 1998). Nonetheless, shareholder suits, and derivative suits in particular, are allowed by courts only when managers or directors infringe either the duty of loyalty or the duty of care. The first "fiduciary duty" forbids managers from carrying out transactions involving undisclosed conflict of interest, while the other makes them financially responsible for any damage resulting from actions at odds with those a reasonably prudent person would undertake in similar circumstances. If managers and directors observe these two fiduciary duties, courts apply the "business judgement rule", making it hard to legally enforce boards' commitment to shareholder value.

Other reasons cast scepticism on the potential benefits of shareholders' litigation. First, it is costly and subject to serious informational problems: to assess ordinary business decisions, judges lack the set of information managers had when they made the decisions. Second, its outcome is uncertain since judges generally lack business experience and knowledge. Third, it benefits above all attorneys, given that "plaintiffs almost always lose" (Ramseyer, 1998). Furthermore, whilst the threat of liability stemming from derivative suits may prevent boards from acting in a way that blatantly harms shareholders' interest, it fails to motivate boards to seek optimal decisions. On the other hand, the risk of shareholder litigation has prompted some companies to afford directors liability insurance policies as a means to recruit talented professionals. Devoid of resources, incentives and power to reduce agency costs, boards have failed thus far to effectively constrain

managers' discretion. Endorsing the claim that U.S. boards are captured by executives, Shleifer and Vishny (1997, p. 751) state that "a true performance disaster is required before boards actually act".

To be true, since the beginning of the 1990s directors of some large publicly held companies have been less complacent about managerial inefficiencies, ousting under-performing senior executive officers more than ever. The dismissal of the General Motors' CEO by its board in 1992 is generally seen as a watershed, after which boards have become more liable to shareholders' concerns. By contrast, others regard this event as demonstrating instead the board's failure, since that decision was made only after mountainous losses and a disastrous fall in the company's market share (Jensen, 1993, p. 852). As a matter of fact, however, from 1993 onwards, boards of many large corporations (such as Eastman Kodak, Compaq, IBM, American Express, Westinghouse, Time Warner, Goodyear, and Sunbeam) either fired their CEOs or pressured them to resign. Furthermore, there is statistical evidence documenting that poorly performing bosses over the period 1993-1998 had a higher probability of being sacked by directors than ever before (The Economist, October 30<sup>th</sup> 1999; Holmstrom and Kaplan, 2001).

A number of factors are generally pointed out as lying behind this slight shift towards less passive directors. Professional directors, who are assuming increasing importance, are supposed to be more concerned with reputation. Greater institutional investor activism would be compelling directors to curb managerial rent-seeking – including by putting their own representatives on boards. Also, the spread of takeover deterrents since the late 1980s is argued to have contributed to make directors more accountable – as well as to shareholder activism. Other often cited reasons are sharper global competition, a larger fraction of directors' compensation based on equity, and "more frequent and onerous shareholder litigation" (OECD, 1996).

Despite episodic evidence suggesting that directors have aroused from passivity, there still remains vast latitude for managers to control them, rather than the other way round. Unless boards' structure and procedures are deeply amended in a way to enhancing incentives to meet their duties and unless the strengthening of the market for professional directors tips the balance in favour of building reputation for independence, oversight from boards is bound to be paltry. Thus, internal corporate control devices seem to be unfit to cope with managerial slackness in the United States. As Jensen (1993) puts it, "the infrequency with which large corporate organizations restructure or redirect themselves solely on the basis of the internal control mechanisms in the absence of crises in the product, factor, or

capital markets or the regulatory sector is strong testimony to the inadequacy of these control mechanisms". This leads us to the external mechanisms of corporate governance.

## 3.3 Markets as a disciplinary mechanism

Ramseyer (1998) believes that "for good governance, investors everywhere have little choice but to look to markets". Indeed, the markets for goods, capital, and corporate control, along with laws protecting outside investors, are recurrently identified as the backbone of the governance apparatus hindering managerial opportunism in the United States. The governance role of markets in American companies is examined below.

### Competitive capital and product markets

One could hold that competition in the product market ensures, in the end, corporate efficiency, inasmuch as firms whose managers are incompetent or pursue private goals would inevitably be swept away. By the same token, should these under-performing firms have to raise funds in the capital markets, they would do it at a substantial premium, also making their permanence in the product market unsustainable. Hence, however relevant other governance mechanisms may turn out to be in the short run, competitive capital and product markets alone would pressure companies into efficiency in the long run.

In fact, competition may in principle help restrain companies' agency costs, since these costs are likely to affect their market share, profitability, and likelihood of bankruptcy. Notwithstanding, the length of the corrective process may prove to be too long, and when markets start signalling the firm's inefficiencies, huge losses or perhaps its very bankruptcy may have already occurred, without the management team having been replaced. High cash flows and huge volume of tangible capital make reactions to competitive pressures even more slow. Therefore, as a governance mechanism, product markets appear to be too costly and sluggish.

An additional problem lies in the fact that substantial agency costs may not be sufficient to menace the survival of oligopolistic firms. Conceivably, the greater is the company's market power, the larger is the room for managerial opportunism. Given that imperfect competition prevails in a great number of product markets, these markets leave a lot to be desired as a tool for disciplining firms. But even in perfectly competitive product market, there remains plenty of scope for managers to expropriate "the competitive return" once the financiers' capital is sunk in the

firm. The income of the firm may be divided up in such a way that managers or controlling shareholders are benefited at the expense of outside shareholders (Shleifer and Vishny, 1997, p. 738; Bebchuk and Roe, 1998, pp. 33-34).

As regards capital markets, they are usually assumed to be more agile in repressing executives from using discretion to their own benefits. The underlying rationale is that managerial inefficiencies would be reflected on share prices, imposing a handicap on the firm should it try to issue new securities. Two objections may be raised against this reasoning. One is that firms may not need direct financing for a fairly long period, circumstance in which capital markets are a blunt disciplinary tool. Actually, firms in industrialised countries have financed their investments mostly by internally generated funds (retained earnings and depreciation allowance). According to Corbett and Jenkinson (1997, p. 74), over the period 1970-1994, they accounted for 96% of American non-financial companies' total net sources of finance for physical investment. Concerning external resources, bonds represented a significant fraction (15%) whereas the amount of new equity issues was lower than the amount of purchases of equity, entailing a negative net contribution from equity markets (-7.6%).<sup>24</sup> Updating these figures, based on raw data drawn from BGFRS (1999), there emerges a fairly similar pattern of investment financing. Over the period 1991-1998, bond finance provided companies on average with 15.2% of their gross capital formation, while issues of net equity shares remained negative – reflecting the thriving market for mergers and acquisitions.

Second, as stock markets are prone to sharp oscillations, frequently unconcerned with changes in the companies' actual fundamentals, they may not be the best judge to evaluate current and prospective managerial performance. Mullianathan and Thaler (2000) and Shleifer (2000), for example, refute the mainstays of the efficient markets hypothesis. They argue that stock prices can (and do) diverge from their "correct" or "rational" value because of "limits of arbitrage less than perfect". Overconfidence may also prompt investors to trade even when they lack information. For these authors, various occurrences in financial markets regarded as "anomalies" through the lens of the standard neo-classical paradigm can be explained by the psychology of decision-making.<sup>25</sup>

<sup>&</sup>lt;sup>24</sup>Over the period 1984-1990, corporations' repurchases of their own shares together with leveraged buyouts (turning them into private) resulted in net equity retirements worth \$500 billion (Holmstrom and Kaplan, 2001).

<sup>&</sup>lt;sup>25</sup>Similarly, Shiller (2000) furnishes copious evidence on inefficiencies and tilt to irrationality in financial-markets. As an illustration of mispricing in capital markets, he shows that IPOs of companies belonging to a certain industry tend to concentrate within some periods of time. Focusing on Italy, Pagano, Panetta and Zingales (1998, pp. 41-42) also find the "cluster" distribution of

Even those believing in "the measuring stick of share prices" and in the market superiority to promote capital reallocation recognise several weaknesses in the efficiency hypothesis. Holmstrom and Kaplan (2001, pp. 137-38), for example, note that, notwithstanding the now fashionable view that diversification destroys value, the 1960s wave of conglomerates in the United States paralleled with a substantial growth in productivity and output. Given that conglomeration announcements in the 1960s were by and large welcome with enthusiasm by the stock market, they cast doubt on the reliability of that market as an indicator of companies' performance: "If hindsight can condemn this economically successful period as mismanaged, then what guarantees that shareholder value will not suffer the same fate?"

## Unnegotiated takeovers

Tender offers together with proxy fights, mergers and negotiated purchases make up the market for corporate control, or takeover market (Manne, 1965). The ultimate rationale lying behind hostile tender offers as a disciplinary mechanism is that mismanaged publicly held companies leave space for arbitrage. Should capital market efficiency prevail, mismanagement should be reflected on lower share prices, prompting whoever perceives this opportunity for profits to make a tender offer to buy the shares of the putative bungled firm. The "predator" (be it another firm or an individual) offers a price higher than the current market price of the share but lower than the price she reckons the share is worth were the "target" well run. If the unsolicited tender offer turns out to be successful, the raider may reap a large reward by replacing the incumbent managers with others deemed able to raise the value of the firm. By that account, the mere threat of hostile takeovers suffices to discipline managers, functioning itself as an incentive-based mechanism of governance.<sup>26</sup>

Even though hostile takeovers may sometimes operate successfully as a fast

IPOs over time.

<sup>&</sup>lt;sup>26</sup>Tender offer (or the threat thereof) is supposed to enhance value by eliminating (or repressing) overstaff and overpay, by dismantling (or inhibiting) empire-building, and by cutting (or reducing) agency costs of free cash flow. Free cash flow is the cash flow exceeding the amount needed to finance all value-increasing investment projects. Agency costs of free cash flow are the costs arisen from investments paying less than their cost of opportunity (Jensen, 1986, 1993). Regarding conglomeration, since the early 1980s stock markets in the United States have welcomed the decision of disbanding conglomerates ensuing most of unsolicited takeovers. At the same time, shares of diversified firms have been traded at a discount – what means that the break-up value of their divisions is perceived to exceed their value as a sole company.

corrective device to make bosses accountable, several reasons can be raised to cast doubts on their overall efficiency and reliability. First, bidders' motivation may be distantly, or not at all, related to efficiency-enhancement. Far from pursuing any possible advantage coming from cost saving or other synergies, the acquiring firm may be just interested either in exploiting rents arisen from increased market power, or in getting private benefits at the expense of other stakeholders or the Treasury. While severe antitrust regulation limits the former possibility in the United States, attempts at expropriating, for example, overfunded defined benefit pension plans through termination have indeed accounted for several takeover bids. As Shiller (2000, p. 33) points up, the decreasing importance of defined benefit plans stems partly from managers' fears that the "so-called overfunded plans sometimes make companies vulnerable to takeovers". Thus, instead of potential efficiency gains, high premiums paid to target firms' shareholders may merely reflect wealth transfers from selling firms' employees, suppliers, creditors or bondholders to buying firms' shareholders and managers. As the share prices of selling firms often increase following hostile bids while those of acquiring firms decrease, it is also argued that hostile takeovers may themselves envisage empire-building, implying some wealth transfer from buying firms' shareholders to selling firms' (Hart, 1995; Jensen, 1993, p. 839). If hostile bidders are themselves publicly quoted firms on which managers have the upper hand, the disciplinary problem remains, changing only those exploiting the governance slackness.

Second, some shareholders may hold onto their shares because they expect to earn an extra gain if the tender offer is successful, a free-rider problem that may lessen the incentive for bidders to engage in takeover ventures. (Refusing to tender, the holdout shareholder runs, on the other hand, the risk of liquidity if the hostile bid succeeds.) Third, unwanted takeovers entail high transaction costs, since bidders have to spend substantial amounts on finding under-performing firms, on legal advice, on fees paid to investment banks,<sup>27</sup> and on costs associated with regulation protecting minority shareholders. By the same token, target firms make great expenses, entirely borne by their shareholders, on defensive strategies. Fourth, the costly and time-consuming task of spotting a target firm, performed by the bidder, is freely provided to other investors when the tender offer is disclosed

 $<sup>^{27}</sup>$ Vodafone AirTouch's takeover of Mannesmann generated fees of nearly US\$1 billion – the largest advisory fees bill of all time. KKR's takeover of RJR Nabisco was the second most remunerative transaction for advisers, who cashed in US\$213 million in fees for a deal worth US\$20 billion (Financial Times, February  $4^{th}$  2000).

– another free-rider problem (Stiglitz, 1985). Besides, the bid announcement may trigger a competition from other investors, making the deal less, or even not at all, profitable.

Fifth, bringing about the dismissal of the incumbent management team, hostile takeovers may disrupt a worthwhile web of long-term, non-contractual relationships woven with non-owner stakeholders (such as clients, suppliers, bankers and employees). If widely spread, unwanted takeovers, by breaching implicit contracts and the mutual trust among stakeholders, are likely to weaken their incentives to undertake invaluable firm-specific investments.

Last, excessive volatility in the stock markets increases the bidder's risk and, consequently, the gains she will require to bid. As Shleifer (2000) demonstrates, the presence in the stock markets of noise traders (investors "whose conduct is not rational according to the normative model") can give rise to a large divergence between market prices and fundamental values of shares. If opinions of those unsophisticated investors are unpredictable, arbitrageurs must bear the risk that the noise traders' misperceptions become even more extreme tomorrow than today. Evidently, arbitrageurs with short time horizons, concerned about liquidating their investment in a mispriced asset, will be reluctant to bear the "noise trade risk" – the risk of a further change of noise traders' opinions away from its mean. Thus, arbitrage will be limited even in the absence of fundamental risk, and share prices can diverge significantly from fundamental values. As De Long et al. (1990, p. 705) put it, "arbitrage does not eliminate the effects of noise because noise itself creates risk".

# The Role of Hostile Takeovers in the United States over the Last Two Decades

As a percentage of the whole number of takeovers, hostile acquisitions sharply decreased in the 1990s: they ranged from 5% to 15%, whereas in the 1980s it varied between 20% and 40% (Holmstrom and Kaplan, 2001). This change raises two sets of questions. First, what lay behind the 1980s hostile takeover wave? Was it fuelled by speculation or efficiency-enhancing purposes? Second, why did hostile takeovers decline in the 1990s? Were they obstructed by legal deterrence mechanisms and/or by managerial defensive devices or did other governance instruments substitute for them?

As regards the intents and effects of hostile takeovers in the 1980s, their interpretation still remains controversial. Some analysts regard the 1980s as the "decade of greed and excess": leveraged buyouts and hostile takeovers based on

insider trading, excessive indebtedness, rent-seeking and speculation fostered defaults, bankruptcies and job losses (OECD, 1995, p. 28; Milgrom and Roberts, 1992). Indeed, the leading firm then in the junk-bond-market, Drexel Burnham Lambert, was convicted of insider trading. There is also clear evidence that the development of the market for high-yield/high-risk bonds bolstered the market for corporate control in that decade, inasmuch as leverage reduced the barrier of size so far protecting large corporations from hostile bids.<sup>28</sup>

However, many refute the view that the 1980s hostile takeovers and LBOs had harmful or no impact at all on efficiency. Jensen (1993, p. 838) contends that they "were addressing an important set of problems in corporate America, and doing it before the companies faced serious trouble in the product markets". For him, takeovers were an efficient and necessary mechanism to dealing with the problem of excess capacity and the requirement of exit. Also aligned with this standpoint, Holmstrom and Kaplan (2001) claim that LBOs enhanced efficiency, the high occurrence of defaults resulting from ever increasing bids, concentrating benefits principally on selling firms' shareholders. Jensen (1993), in turn, ascribes the high number of bankruptcies partly to changes in the rules and procedures governing bankruptcies, and partly to the credit crunch, which took place at the end of the 1980s and would have contributed to the economic slowdown at the beginning of the 1990s.

This leads to the reasons for the collapse in the market for corporate control in the late 1980s – a still unsettled question too. For some analysts, the implementation of widespread takeover deterrents from the mid-1980s onwards has made a nasty dent in the operation of that market (Bebchuk and Ferrell, 1999, Jensen, 1993). As The Economist (October 30<sup>th</sup> 1999) puts it, "nowadays, legal barriers make those (hostile takeovers) much hard to mount". These analysts hold that political reactions to the intimate ties between hostile bids and the junk bond market were decisive to the emergence of management-friendly legislation, which would end in throwing sands into the wheeling of the market for corporate control. Management, labour, and politicians wishing to win over electors, so the argument goes, managed to exploit this anti-takeover mood for their own benefits, giving rise to "unwise public policy and court decisions" against that market. Entailing higher costs for bidders, they argue, these laws mitigate the disciplinary role

 $<sup>^{28}\</sup>mathrm{Debt}$  finance accounted for nearly 80% of the overall capital in leveraged buyouts (LBOs) in the 1980s. Over the period 1984-1989, half of the total value of issues of non-investment grade bonds was directed to financing takeovers. As "junk bonds" primarily financed LBOs or buybacks of shares, small wonder that net equity issues for American non-financial enterprises were largely negative in that period, averaging -3.5% of the total stock market capitalisation (Holmstrom and Kaplan, 2001).

tender offers could otherwise impose on managers, shielding under-performance. Accordingly, Shleifer and Vishny (1997) deem hostile takeovers "a very imperfect and politically vulnerable method of concentrating ownership". Likewise, Roe (1998a) regards antitakeover laws enacted in the late 1980s as endorsing his general view that American politics "often tries to dampen financial influence in the corporation".

These defensive schemes have been widely adopted by both states and managers. States may elevate the costs of takeovers either directly, through passing anti-takeover amendments, or by being tolerant of contrivances conceived by managers. In fact, the forbearance of state laws and courts has made it easier for managers to implement strategic takeover deterrents. Although both the Securities Act of 1933 and the Securities Exchange Act of 1934 contain provisions related to tender offers, regulation on this subject is primarily determined at the state level. Garvey and Hanka (1999) report that antitakeover legislation between 1980 and 1987 at both the federal and state levels was actually ineffective, despite the existence of "first generation" antitakeover laws in most of states. Federal interference, in turn, was carried out within the legal framework embracing the 1968 Williams Act – outlawing "fraudulent, deceptive or manipulative acts or practices in connection with any tender offer" – and antitrust laws. Throughout this period, the Supreme Court typically ruled in favour of relaxing takeover regulation, but in 1987 it confirmed the Indiana antitakeover law, which triggered the "second generation" of state-level antitakeover laws, passed between 1987 and 1990. The most common among these laws were the "business combination law" and the "control share laws".<sup>29</sup>

At the firm level, managers have often resorted to poison pills, 30 golden para-

<sup>&</sup>lt;sup>29</sup>Business combination laws impose a moratorium or freeze-out on certain kinds of transactions (such as assets sales and mergers) between a large shareholder and the firm, for a period typically varying between three and five years after her stake reaches a pre-specified threshold. The objective lies in delaying any business combination. Control share laws, in turn, restrict the voting rights of controlling shareholders. Business combination statutes covered nearly 80% of exchange-listed firms in the United States in 1991, against 15% four years before (Comment and G., 1995). This percentage increased even more in the 1990s, achieving 88% in 1998 (Gompers et al., 2001). Control share laws and poison pills applied to, respectively, 24% and 35% of the American exchange-listed firms in 1991. In that same year, nearly 87% of all those firms had at least one of these three managerial defensive mechanisms. Takeover rates followed the opposite way: they peaked 1.5% per month in 1987 and 1988, plummeting thereafter to reach 0.5% per month in 1990-91. Transactions related to the control market decreased from US\$340 billion in 1988 to US\$96 billion in 1991 – LBOs and MBOs falling from US\$80 billion to just US\$1 billion (Jensen, 1993, p. 852).

<sup>&</sup>lt;sup>30</sup>Poison pills increase the cost of an unfriendly takeover (reducing, consequently, the value of the firm) often by granting shareholders the right either to receive as dividends additional shares

chutes, super-majority provisions and greenmail. According to Bebchuk and Ferrell (1999, p. 18), the maintenance and spread of poison pills were reinforced by the approval of multi-constituency laws in 31 states, with similar jurisprudence in others. These laws added non-investing stakeholders' interests to the coverage of managers' fiduciary duties – allowing them, for example, to take into account the effect of a takeover on employees or on the local community. Whilst federal laws governing takeovers may somehow be justified on the grounds of minority shareholders' protection (such as the obligation for any potential bidder to make public their intentions when her shareholdings exceed a determined threshold, or the imposition of extending the same bid to all shareholders), most state laws, however, seem to be motivated by other goals – for example, when they set ceilings on voting rights to shareholders acquiring large share stakes.

Yet some object the view that heavy regulation and hindrances adopted by managers as well as jurisprudence provoked the demise of the market for corporate control in the late 1980s. As a case in point, Comment and G. (1995) assert that there is little evidence to support the claim that recent statutory and legal measures have been used systematically to deter takeovers and to entrench incumbent management.<sup>31</sup> They imputed the sharp fall in takeover deals at the turn of the 1980s to "broad-scale political or economic forces that manifest themselves as secular variation", such as the recession in 1990-91 and the credit crunch.<sup>32</sup> However, even though the junk bond market bounced back in the 1990s, hostile takeover dealings were kept at relatively low levels.<sup>33</sup> Holmstrom and Kaplan

in the target (or, if the takeover is successful, in the acquiring) firm, or to purchase them at a discount in the event that anybody acquires more than a specified block of equity. By diluting the raider's stake, this device may enable managers to abort hostile takeovers. Even if takeovers are consummated, a redistribution of gains from the target firm's shareholders to its managers is likely to happen.

<sup>31</sup>They find that selling shareholders receive higher premium prices for their shares when their firms are protected by antitakeover state laws or by poison pills. This might suggest that these measures better the targets' bargaining position vis-à-vis bidders' (raising the gains to the former), deterring consequently purchasers. Notwithstanding, they fail to capture such deterrence, finding that target shareholders gain even after accounting for deals that are never completed.

<sup>32</sup>By their account, Drexel's bankruptcy also seriously affected takeover deals. On the significance of measures designed to curb high leverage on the credit crunch, see also Jensen (1993).

<sup>33</sup>The market for junk bonds regained strength from 1992 on: new issues averaged more than 1% of the average total stock market capitalisation over 1992-1999, peaking at 1.5% in 1993. Nonetheless, less than 30% of the funds raised by junk bond issues in the 1990s were used to finance takeovers. Besides the smaller share of hostile takeovers, another feature of takeovers over the last ten years is that they have been mostly financed by equity, instead of risky debt. Almost 58% of all mergers over the 1990s were wholly paid with shares (Andrade et al., 2001). This helps explain why net equity issuance for non-financial enterprises, after being positive in

(2001, p. 132) counter that interpretation arguing that hostile takeovers and LBOs waned in the 1990s because "they were no longer needed". For them, deregulation, globalisation, and information technology have forced managers to cede "authority to the markets", shrinking managers' scope for discretion. The function leveraged hostile takeovers and buyouts performed in the 1980s would be fulfilled now by institutional investors, board activism, and managerial incentives (fear of hostile takeovers and compensation based on share option).

The real ultimate effect of antitakeover laws remains therefore debatable, even more so if taken into account the question about whose interests should be protected in the firm – from employee's viewpoint, takeover deterrents may be advantageous. Be that as it may, bidders have unequivocally had to face several types of hurdles that make unsolicited takeovers costlier: from state corporate laws to corporate charters, to adverse court decisions and to regulatory restrictions on the availability of debt financing. Still, even if plagued by legal deterrents, hostile takeovers (or the threat of them) appear to be, as Black (1998) emphasises, "a more effective prod for change in poorly performing firms than monitoring by independent directors or jawboning by institutional investors".

To conclude this section, it is worth noting that the same legal and institutional conditions contributing to the existence of deep and highly liquid stock markets in the United States are crucial for the workings of the market for corporate control. The downside, as already emphasised, is that liquidity trades off against monitoring.

## 4. Incentive-based Compensation Contracts

Making top managers' compensation very sensitive to the market value of the company or to its profits, performance-related compensation packages – involving share options, pay in shares, or bonus plans – are claimed to provide "high-powered" incentives for executives to be efficient. Grounded on this rationale, share options have grown rapidly in importance as a means of executive's pay over the last decade, becoming today "the single largest component of compensation for U.S. executives" (Hall and Murphy, 2000).<sup>34</sup>

the first half of the 1990s, turned into negative thereafter (Holmstrom and Kaplan, 2001).

<sup>&</sup>lt;sup>34</sup>Recipients of share options are entitled to buy a certain number of shares at a fixed exercise price for a pre-specified term (typically five to ten years in the United States), facing generally some constraints on the early exercise of the call option. Nearly 97% of the 500 companies comprising the Standard & Poor's index had granted share options to their senior executives in 1998 (against 82% in 1992). In 1998, employee share options reached 6.2% of the outstanding

Nevertheless, there are compelling reasons for doubting about the efficiency of performance-based pay as an incentive to align the firm's decision-making with the interests of its shareholders. To begin with, measuring managerial performance carries insurmountable difficulties of both verifiability and enforcement, since it cannot be directly observed, let alone verified. To take observable outcomes such as firms' profits or share prices as proxies for their performance can give rise to serious distortions, inasmuch as these outcomes do not depend exclusively on managers' efforts and competence.

Moreover, share options as well as risky bonuses and other forms of contingent pay are a costly means of executives' compensation. As Hall and Murphy (2000) remark, two assumptions lying at the heart of traditional option-pricing methodologies (as the Black-Scholes' model) are unfit to analyse executives' (and other employees') share options. One is that options can be freely tradable; the other is that their holders can fully hedge the risk of holding them by short-selling the underlying shares. But while these assumptions reasonably reflect the circumstances surrounding sophisticated, well-diversified outside investors, they fail to capture the main characteristic features of share options as an incentive-based governance tool. Notably that executives cannot trade their options nor hedge the risks by short-selling company shares – otherwise the pivotal purpose of share option grants would disappear.

The wedge between the company's economic cost of issuing options and the economic value options have to the executive-recipients is almost always neglected by those using traditional option-pricing methodologies to value executive share options. Option-pricing models are adequate only to measure the company's cost of opportunity for granting an option because they reasonably estimate the amount outside investors would pay for an option (Abowd and Kaplan, 1999). The real (risk-adjusted) value of options to executives-recipients should be estimated as the compensation in cash that they would be willing to exchange for them.

Hall and Murphy (2000) show that the ratios of that value to the cost of granting the options for the company vary inversely to executives' risk-aversion and directly to the diversification of their wealth. Put it differently, owing to managers' risk aversion and non-diversification, the economic cost to shareholders of granting options (or of any variable element of pay) typically far exceeds their value to executive-recipients. Thus, "options are, in fact, an usually expensive

equity capital of 144 of the largest S&P 500 firms (Shiller, 2000). Equity-based compensation accounted for almost 50% of the total CEO pay in 1994, while in 1980 it represented just 20%. According to *The Economist* (April 25<sup>th</sup> 2002), share options represented 58% of the CEOs' pay in large American companies in 2001. See also *The Economist* (August 29<sup>th</sup> 1998).

and therefore inefficient way to convey compensation to executives and employees ... Stock options are efficient only when the incentive benefits of the options (including both pay-to-performance and retention incentives) exceed their 'inefficient cost'."

With respect specifically to the rules governing the use of share options in the United States as a form of variable pay to executives, they seem to create perverse incentives. First, they neither prevent companies from issuing share options without shareholders' consent, nor require the disclosure of the "rescission" of those already exercised. The SEC's attempts to change this picture have faced strong opposition, notably from Nasdaq.

Second, the treatment of share options is purpose-dependent: the cost to the firm of granting them is allowed to be deducted from the taxable income whereas that cost is typically not counted as expenses in the firm's profit statements. Thus, share options are dealt with as a cost on tax grounds but are non-expensed in profit statements for their shareholders. Reported profits are therefore overstated.<sup>35</sup>

Third, share options may induce top executives to be primarily engaged in boosting share prices – for example, in initiatives just meeting market's expectations – irrespective of their own opinion about whether those measures are efficient or not – or, more directly, in substituting share repurchases for a portion of the dividend payout.<sup>36</sup> Or still share option pay may make managers predisposed to bogus accounting and fictitious dealings since artificially-inflated profits ensure them high payoffs – a stratagem actually adopted by some large corporations in the last few years. As Krugman (2002) emphasises, "a system that lavishly rewards executives for success tempts those executives, who control much of the information available to outsiders, to fabricate the appearance of success." Fourth, share options may foster moral hazard: managers' incentives to take risks with the company increase because they "share in the upside, but not, beyond a point, in the downside" (Wolf, 2001). Fifth, rather than a tool for bringing into line executives' wealth and the company's share-price performance, share option pay may be a

<sup>&</sup>lt;sup>35</sup>Wolf (2001) notes that neglecting the costs of share options on companies' profit and loss statements is reckoned to overestimate U.S. corporate profits by roughly 20%. As an example, Oracle, the world's second largest software company, spent US\$2.7 billion in the fiscal year of 2000 in order to avoid the dilution that the exercise of share options would entail – amount equivalent to 43% of its annual net income. It should be noted that pay in shares is scarcely used as an incentive contract. Even more curious is that, unlike share options, shares as a form of compensation for executives and directors are treated as an expense.

<sup>&</sup>lt;sup>36</sup>Of the largest S&P500 firms, 144 repurchased, on an annual average, 1.9% of their outstanding shares over the period 1994-1998, while new share issues averaged only 0.9%. Repurchases were made principally to cater to the exercise of executives' options (Shiller, 2000, pp. 23-24 and 238).

handy device for boards justifying managers' excessive pay.

Against this background, no wonder some analysts regard share options as, above all, a mechanism of transferring, rather than creating, wealth. As Wolf (2001) contends, share options are "a form of shareholder expropriation ideally suited to the bull market of the 1990s": it is legal, renders shareholders – owing to the capital gains – less attentive to managerial rent-seeking, and is labelled as incentives. For him, share options "may prove no more than a bull-market fad". This view is reinforced by the fact that falling share prices at the end of 2000 led numerous companies to allow executives to rescind their exercise of stock options (Norris, 2001). Curiously enough, even those advocating this type of compensation as a contribution to rendering managers liable to shareholder value, like Holmstrom and Kaplan (2001, p. 140), recognise that great reliance on stock options may abate when stock markets become bearish. On account of all the aforementioned problems, it seems unconvincing the case for top-executive performance-based compensation.

### 5. Debt

According to Milgrom and Roberts (1992, pp. 492 and 494), free cash flows, "for efficiency, should be returned to stockholders, for example, by increasing dividends or repurchasing shares of stock . . . Managers and their boards may be severely tempted to use these resources within the firm, however, carrying out new investments that (by definition) are not profitable and not in the shareholders' interests. They may also be more inclined to indulge themselves in excessive perks and to share the wealth with the employees". In fact, managers of mature, cash-cow firms, with low growth opportunities, are liable to overinvestment. In particular, managers in declining industries with excess capacity, where agency costs of free cash flow are high, are likely to eschew the necessary restructuring, let alone exit. Accordingly, Jensen (1986, p. 324) claims that debt can serve as an invaluable disciplinary tool, inasmuch as it "reduces the agency costs of free cash flow by reducing the cash flow available for spending at the discretion of managers". Thus debt operates as "an effective substitute for dividends", forcing "managers to effectively bond their promise to pay out future cash flows". A crucial assumption underlying this claim is that the cost of capital raised by debt exceeds the perceived cost of equity capital, because the latter source of financing confers on managers some clout with the dividend policy. Fears of losing job and reputation that default and bankruptcy could imply render managers committed to running the firm efficiently in order to ensure a return on capital at least enough to meet

the fixed interest obligations. Therefore, managers can be compelled to contract more debt than they would like. As overall empirical evidence for that theory, it is generally presented the 1980s management and leveraged buyouts, when supposedly managers were coerced by debt to, and did, promote efficiency and increase firm value (Jensen, 1993, Holmstrom and Kaplan, 2001).

Getting into debt to buy back shares may indeed help curb agency costs of free cash flows in companies where these costs are expected to be high, not least in mature companies, where debt-overhang may add value to the firm without posing major threat of default. Debt however is not free from drawbacks as well. First, heavy indebtedness may blunt other governance mechanisms. As Novaes and Zingales (1995) put forward, managers can take on debt to reduce the threat of hostile takeovers, debt serving therefore as a mechanism for entrenchment. Second, interest rate shifts or other macroeconomic changes may increase the risk of bankruptcy, making it more difficult to run the firm. Third, debt finance can function as a disciplinary tool provided legal rules severely penalise defaulters, otherwise it may induce moral hazard. Weak protection of creditors, by raising the cost of bankruptcy they may have to bear, affects the cost and availability of debt as well as the probability of bankruptcy itself – as it prompts managers to pursue risky strategies. Only reputation in the "market for executives" is left to rein in their bias towards opportunistic bankruptcy. In this regard, legal protection of creditors in the United States leaves something to be desired, failing to provide the adequate incentives to make debt a sharp governance instrument (La Porta et al., 1998). Its bankruptcy law, in particular Chapter 11, reveals a strong bias in favour of managers. When firms defaults, American managers enjoy unequivocally a privileged treatment as compared to their counterparts in other developed countries: whereas in these countries "creditors' consent is required for filing for reorganisation and existing management is replaced during the reorganisation process", Chapter 11 allows managers to file unilaterally for reorganisation, implying generally their permanence, thenceforth temporarily free from creditors' claims (OECD, 1996). Even secured creditors cannot automatically pull the collateral from firms being reorganised. Fourth, while high leverage may operate as a disciplinary tool to prevent the overinvestment problem, it may also give rise to the opposite problem of underinvestment (debt overhang), when firms face high growth opportunities (Myers, 1977). Thus, the free cash flow theory seems to apply more to firms of stable industries.

Regarding the empirical literature on the disciplinary role of debt, there exists some evidence underpinning Jensen's contention. Based on a sample of 381 exchange-listed companies whose prices of shares experienced sharp decrease over

the period 1979-1984, Gilson (1989) shows that a senior-level management turnover occurred in 52% of those firms that suffered a financial distress, whereas the rate for non-financially-distressed firms was just 19% — despite firms of both groups being similarly unprofitable. Another important finding is that no fired manager was subsequently employed by another exchange-listed firm for at least 3 years following his departure, suggesting he incurred high personal costs of financial distress. Thus, managers would "have incentives to reduce the likelihood of default by borrowing less, choosing less risky investment projects, and managing their firms more efficiently".

Likewise, Kaplan (1989) finds evidence corroborating the free cash flow theory of debt. Examining 48 large management buyouts of public companies consummated between 1980 and 1986, he documents the following effects on the sampled firms in the three years after the buyout: 1) increases in operating income (before depreciation); 2) reductions in capital expenditures; 3) increases in the net cash flow (the difference between operating income and capital expenditure), even after controlling for post-buyout asset divestitures and acquisitions as well as for industry changes; and 4) increases in the combined total market-adjusted return for pre-buyout and post-buyout investors. The author investigate three hypotheses for explaining the enhanced operating performance: 1) wealth transfers from employees to the investor group (layoffs); 2) managerial exploitation of shareholders through insider information; and 3) reduced agency costs along with new incentives. Kaplan affords evidence that tends to be more consistent with the latter (Jensen's) hypothesis.

In the same vein, Smith (1990), focusing on 58 management buyouts completed between 1977 and 1986, finds that operating returns increase significantly from the year preceding to the year following the buyouts, and that the high levels are sustained subsequently, even after controlling for industry trends. Smith reports evidence that the higher operating returns cannot be entirely accounted for by major asset sales, layoffs, or cut-backs in expenditures on advertising, maintenance and repairs, research and development, or property, plant, and equipment. Furthermore, he provides evidence to reject the hypothesis that managers carry out buyouts with a view to exploiting inside information on firms' favourable prospects. Instead, he shows that the sustained growth in operating returns after buyouts derives probably from enhanced operating efficiency brought about by the resulting concentration in ownership structure, which is likely to imply better monitoring and heightened incentives for managers to eschew shirking and perqui-

sites. Another possible explanation is that put forward by Jensen (1986): the commitment to service the debt shrinks managers' leeway for pursuing those private benefits.

Denis and Denis (1993) find further evidence that increased leverage does in fact restrain managerial discretion over investment policy. Analysing 39 proposed leveraged recapitalisations, they show that, once undertaken, recapitalisations are generally followed by substantial reduction in undistributed cash flow, capital expenditures, and total assets. They also report that whilst in the years leading up to the recapitalisations the firms examined actually adopted bad investment policies, investment contraction is significantly correlated with the cumulative abnormal returns earned by the shareholders of the recapitalizing firms.

Safieddine and Titman (1999) also furnishes evidence to the hypothesis of debt serving as a governance tool. Examining a sample embracing 573 failed takeover attempts during the 1982 to 1991 period, they find that: 1) leverage ratios significantly increase for targets of failed takeovers; and 2) failed takeover attempts does reduce the likelihood of targets whose leverage increases getting taken over in the future in comparison with those whose leverage does not. However, this observed negative relationship between leverage changes and subsequent takeover activity could be assigned either to the greater credibility of a target manager's promises resulting from higher leverage – since it would increase the share prices of the target firm and, therefore, the cost of takeover; or to the incumbent managers' deeper entrenchment allowed by higher leverage, which may deter unwanted takeovers by increasing the costs of the target but without adding value. The authors documented that those target firms with the largest growth in leverage following an unsuccessful takeover have increases in their adjusted operating cash flows and those whose leverage increases the least realise reductions in their adjusted cash flows. This evidence is therefore consistent with the hypothesis that leverage induces managers to be more efficient. They show moreover that failed targets that increase their leverage the most make a number of changes that can potentially improve their productivity. Increases in leverage following failed takeovers are also correlated with decreases in investment and other restructuring activities usually associated with takeovers – asset sales, layoffs, cut-backs in their labour force, change in focus, hostility, insider ownership, and management turnover. Besides, firms with the largest increase in leverage following an unsuccessful takeover realise cash flows that outperform their benchmarks in the five years following the failed takeover. Differently, operating cash flows, capital expenditure, employment, focus and assets sales show insignificant or no changes in those firms with the least increase in leverage after a failed takeover bid. Cross-sectional regressions demon-

strate that the impact of changes in leverage ratios on cash flows is strong even after controlling for these other potential explanatory variables of performance. For these authors, higher leverage helps target firms remain independent, committing their managers to adopting the value-enhancing decisions that the bidder would have taken.

Similarly, Berger et al. (1997) find that the level of debt is likely to increase following shocks that reduce managerial entrenchment, such as failed tender offers, CEO dismissals, or the election of outsiders or large shareholders to the board of directors. Also, they provide evidence suggesting that leverage ratios tend to be low when top managers are entrenched (facing poor active monitoring) or have low ownership and compensation incentives.

On the other hand, Garvey and Hanka (1999) provide evidence consistent with the entrenchment view of leverage. They argue that antitakeover laws can operate as a substitute for debt as a means to maintain managerial discretion, with the advantage of reducing the financial distress risk. To test the opposing hypotheses about the motivation behind managerial financing choices, they investigate if managers changed their financing policies after the passage of "second generation" state antitakeover laws over the period 1987-1990. If managers issued debt to shield themselves against hostile takeovers bids, then it is expected that those laws, in making these bids costlier, would induce managers to reduce their firms' leverage ratio as compared with unprotected firms. Even controlling for size, industry, or profitability, they find that firms that became subject to antitakeover laws had a cumulative abnormal reduction in their leverage ratios of nearly 30% over a four-year period after the passage of these laws, the opposite occurring to unprotected firms.<sup>37</sup> In addition, they find no evidence of significant change in firm size or profitability following the passage of antitakeover laws, what runs counter to the view that legal takeover deterrents worsen free cash flow allocation – protected firms tend to reduce major new investments and disinvestments. Shyam-Sunder (1991), in turn, finds that announcements of straight debt offerings were not associated with a significant stock price reaction.

As regards the relationship between profitability and leverage, the theory of free cash flow predicts that, should the market for corporate control be effective, the correlation will be positive – otherwise managers of high operating cash flows would be reluctant to contracting debt, implying a negative correlation. Con-

<sup>&</sup>lt;sup>37</sup>Besides the fact that some states did not adopt antitakeover laws can serve as a natural control for other contemporaneous changes affecting leverage, Garvey and Hanka's analysis has the advantage over that of Berger et al. (1997) of dealing with a more exogenous change in managerial incentives.

trariwise, for Myers and Majluf (1984) those two variables should be negatively correlated.<sup>38</sup> Testing this relationship, Rajan and Zingales (1995) find that profitability for American non-financial firms is negatively correlated with debt to market capital (at the 1% significance level), the same correlation sign prevailing for their counterparts in the other G-7 countries except Germany (being however economically insignificant in France). For firms in the United States, the negative effect of profitability on leverage is considerably stronger as their size increases. The authors are cautious however to draw any other conclusion about the suitability of the available theories from the evidence they found than that "theoretical underpinnings of the observed correlations are still largely unresolved" (p. 26).

In fact, as emphasised by Harris and Raviv (1991, p. 325), theories driven by corporate control considerations, including the theory of free cash flow, "have nothing to say about the long run capital structure of firms", only theorising about the optimal short-term reaction in terms of financing to potential takeover attempts. Even Safieddine and Titman (1999) recognise that "increased debt can make firms more shortsighted in their operating and investment decisions, making immediate cash flows higher at the expense of later cash flows… boosting short-run profits by cutting costs at the expense of its long-term reputation and profits".

From the foregoing, there appear to be some persuasive theoretical arguments against the contention that debt can operate as an effective disciplinary device as well as some empirical evidence consistent with the view that debt has a very limited governance scope.

Finally, it should be recognised that there are very few marked inconsistencies between differences in debt ratios across American industries and what the free cash flow theory predicts. Leverage ratios in that country tend to be high for traditional, capital-intensive industries, like petroleum, steel, cement, aluminium, chemicals, and for regulated industries (such as airlines, transportation, telecommunications, electric and gas utilities). Conversely, industries with fast-growing perspectives (such as computer software, electronics industries, and most companies in the pharmaceutical sector) typically operate at low, or even negative, debt ratios.<sup>39</sup> But nor does this pattern of debt/equity conflict with either the two oth-

<sup>&</sup>lt;sup>38</sup>The pecking order theory, advocated by these two economists, attempts to account for managers' financing decisions by the signalling effects resulting from asymmetric information.

<sup>&</sup>lt;sup>39</sup>See Harris and Raviv (1991) and Brealey and Myers (2000). Rajan and Zingales (1995) afford evidence that American companies' debt ratios show no systematic differences vis-à-vis their counterparts in other industrialised countries.

er "conditional" theories available to account for firms' capital structure choice – the "trade-off theory" and the "pecking-order theory" (Brealey and Myers, 2000, especially chapter 18).

## 6. Concluding Remarks

Despite much lauded, the American structure of corporate governance is far from invulnerable. Its Achilles' heel seems to lie in the combination of weak internal controls and severe constraints on shareholders to be pro-active in making managers accountable. Internal mechanisms fail to curb inefficiency and misbehaviour for a number of reasons: slack rules governing board's assignments and difficulties in enforcing them; costs and unreliability of shareholder litigation and the business judgement rule; and the limits of high-powered incentives for directors to eschew rent-seeking or shirking.

Limited shareholder activism, in turn, stems to a great extent from the still strong regulation inhibiting "voice", since close contacts with managers and/or directors are taken a liquidity toll. It should be recognised that some important structural and institutional changes have been altering this picture. The outstanding growth in the volume of assets controlled by pension funds and other institutional investors along with the concentration of their portfolio in shares of publicly held companies are shaping a less diffuse pattern of corporate ownership. Driven by the perception of the benefits associated with "voice" relatively to the limited scope "exit" leaves for large shareholdings (due to the attendant price-effects), some institutional investors have become more active in monitoring companies and called for changes when they spot bungling managers. This seems to be the rationale so far guiding public pension funds towards shareholder activism.

Notwithstanding, it is hard to conceive of shareholders overtaking hostile bidders in monitoring American corporations in the near future, unless there is a massive overhaul of the still binding regulations burdening activist shareholders with

<sup>&</sup>lt;sup>40</sup>The former, emphasising the static trade-off between interest tax shields and expected costs of financial distress, may explain why debt as compared to equity is high in capital-intensive industries. The other theory, in turn, provides a rationale for the low or negative debt ratios in industries intensive in intangible assets (advertising and educational services), or in industries whose returns and business risk are relatively high (pharmaceutics). In their judicious survey of the theoretical and empirical literature on capital structure Harris and Raviv (1991) also remark that these theories are by and large "complementary", the importance of each being context-dependent. They claim that these models, in spite of giving rise to a multitude of implications, are hardly ever conflicting (pp. 342, 350).

liquidity relinquishment. As a matter of fact, the current regulatory framework obstructs the emergence of investors willing to trade off liquidity against monitoring. Likewise, although the jettisoning of the Glass-Steagall Act may deepen the current trend to consolidation in the American financial industry, catapulting mergers and acquisitions within and across the banking industry, there is no sign that the resulting institutions will break with their long-standing arm's-length relationships with non-financial enterprises.

As regards external controls, competitive product and capital markets appear as insufficient to force management to be liable to shareholders. Apart from the predominance of imperfect competition, product markets delay to detect mismanagement, allowing inefficiencies to last for a long time. Capital markets, on the other hand, may be worthless to reduce leeway for managerial discretion if firms barely tap them or if investors make their decisions based on criteria other than firms' efficiency.

With respect to the market for corporate control, tender offers are far from reliable to cope with inefficiencies. Although fears of being superseded may curb managers' slackness, they also lead to focus excessively on short-term earnings – given their direct impact on investors' expectations and, thus, on share prices. Curtailed horizons may, in turn, downgrade the efficiency of investments since expenditures on research and development are the first to be cut. Additionally, even without rent-seeking purposes, hostile bids have to overtake several hurdles to turn out to be a sharp governance instrument, the most important of which are: a wide range of transaction costs, regulatory barriers, deterrence devices adopted unilaterally by managers and directors, and the uncertainties surrounding takeovers' aftermath. Hence, a cloud is cast over the actual power of tender offers to control management in the United States. Being also part of the market for corporate control, managers and directors' concerns with their reputation are nonetheless insufficient to prevent alone under-performance and poor monitoring. As for performance-related compensation schemes, mounting evidence suggests that they mainly transfer, rather than create, wealth. Debt in turn seems to work only under some strict circumstances and generally improves the firm's short-run performance at the price of worsening its long-run cash flows.

Finally, federal laws as well as stock exchange rules and their reasonable enforcement go a long way towards restricting managers' latitude in expropriating shareholders. Besides boosting securities markets and enhancing liquidity, the rather binding legal protection of shareholder rights facilitates diversification and

fosters the venture capital industry. On the other hand, liquidity also eases exit, reducing the incentive to monitoring, and regulation makes hostile takeovers more expensive.

All in all, none of the alleged pillars underpinning corporate governance in the United States is free from drawbacks. Evidently this conclusion does not imply that, as a whole, the American governance system is worse than, say, its German counterpart. Notwithstanding deficiencies displayed by each of these mechanisms as separately considered, it may be that complementarities among them or with other institutions render the current American framework based on a combination of laws and markets the best feasible arrangement there – a "locally" efficient structure, as Bebchuk and Roe (1998) put it.<sup>41</sup> Future research should throw light on that issue.

#### References

- Abowd, J. & Kaplan, D. (1999). Executive compensation: Six questions that need answering. *Journal of Economic Perspectives*, 13(4):145–168.
- Akiuz, Y. (1993). Financing liberalisation: The key issues. UNCTAD Discussion Papers, No. 56.
- Andrade, G., Mitchell, M., & Stafford, E. (2001). New evidence and perspective on mergers. *Journal of Economic Perspectives*, 15(2):103–120.
- Bebchuk, L. & Ferrell, A. (1999). Federalism and the takeover law: The race to protect managers from takeovers. NBER Working Paper Series, No. 7232 Cambridge (MA).
- Bebchuk, L. & Roe, M. J. (1998). A theory of path dependence in corporate governance and ownership. Working Paper # 131. Columbia Law School.
- Berger, P. G., Ofek, E., & Yermack, D. L. (1997). Managerial entrenchment and capital structure decisions. *The Journal of Finance*, 52(4):1411–38.

<sup>&</sup>lt;sup>41</sup>As a case in point, there appear to be "institutional complementarities" among fluid labour markets, diffuse ownership, and relatively high occurrence of takeovers in the United States. The strength of each of these three characteristic features of the American corporate landscape appears to depend on the strength of the others. Flexibility in the labour markets may facilitate adjustments imposed by takeovers, accomplished in turn thanks to dispersed shareholdings. By the same token, monitoring by large shareholders in some civil-law countries would be a (remedial) complement of weak legal protection of shareholders (Roe, 1998a).

- BGFRS (1999). Board of governors of the federal reserve system. Flow of funds accounts of the United States: annual flows and outstandings.
- Bhagat, S., S., B. B., & Blair, M. (1998). Relational investing and firm performance. University of Colorado Working Paper.
- Black, B. (1998). Shareholder activism and corporate governance in the United States. In Peter Newman, editor, *The New Palgrave Dictionary of Economics and the Law*. Macmillan Reference Ltd., London.
- Blair, M. (1995). Ownership and control: Rethinking corporate governance for the twenty-first century. Washington, D. C.: Brookings Institution.
- Brealey, R. & Myers, S. (2000). Principles of Corporate Finance. McGraw-Hill, Boston.
- CalPERS (1999). Home page: http://www.calpers.ca.gov.
- CCL. Center for Corporate Law (2000). General rules and regulations promulgated under the securities exchange act of 1934. Available online at: http://www.law.uc.edu/CCL/34ActRls/index/html.
- Comment, R. & G., W. S. (1995). Poison or placebo? evidence on the deterrence and wealth effects of modern antitakeover measures. *Journal of Financial Economics*, 39.
- Corbett, J. & Jenkinson, T. (1997). How is investment financed? a study of Germany, Japan, the United Kingdom and the United States. *The Manchester School Supplement*, pages 69–93.
- DB. Deutsche Bundesbank (1997). Shares as financing and investment instruments. *Monthly Report*.
- De Long, J. B., Shleifer, A., Summers, L., & Waldmann, R. (1990). Noise trader risk in financial markets. *Journal of Political Economy*, 98(4).
- Denis, D. J. & Denis, D. K. (1993). Managerial discretion, organizational structure, and corporate performance: A study of leveraged recapitalizations. *Journal of Accounting & Economics*, 16(1–3):209–236.
- Financial Times (2000). Vodafone-Mannesmann: Making the connection, advisers set to earn millions.

Friedman, B. M. (1996). Economic implications of changing share ownership. NBER Working Paper 5141.

- Garvey, G. T. & Hanka, G. (1999). Capital structure and corporate control: The effect of antitakeover statutes on firm leverage. *The Journal of Finance*, pages 519–548.
- Gilson, S. C. (1989). Management turnover and financial distress. *Journal of Financial Economics*, 25(2):241–262.
- Gompers, P. A., Ishii, J. L., & Metrick, A. (2001). Corporate governance and equity prices. NBER Working Paper Series 8449.
- Gompers, P. A. & Metrick, A. (2001). Institutional investors and equity prices. The Quarterly Journal of Economics, 116(1):229–259.
- Grossman, S. & Hart, O. (1988). One share-one vote and the market for corporate control. *Journal of Financial Economics*, 20(1/2):175–202.
- Hall, B. & Murphy, K. (2000). Stock options for undiversified executives. NBER Working Paper Series No. 8052. Cambridge (MA).
- Harris, M. & Raviv, A. (1991). The theory of capital structure. *The Journal of Finance*, XLVI(1):297–355.
- Hart, O. (1995). Corporate governance: Some theory and implications. *The Economic Journal*, (105):678–689.
- Holderness, G. C., Kroszner, R. S., & Sheehan, D. P. (1999). Were the good old days that good? changes in managerial stock ownership since the great depression. *The Journal of Finance*, LIV(2):435–469.
- Holderness, G. C. & Sheehan, D. P. (1988). The role of majority shareholders in publicly held corporations: An exploratory analysis. *Journal of Financial Economics*, 20(1,2):317–346.
- Holmstrom, B. & Kaplan, S. (2001). Corporate governance and merger activity in the United States: Making sense of the 1980s and 1990s. *Journal of Economic Perspectives*, 15(2):121–144.
- Hubbard, R. G. (2000). Money, the Financial System, and the Economy. Addison-Wesley, Boston,  $3^{rd}$  ed. edition.

- Hubbard, R. G. & Palia, D. (1998). The market for corporate control. In Peter Newman, editor, The New Palgrave Dictionary of Economics and the Law. Macmillan Reference Ltd., London.
- IRI (1993). Industrial research institute. 1993. Financing U.S. technology: Experts explore why foreign competitors seem to be putting the new knowledge created in the U.S. to better commercial advantage than U.S. companies do. *Research Technology Management*, 36(1).
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76(2).
- Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, XLVIII(3).
- Jensen, M. & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, (3):305–60.
- Kaplan, S. (1989). The effects of management buyouts on operating performance and value. *Journal of Financial Economics*, 24(2):217–254.
- Karpoff, J. (1998). The impact of shareholder activism on target companies: A survey of empirical findings. University of Washington, School of Business.
- Krugman, P. (2002). Greed is bad. The New York Times.
- La Porta, R., Lopes-de Silanes, F., & Shleifer, A. (1998). Law and finance. *Journal of Political Economy*, 106(6).
- La Porta, R., Lopes-de Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, LIV(2).
- La Porta, R., Lopes-de Silanes, F., Shleifer, A., & Vishny, R. (1997). Legal determinants of external finance. *The Journal of Finance*, LII(3).
- Lazonick, W. & O'Sullivan, M. (1996). Organization, finance and international competition. *Industrial and Corporate Change*, 5(1).
- Maher, M. & Anderson, T. (1999). Corporate governance: Effects on firm performance and economic growth. Paris: OCDE.

Manne, H. (1965). Mergers and the market for corporate control. *Journal of Political Economy*, 73.

- Milgrom, P. & Roberts, J. (1992). Economics, Organization and Management. Prentice-Hall, New Jersey.
- Mullainathan, S. & Thaler, R. (2000). Behavioral economics. NBER Working Paper Series No. 7948. Cambridge (MA).
- Myers, S. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5:147–175.
- Myers, S. & Majluf, N. (1984). Corporate finance and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13:187–221.
- Norris, F. (2001). New corporate perk: If the stock falls, cancel purchases. The New York Times.
- Novaes, W. & Zingales, L. (1995). Capital structure choice when managers are in control: Entrenchment versus efficiency. NBER Working Paper Series No. 5384. Cambridge (MA).
- OECD (1995). Financial markets and corporate governance. Financial Market Trends, (62). Paris: OECD.
- OECD (1996). OECD economic surveys, 1995-1996. United States. Paris: OECD.
- OECD (1997). The impact of institutional investors on OECD financial markets. Financial Market Trends, 68. Paris: OECD.
- OECD (2001). Recent trends: Institutional investors statistics. Financial Market Trends, 80.
- Pagano, M., Panetta, F., & Zingales, L. (1998). Why do companies go public? an empirical analysis. *Journal of Finance*, LIII(1).
- Porter, M. (1992). Capital disadvantage: America's failing capital investment system. *Harvard Business Review*, 70(5).
- Prowse, S. (1994). Corporate governance in an international perspective. *BIS Economic Paper*, (41).

- Rajan, R. G. & Zingales, L. (1995). What do we know about capital structure? some evidence from international data. *Journal of Finance*, L:1421–1460.
- Ramseyer, J. M. (1998). Corporate law. In Ltd., M. R., editor, *The New Palgrave Dictionary of Economics and the Law.* Newman, P. (ed.), London.
- Roe, M. (1994). Strong Managers, Weak Owners: The Political Roots of American Corporate Finance. Princeton University Press, Princeton.
- Roe, M. (1998a). Comparative corporate governance. In Ltd., M. R., editor, *The New Palgrave Dictionary of Economics and the Law.* Newman, P (ed.), London.
- Roe, M. (1998b). German codetermination and german securities markets. Working paper # 128. Columbia Law School.
- Romano, R. (2001). Less is more: Making institutional investor activism a valuable mechanism of corporate governance. *Journal on Regulation*, 18(174):174–251.
- Romero, S. & Norris, F. (2002). New bookkeeping problems are disclosed by Worldcom. The New York Times.
- Safieddine, A. & Titman, S. (1999). Leverage and corporate performance: Evidence from unsuccessful takeovers. *The Journal of Finance*, LIV(2):547–580.
- SEC. Securities and Exchange Commission (1999). The investor's advocate: How the SEC protects investors and maintains market integrity.
- Shiller, R. (2000). Irrational Exuberance. Princeton University Press, Princeton.
- Shleifer, A. (2000). *Inefficient Markets: An Introduction to Behavioural Finance*. Oxford University Press, Oxford.
- Shleifer, A. & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, LII(2).
- Shleifer, R. & Vishny, R. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3).
- Shyam-Sunder, L. (1991). The stock price effect of risky versus safe debt. *Journal of Financial and Quantitative Analysis*, 26(4):549–558.
- Smith, A. J. (1990). Corporate ownership structure and performance: The case of management buyouts. *Journal of Financial Economics*, 27(1):143–164.

Stiglitz, J. (1985). Credit markets and the control of capital. *Journal of Money*, *Credit*, and *Banking*, 17(2).

Stiglitz, J. (2002). Crony capitalism american-style. Project Syndicate.

The Economist, (various issues).

Tirole, J. (2001). Corporate governance. *Econometrica*, 69(1):1–35.

Wolf, M. (2001). Taking other people's money: Stock options are not an efficient stimulus to executive performance but an effective way to transfer wealth in a bull market. *Financial Times*.