CeRP

CENTER FOR RESEARCH
ON PENSIONS AND
WELFARE POLICIES

Working Paper 11/01

INSTITUTIONAL SHAREHOLDERS AND CORPORATE GOVERNANCE: THE CASE OF UK PENSION FUNDS

Mara Faccio[a]
M. Ameziane Lasfer[b]

[a] Università Cattolica del Sacro Cuore, Largo Gemelli 1, 20123 Milano, Italy
[b] City University Business School, Barbican Centre, London EC2Y 8HB, UK

Institutional Shareholders and Corporate Governance:
The Case of UK Pension Funds

Mara Faccio[1], M. Ameziane Lasfer[*]

Abstract

We analyze the monitoring role of occupational pension funds, the largest category of shareholders in the UK. Our hypothesis is that, unlike other financial institutions, occupational pension funds are expected to monitor companies in which they hold large stakes because of their objectives, structure and overall share holding. After controlling for size and industry, we find that the value added by these funds is negligible and their holdings do not lead companies to comply with the *Code of Best Practice* or outperform their industry counterparts despite their long-term holding strategies.

---

[*] Corresponding author. Tel. (+44) (0) 171 477 8634, Fax (+44) (0) 171 477 8648, email: m.a.lasfer@city.ac.uk
[1] Tel. (+39) 02 72342436, Fax (+39) 02 72342766, email: mara.faccio@mi.unicatt.it

Institutional Shareholders and Corporate Governance:

The Case of UK Pension Funds

1.   Introduction

Under the agency setting large block holding is considered to be one of the mechanisms for controlling the agency problems which arise whenever managers have incentives to pursue their own interests at the expense of those of shareholders. However, the primarily US empirical evidence provided to date on the role and effectiveness of blockholders is mixed. (See Shleifer and Vishny (1997) for a review). The purpose of this paper is to analyze the monitoring role of occupational pension funds, the largest category of shareholders in the UK. We focus specifically on these funds because of the large dimension of their overall stakes in the UK market, the particular structure of their portfolios and their investment objectives. We consider these funds to be pressure-resistant institutions as opposed to other institutions, such as banks, investment and unit trusts and insurance companies, which are pressure-sensitive (e.g., Brickley, Lease and Smith, 1994). By comparing companies in which occupational pension funds hold large stakes against a control group of companies listed on the London Stock Exchange, we test the hypotheses that monitoring increases with ownership concentration and, as a result, occupational pension funds reduce agency conflicts and lead companies to increase their performance.

Over the last few years the issue of involvement of pension funds in the running of companies has been subject to an extensive debate. On the one hand, pension funds are perceived by the public to be short-termists and impose their views on companies in which they invest by, for example, making them pay dividends and not invest in the long-term (e.g., Hutton, 1995).[1] On the other hand, academic studies show that pension funds do not

get involved in corporate monitoring because they find it easier and cheaper to sell their holdings, they do not want to sit on the board for fear of getting price sensitive information or because of the agency problems within the funds themselves.[2] In addition, the UK pension funds, despite the size of their holdings, are not known for their monitoring and hardly vote at the annual general meetings (FT, 1999; NAPF, 1996b).[3] At the same time, policy makers tend to rely on these institutions to promote corporate governance (e.g., Cadbury, 1992; Greenbury, 1995).[4] Therefore, the testing of the empirical hypotheses in a pension fund dominated market such as the UK where companies suffer from the same free cash flow problems as their US counterparts, will contribute to the current corporate governance debate and will strengthen the evidence provided to-date.[5]

We analyse the shareholding section in the financial statements of all UK quoted non-financial companies and construct a test sample of companies in which pension funds hold more than 3% of the issued share capital. Our test sample includes 289 companies (18% of the total population). A control sample is constructed by matching each test firms by industry and size.[6] We find that companies in which pension funds hold large stakes do not adopt the *Code of Best Practice*, i.e., split the roles of chairman and CEO, have more non-executive directors and/or narrow the size of their board. These results are not consistent with the recommendations of Cadbury (1992) and Greenbury (1995). These companies are also not more profitable than the control firms. We report weak and even negative relationship between occupational pension funds blockholdings and firm value. Our overall results are consistent with previous US evidence (e.g., Romano, 1994 and Wahal, 1996) and cast doubt on the effectiveness of UK occupational pension funds' monitoring role.

The rest of the paper is structured as follows. Section 2 presents the theoretical

background. Section 3 describes the data. Section 4 presents the results. The Conclusions are in Section 5.

2.   Theoretical framework

In this section we review the literature on the role of large shareholders, present the structure of the pension fund industry and corporate governance system in the UK, and set up the hypotheses.

2.1   Review of the literature

Unlike the *relationship-based* corporate governance system of Japan and Germany where ownership is concentrated and markets are relatively illiquid, the UK system is a *market-based* characterized by liquid markets and unconcentrated company ownership.[7] The issue, although not trivial, has been considered in the literature only recently when agency theorists argue that public corporations suffer from excessive costs as managers pursue their own interests rather than the interests of shareholders (e.g., Jensen, 1986). As a result, there is a need for setting up mechanisms to make managers maximize shareholder wealth. These mechanisms include shareholding of managers, intermediaries and large blockholders (McConnell and Servaes, 1990; Morck, Shleifer and Vishny, 1988), outside directors (Cotter, Shivdasani and Zenner, 1997), debt policy (Lasfer, 1995; McConnell and Servaes, 1995), the market for corporate control and incentive contracts (Hart, 1995), large intermediaries (Admati *et al.*, 1994; Diamond, 1984), and long-term relationships (Ayres and Cramton, 1993).

In theory, Diamond (1984) suggests that a large intermediary can represent a better solution to agency conflicts because of economies of scale and diversification. Admati *et al.* (1994) argue that when monitoring is costly, the intermediary will monitor only if this will result in a modification in firm's payoff structure and lead to net gains. Similarly, Shleifer

and Vishny (1997) and Agrawal and Knoeber (1996) suggest that large investors, because of the relevance of the resources invested, have all the interest and the power to monitor and promote better governance of companies. However, Maug (1998) argues that while liquid markets make corporate governance more effective as it is cheaper and easier to acquire and hold large stakes, they also reduce large shareholders' incentive to monitor because they can sell their holdings easily. Kahn and Winton (1998) show that intervention is a function of the size of the institution's stake, firm specific factors and institution's trading profit.

The primarily US-based empirical evidence provided to date on the effectiveness of shareholder activism is mixed.[8] For example, Wahal (1996) and Karpoff, Malatesta and Walkling (1996) find little evidence that operating performance of companies that are the target of pension funds proposals improves. These results are consistent, among other things, with the arguments of Murphy and Van Nuys (1994) and Romano (1994) that pension funds are not effective monitors because of the agency problems within the funds themselves. In contrast, Smith (1996) and Nesbitt (1994) find that companies targeted by large pension funds, such as CalPERS, increase significantly their performance. More recently, Del Guercio and Hawkins (1999) show that the monitoring effectiveness depends on the investment strategies of pension funds and find that, unlike proposals sponsored by externally-managed funds, those made by internally managed funds are not associated with general increases in governance-related events at target firms. Other studies find a weak relationship between large institutional holdings and firm value or rates of return (e.g., Agrawal and Knoeber, 1996; Demsetz and Lehn, 1985).

2.2   The UK Pension Funds Industry

In addition to the state-sponsored pension scheme, we find in the UK occupational pension schemes which are organized and sponsored by employers and individual pension

schemes offered by financial institutions. Occupational pension schemes dominate the UK pension fund industry. For example, in 1997 the overall value of occupational pension funds' assets (including insured schemes) reached £635bn compared to individual pension schemes assets of £190bn (ABI, 1998).[9] Occupational pension funds also invest most of their funds in equities and they are the largest equity investors in the OECD countries (Davis, 1995). For example, in 1993, 78% of assets were invested in equities, 12% in fixed income securities and the remaining in cash and property (Business Monitor, 1997). This is partly due to the fact that they run defined benefit plans where individuals do not bear the investment risk (NAPF, 1996b). Another reason for the preference of equities over fixed income securities relates to the tax-exempt status of pension funds who, like charities, are not subject to capital gains tax and claim back a tax credit when they receive dividends (Lasfer, 1996). The predominance of pension funds in the UK market has only been recent. For example, In 1963 they held 7% of all UK equities and individuals were the main shareholders with 58.7%. By 1993 pension funds stakes increased to 34.7% (London Stock Exchange, 1995). In contrast, in the US individuals held 50% in 1990 followed by pension funds with 20.1%, increasing to 25.4% in 1995 (Prowse, 1994; Brancato, 1997). The US pension funds also invest a lower proportion of their assets in equities. For example, in 1990, out of the total assets of $2,491bn, 38.6% are invested in equities but these investments are concentrated in large firms and this proportion has not changed over the 1970-90 period (Brancato, 1997; Charkham, 1995; Davis, 1995; Stapledon, 1996).

In managing these assets, the funds are subject to trust law and implicitly follow the prudent-man concept which implies that the money is invested for the sole benefit of the beneficiaries. However, there is no explicit prudent-man rule and the pension trust law is very flexible making the legal barriers against institutional activism weaker in the UK

compared to the US where active shareholders that hold a "block of shares" are subject to filing requirements, such as the 13D Form with the SEC, and they can be sued for breaching disclosure duties of their plans or proposals.

The UK pension fund industry is also highly concentrated. For example, in 1994, the largest 5 in-house managed occupational pension funds managed assets worth £65.8 bn, 14.8% of all occupational pension funds assets (NAPF, 1996a) and British Telecommunications, accounted for £17.2 bn. The largest 68 schemes, whose assets value exceeds £1 bn in 1995, accounted for 57.3% of all occupational pension funds assets (Pension Funds and their Advisers, 1996). The same concentration is observed in the industry of fund managers where, at the end of 1996, the top 20 segregated fund managers managed assets worth £285.7bn on behalf of occupational pension funds and, as a whole, managed assets of some £1,029.2bn (Financial Times, 1997a).

2.3   The UK corporate governance system

Following the recent concerns about the way in which remuneration packages for senior executives have been determined, the spectacular collapse of a number of large companies and the fraudulent use of the pension fund monies to finance an illegal scheme for supporting the share price of Maxwell Communications Corporation, the Committee on the Financial Aspects of Corporate Governance (referred to as the Cadbury Committee after its chairman) was set up to look at the changes needed in corporate governance in the UK and published a report in December 1992 (Cadbury 1992). At the heart of the report is the *Code of Best Practice* which details the role and composition of the board of directors, the appointment of non-executive directors, the disclosure of the remuneration of executive directors and the renewal of their contracts, and the way companies should report and audit their accounts. The main recommendation is that the offices of the chairman and the chief

executive officer should be separated to prevent excessive concentration of power in boardrooms and that companies should appoint independent non-executive directors with high caliber so that their views will carry weight in board discussions.[10] The code defines the various roles non-executive directors should play. For example, they are to be in a majority on the nominating committee which is responsible for making recommendations for board membership, they should be the sole or majority members of the remuneration committee which makes recommendations to the board on the pay of executive directors, and of the audit committee whose function is to advise on the appointment of auditors, to insure the integrity of the company's financial statements and to discuss with the auditors any problems arising during the course of the audit.[11]

2.4   Hypotheses

The Cadbury report relied on large institutional shareholders, such as pension funds, for the application of its recommendations. In particular, these funds are expected to monitor boards where there is a concentration of power in the hands of the chief executive, seek to promote the influence of non-executive directors and they are expected to bring about changes in underperforming companies rather than dispose of their shares. However, Del Guercio and Hawkins (1999) show that the level of monitoring by pension funds depends significantly on the way their assets are managed. In the UK pension funds assets can be managed in three different ways: self-managed, externally managed and insured. Within self-managed schemes, the trustees of the scheme define asset allocation, portfolio selection policies and directly invest pension fund assets. Within externally managed schemes, the investment power is wholly or in part delegated to one or few external managers. In the case of insured schemes, the funds are invested in insurance policies or managed through fund contracts taken out with an insurance company.

Following the arguments of Admati *et al.* (1994) and Diamond (1984), we would expect large funds and those that hold large stakes to be more active in corporate monitoring. For such funds the monitoring costs are minimized because they are likely to understand when activism is necessary, they are large enough to make monitoring effective, and their large holdings are expected to alleviate the free-rider problem that makes atomistic shareholders' action non-rational and inefficient. In this case, we expect internally managed occupational pension funds to have a stronger incentive to monitor because these funds are larger than externally-managed and insured schemes (e.g., Blake, 1995; Minns, 1980; NAPF, 1996a), they control directly or indirectly the investment and the voting decisions, many large companies managed internally their pension schemes (Stapledon, 1996) and their objective is likely to maximize the value of funds in order to minimize the company's contributions and, possibly, use any pension fund surplus to inflate company's profits (Short and Keasey, 1997). In contrast, funds that delegate their investment functions to external managers effectively disconnect their activism efforts from their investment actions (Del Guercio and Hawkins, 1999), and since they will not be able to trade profitably on any private information that results from their activism, they are not likely to monitor or to publicize their activism efforts. The level of monitoring role of externally managed pension funds will depend on the content of the contract with the trustees and the level of competition among fund managers. Since we do not have data on these contracts and on the investments made on behalf of pension funds, we cannot expect all externally managed funds to monitor.

However, internally-managed occupational pension funds may not monitor individual companies if they find it easier to sell, if they do not want to gain access to price sensitive information or if they themselves are subject to agency problems. In addition,

given that these funds are defined benefits schemes, they are likely to be indexed and passive to minimize their management risk, transaction costs and to fit the needs of long-term pension investors (Tomlinson, 1998). Del Guercio and Hawkins (1999) argue that such passive management style will lead pension funds to monitor by promoting spill-over effects that boost the performance of the stock market overall rather than specific stocks.

The monitoring role of pension funds can however, take different forms. First, they can monitor the size of the board (Cadbury, 1992).[12] Jensen (1993) argues that as the size of the board increases, its ability to control management decreases and the communication and co-ordination problems increase. Consistent with this proposition, Yermack (1996) and Eisenberg, Sundgren and Wells (1998) find a negative correlation between board size and firm performance. Thus, our first hypothesis can be constructed as follows:

H_{01}: *Internally-managed pension funds do not lead companies in which they hold large stakes to restrict the size of their board.*

Second, pension funds are expected to monitor the board composition so that it becomes more accountable to the shareholders. In this case, they are expected to lead companies to adopt the *Code of Best Practice* defined by Cadbury (1992), i.e., to split the roles of chairman and chief executive officer, to have a high proportion of non-executive directors and to restrain executive pay.[13] Thus, our second hypothesis is:

H_{02}: *Internally-managed pension funds do not lead companies in which they hold large stakes to adopt the Code of Best Practice.*

Third, pension funds are expected to monitor the performance of firms in which they hold large stakes. This implies that such companies have a higher value than widely held companies and/or companies held by other blockholders. However, the level of performance is likely to be affected by other factors such as industry in which the company

is operating. Thus, our third hypothesis is:

H_{03}: Companies in which occupational pension fund hold large stakes have a lower value than other companies.

3. Sample construction and definition of proxy variables

To test the aforementioned hypotheses, we construct a test sample by searching the financial statements of all the 1,640 non-financial companies quoted in the London Stock Exchange in 1995-96 for those where occupational pension funds hold large stakes. To avoid survivorship bias, our sample includes all companies for which the relevant data is available even if they are currently extinct but we exclude financial companies because of the specificity of some of their ratios such as leverage, which cannot be related to the level of their risk and/or resolution of their agency conflicts.[14]

We rely on any disclosed holding above 3% threshold in the accounts and reported in *Extel Financial*[15] and define these as occupational pension funds holdings or blockholders. All the holdings of directors are disclosed even if they are zero (Company Act 1985). Although this cut off point of 3% is constraining, it is the only data available. We, nevertheless, posit that the holding of 3% or above is significant to warrant monitoring and to allow us to test directly the Admati *et al.* (1994) and Diamond (1984) propositions. We find 289 individual companies (18% of our total sample) with at least one occupational pension fund holding above 3%, and 356 large stakes held by 99 individual occupational pension funds. We split the other major disclosed holdings (other than managerial holdings) into institutional and non-institutional blockholding depending on the identity of the shareholders. We compare the performance of our test firms against a control group of companies with similar size and industry characteristics. We collect all the relevant

accounting and financial data from *Extel Financial* and from each company's accounts.

We use five definitions of pension fund holdings: *LPF*; the first largest stake held by pension funds, and *TPF*, the sum of all pension fund holding to analyze pension fund individual and collective monitoring roles; *IPF*, the ratio of pension fund investment in our test sample over their total assets to assess the magnitude of such investment in their portfolio;[16] *NPF*, the number of occupational pension funds in our test firms, and *LNPFA*, the logged value of the largest pension fund's asset. To control for the managerial entrenchment hypothesis we use *Dir*, the proportion of shares held by the directors.[17] Any other large stake, *Block*, is used to control for the monitoring role of blockholders.

We use accounting rates of return and a one-year share price return, $R_{i, t-12\ to\ t}$, to proxy for firm performance and Tobin's Q, the ratio of market value of equity *plus* book value of debt over total assets (Agrawal and Knoeber, 1996), market-to-book, *M/B*, and market-to-sales, *M/S* (Lins and Servaes, 1999) to measure firm value. These variables are, however, ambiguous measures of value-added by pension funds investments, since they can also capture the value of future investment opportunities. As in Yermack (1996), we control for growth opportunities by using P/E ratio. We use market value of equity, *ME*, or total assets, *TA*, to control for size and *Mlev*, defined as long-term debt over market value of equity *plus* long-term debt, and *Blev*, defined as long-term debt over shareholders funds *plus* long-term debt, to test for the monitoring role of debtholders. Finally, we use the following variables to measures the size and composition of the board: *split,* a dummy variable equal to 1 if the role of chairman and CEO are differentiated, *nechair*, a dummy equal to 1 if the position of chairman is covered by a non-executive director, *#DIR*, number of directors, and *% NED,* the proportion of non-executive directors in the board.

4.   Empirical Results

4.1   Univariate analysis

Table 1 reports the descriptive statistics of financial attributes of the test and control firms. We compute the t-statistics to test for differences in means and the Mann-Whitney p-value to test for differences in medians.[18] The results shows that compared to the industry and size-adjusted control group, the block and managerial holdings in our test firms are not statistically different. Blockholders hold an average of 34% in our test firms and 36.5% in our control sample. Insiders hold an average of 14.5% in our test firms and 14% in our control sample. The test statistics for differences in means and medians are not statistically significant at any confidence level. The results imply that our analysis is not affected by block or managerial ownership. However, insiders and blockholders hold significantly larger stakes in our test firms than occupational pension funds, suggesting that these funds do not invest a large proportion of their assets in our test companies.

Table 1 also shows that the value of our test firms is significantly lower than that of our control group. The average Tobin's Q of our test firms is 1.16 while that of the control group is 1.62. The same conclusion is reached when we use market-to-book and market-to-sales as alternative measures of firm value. At the same time, our test companies have lower leverage than our control firms. However, in terms of accounting and market rates of return and PE ratio, our test companies are not different from the control firms. These results do not reject H_{03} and suggest that our test companies do not overperform other firms.

The test and control companies have also exactly the same number of directors of about 6, ranging between 2 and 15, and the same proportion of non-executive directors of about 40%. The proportion of our control companies that split the roles of chairman and CEO of 88% is higher than that of our test firms (84%). These results are striking. They do

not reject H_{01} to H_{03} and suggest that pension funds investments do not lead companies o a better performance nor do they increase the likelihood of compliance with the Cadbury (1992) recommendations.

[Insert Table 1 here]

4.3   Multivariate analysis

Table 2 reports the results of the Logit regressions where the various agency variables are considered simultaneously. The dependent variable is equal to 1 if company *i* is in the test sample and 0 if it is part of the control sample. The results are consistent with those reported in Table 1 and show that our test companies have significantly lower value that that of the control firms while they are not more profitable or not more likely to split the roles of chairman and chief executive officer, have less directors or more non-executive directors than our control group. These latter issues were the main focus of the recommendations of Cadbury (1992) which relied on pension funds for their implementation.

Equation 6, Table 2, controls for differences in other monitoring mechanisms to account for the fact that the various mechanisms may be substitutes. The results show that the main difference between our test and control firms is the measure of firm value, *Q*, suggesting that our test firms have lower value than the control firms.[19] The coefficient of blockholding is also negative and significant at the 10% confidence level, suggesting that, after controlling for all other differences between our test and control firms, the test companies have lower blockholding than our control firms. No single pension fund-monitoring variable is significant at any confidence level. These results do not reject H_{01} to H_{03} and cast doubt on the monitoring role of pension funds in the UK.

[Insert Table 2 here]

In Table 3 we analyze the causal relationship between board structure and pension funds holdings by running a set of regressions with the dependent variables which proxy for board structure measured in 1996/97 and the explanatory variables such as pension funds holdings are in 1995/96. We hypothesize that pension funds require companies in which they hold large stakes in 1995/96 to adopt the Cadbury's (1992) board structure in 1996/97. We follow McConnell and Servaes (1995) and focus separately on low and high growth firms using E/P ratio as a proxy for growth opportunities. Firms with E/P ratio above (equal or below) the median are classified as low (high) growth. For low growth firms pension funds holdings is expected to be positively related to the adoption of the Cadbury (1992) recommendations because they are more likely to suffer from the free cash flow problem.

The first 3 columns of Table 3 report the results of the Logit regression where the dependent variable is equal to 1 if the roles of CEO and Chairman are split and zero otherwise. The results show that the coefficients of the pension fund variables are positive but not significant. When we split our sample into high and low growth companies, still, none of the pension funds variables is significant. We tested for possible multicollinearity problem by running the regressions with each single variable. We find (but do not report) that the holdings of directors, *Dir*, is negative and significant. In addition, the coefficient of block shareholders, *Block*, is negative but insignificant. None of the occupational pension funds variables is significant.

Columns 4 to 6 provide the results of the Logit regressions where the dependent variable is equal to 1 if the company has appointed a non-executive director as chairman and zero otherwise. We find that, for the whole sample, the coefficients of pension fund incidence, IPF, and pension fund size, LNPFA, are positive and significant (though only at the 10% level). These coefficients become insignificant when regressions are run separately

for high and low growth firms. Also, the coefficient of directors' ownership is negative and significant for the whole sample. In addition, when we run the regressions with a single independent variable, we find that the coefficient of pension funds incidence, *IPF*, is still positive and significant (1.36 with $t = 1.71$) for the whole sample. For the low-Q companies, we find that the coefficient of total pension funds, *TPF*, is positive and significant (0.06 and $t = 1.93$). The coefficients of directors' ownership, *Dir*, is negative and significant while that blockholders is positive and significant.

The last 3 columns present the results of the OLS regressions where the dependent variable is the proportion of non-executive directors in the board. The results show that none of the pension fund variables is significant. When the regressions are run separately, we find that only size, *Ln(TA)*, and leverage, *Blev*, that are positive and significant.

The overall results do not provide strong support for the occupational pension fund monitoring of the board structure. At the same time, board structure is unrelated to market performance, suggesting that the recent trend towards the adoption of the Cadbury's prescriptions was not related to the presence of agency conflicts, but rather dictated by some "need of visibility" by companies. Franks, Mayer and Renneboog (1998) also report a similar relationship. We do, however, report some evidence consistent with monitoring role of other than pension funds institutional shareholders and of debtholders, at least with regards to the appointment of non-executive directors within low growth firms. There is also some evidence that managerial ownership is used to entrench the position of incumbent managers as the coefficient of directors' ownership is, in most cases, negative and significant. We simulated our results using growth in profits, market returns and Q as proxies for growth opportunities and/or presence of agency conflicts. The results are qualitatively similar to those reported in Table 3.

4.4   Pension funds investments and firm value

In this section we focus only on our test companies and test for the relationship between firm value and ownership structure. A simple correlation matrix, not reported, shows a weak relationship between the various measures of occupational pension fund holdings and firm value. The split dummy variable is positively related to leverage, block ownership, size and proportion of non-executive directors in the board, but negatively related to directors' holdings. This suggests that the larger the company and the higher the debt-equity ratio, blockholding and the proportion of non-executive directors in the board, the higher its propensity to split the roles of chairman and CEO. However, none of the occupational pension fund measure is statistically related to the split dummy, implying that pension funds, individually or collectively, do not push companies to split the roles of chairman and chief executive officer. Finally, directors' holdings are negatively related to the proportion of non-executive directors in the board, suggesting that such holdings exacerbate the potential agency conflicts between the board and the management.

In Table 4, columns (1) to (3), we report the results of the regressions of firm value, as measured by Tobin's Q in 1996/97, against various measures of occupational pension funds holdings measures in the 1995/96 financial year. Equations (1) to (3) indicate that, with the exception of total pension funds stakes, *TPF*, none of the various measures of pension funds holdings explain firm value. The total pension funds stakes variable, *TPF*, is, actually, negative and significant, suggesting that pension funds collectively destroy value. Even after controlling for other monitoring mechanisms documented in the previous literature (e.g., Agrawal and Knoeber, 1996; Yermack, 1996), such as size and P/E, firm value is still negatively related to total pension funds holdings (Equation 3). Although the

coefficient of pension fund incidence, *IPF*, and the size of pension fund, *LNPFA*, are positively related to firm value, they are not significant.

In contrast to previous studies (e.g., Yermack, 1996, and Eisenberg *et al.*, 1998) we report a positive relationship between firm value and the number of directors. The difference in the results could be due to the fact that our companies are relatively middle-sized compared to the sample of small companies of Eisenberg *et al.* (1998) and that of large companies of Yermack (1996). Finally, the coefficients of the holdings of directors variable and its squared value are not significant suggesting that there is no linear or non-linear relationship between value and managerial ownership. These results are not consistent with the findings of McConnell and Servaes (1990, 1995).

We simulate these results using market value of the firm over sales as a proxy for firm value (Lins and Servaes, 1997). The results, reported in Equations (4) and (5), show a positive relationship between value and pension fund incidence, but a negative relationship with the number of pension funds. The coefficient of block ownership is not significant in any regression. We also simulate our results by using sales as a measure of size and capital expenditure over total assets as a proxy for growth opportunities. The results, not reported for space reasons, are qualitatively similar to these reported in Table 4. Overall, our results suggest that pension funds do not add value to companies in which they hold large stakes.

[Insert Table 4 here]

4.5   Pension fund holdings on firms' long-term performance

We analyze the long-term performance of our test firms by comparing the changes in firm value and stock price performance over the sample periods 1994-95 and 1996-97. As in Karpoff *et al.* (1996) and Del Guercio and Hawkins (1999), we investigate whether companies in which pension funds hold large stakes rebound more quickly from poor

performance or maintain their good performance over a longer time period.

We evaluate the abnormal performance by computing the arithmetic change over the two sample periods in Q *less* industry-median Q, and by stock market returns. We compute the Share Price Return from a buy-and-hold strategy over the sub-periods 1994-95 and 1996-97 as follows:

$$\text{Returns}_{i,t,T} = \prod_{n=t}^{T} \left\{ 1 + r_{i,n} \right\} - \prod_{n=t}^{T} \left\{ 1 + r_{s,n} \right\}$$

$$\text{where } r_{i,n} = \frac{P_{i,n}}{P_{i,n-1}} - 1 \quad \text{and} \quad r_{s,n} = \frac{\text{Industry Index}_n}{\text{Industry Index}_{n-1}} - 1$$

This measure of performance accounts for the fact that occupational pension funds are long-term investors and does not suffer from cumulating biases observed in arithmetic mean returns (Conrad and Kaul, 1993; Wahal, 1996). We eliminate survivorship bias by including dead companies in our sample. Out of the 289 test companies, 34 (11.76%) are excluded because they went public after 1995 and we could not compute the market performance for the first period.

The results reported in Table 5 show that, for the full sample, the industry-adjusted Q has decreased from 0.163 to 0.072. The decrease in both the average and median firm value is statistically significant. The results suggest that, over time, the value of companies in which occupational pension funds hold large stakes decreases. As in Wahal (1996), we split the sample into overperformers and underperformers. Overperforming (underperforming) companies are companies with Tobin's Q higher (lower) than the median. The overperforming companies have done worst over the two sample periods. Their average value has decreased from 0.67 to 0.48. The decrease in the mean median are statistically significant. In contrast, the average and the median Tobin's Q of the

underperforming companies did not change significantly. These companies have underperformed in 1994-95 period and carried on underperforming in 1996-97. These results are striking as they imply that companies in which occupational pension funds hold large stakes decrease in value through time, and those that are already underperforming do not improve. In sum, it appears that pension funds are passive investors: they do not make companies in which they hold large stakes improve their performance and they do not sell their holdings in companies that are underperforming.

Panel B reports the results based on the industry-adjusted share price returns. For the full sample, companies have increased their performance from 11.65 to 14.4 per cent. However the difference in means (and medians) is not statistically significant. The stock price performance of the sub-sample of the overperforming firms declined significantly from 62.66 to 18.59 per cent (*t*-statistic of the difference in means = -4.51), while under-performing companies increased their performance from –38.96 to 10.25 per cent (*t*-statistic of the difference in means = 6.94). As in Wahal (1996), our results indicate that both the over-performing and under-performing companies experience return reversals. As such our results are consistent with the mean reversion hypothesis and cannot be attributed to pension funds investments.[20]

[Insert Table 5 here]

5.   **Discussion and conclusions**

In this paper we analyze the performance of companies in which occupational pension funds hold large stakes and test the hypotheses that, because of their size, structure and objectives, these funds should be effective monitors of UK companies. We show that our test firms are small and have low value. These companies are also not likely to be more efficient than the control group. We report that pension funds do not add value to the

companies in which they hold large stakes. Our results cast doubt on the monitoring role of pension funds which are considered in theory, to be the main promoters of corporate governance in the UK. At the same time, we show that, despite the relatively poor performance of the companies in which they invest, occupational pension funds do not opt for an 'exit' strategy.

Our results suggest that, once 'locked in' pension funds find it difficult and costly to monitor because their holdings tend to represent relatively small fractions of the total values of the funds' assets (0.15%). Thus, our results are consistent with Admati *et al.* (1994) proposition that, given that monitoring is costly, these funds will not monitor as this is not likely to result in a modification in the firm's payoff structure and will not lead to net gains. They cannot also sell their holdings for fear of selling at a discount or conveying information to the market. They may also refrain from intervening publicly for fear of drawing to public attention the difficulties the company is facing and/or trading on insider information. However, our results could also imply that pension funds are passive investors, investing most of their funds in the index and these investments we analyzed in this paper are peripheral and that they choose to invest in low Q firms to benefit from return reversals on these securities. These are matters of further investigation.

References

Admati, A. R., Pfleiderer P., and Zechner, J. (1994), 'Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium', Journal of Political Economy 102, 1097-1130.

Agrawal, A., and Knoeber, C. R. (1996), 'Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders', Journal of Financial and Quantitative Analysis 31, 377-397.

Ayres, I., and Cramton, P. (1993), 'An Agency Perspective on Relational Investing', Working Paper, Stanford University.

Black, B. S. (1998), 'Shareholder Activism and Corporate Governance in the United States', in Newman (ed.), The Palgrave Dictionary of Economics and the Law.

Blake, D. (1995), Pension Schemes and Pension Funds in the United Kingdom (Oxford: Clarendon Press).

Brancato, C. K. (1997), Institutional Investors and Corporate Governance: Best Practice for Increasing Corporate Value (Chicago: McGraw Hill).

Brickley, J. A., Lease, R. C., and Smith, C. W. Jr (1994), 'Corporate Voting: Evidence from Charter Amendment Proposals', Journal of Corporate Finance 1, 5-30.

Business Monitor (1997) (London: Central Statistical Office).

Cadbury, A. (1992), Report of the Committee on the Financial Aspects of Corporate Governance (London: Gee).

Charkham, J. (1995), Keeping Good Company: A Study of Corporate Governance in Five Countries (Oxford: Oxford University Press).

Chew, D. H. (1997) (ed.), Studies in International Corporate Finance and Governance Systems: A Comparison of the US, Japan and Europe (New York: Oxford University

Press).

Conrad, J., and Kaul, G. (1993), 'Long-Term Market Overreaction or Biases in Computed Returns? ', Journal of Finance 48, 39-64.

Cotter, J. F., Shivdasani, A., and Zenner, M. (1997), 'Do Independent Directors Enhance Target Shareholder Wealth during Tender Offers? ', Journal of Financial Economics 43, 195-218.

Davis, E. P. (1995), Pension Funds. Retirement-Income, Security and Capital Markets. An International Perspective (Oxford: Clarendon Press).

Del Guercio, D., and Hawkins, J. (1999) 'The Motivation and Impact of Pension Fund Activism', Journal of Financial Economics (forthcoming)

Demsetz, H., and Lehn, K. (1985), 'The Structure of Corporate Ownership: Causes and Consequences', Journal of Political Economy 93, 1155-1177.

Denis, D. J., and Sarin, A. (1999), 'Ownership and Board Structures in Publicly Traded Corporations', Journal of Financial Economics (forthcoming)

Diamond, D. W. (1984), 'Financial Intermediation and Delegated Monitoring', Review of Economic Studies 51, 393-414.

Drucker, P. F. (1976), The Unseen Revolution: How Pension Fund Socialism Came to America (London: Heinemann).

Eisenberg, T., Sundgren, S., and Wells, M. T. (1998), 'Large Board Size and Decreasing Firm Value in Small Firms', Journal of Financial Economics 48, 35-54.

Financial Times (1997a), 'FT Survey on Pension Fund Investment', Financial Times, May 9, 1997.

——— (1997b), 'Pension Funds to Call for Votes on Boardroom Pay: NAPF Will Oppose Hampel Committee's Findings', Financial Times, September 29, 1997 p. 20.

Franks, J. R., and Mayer, C. (1994), 'The Ownership and Control of German Corporations',
Working Paper, London Business School.

——— ——— and Renneboog, L. (1998), 'Who Disciplines Bad Managers?', Working
Paper, London Business School.

Greenbury, R. (1995), <u>Directors' Remuneration: Report of a Study Group Chaired by Sir
Richard Greenbury</u> (London: Gee).

Hart, O. (1995), <u>Firms, Contracts, and Financial Structure</u> (Oxford: Oxford University
Press).

Hutton, W. (1995), <u>The State We Are In</u> (London: Vintage Press).

Jensen, M. C. (1986), 'Agency Costs of Free Cash Flow, Corporate Finance, and
Takeovers', <u>American Economic Review</u> 76, 323-329.

——— (1993), 'The Modern Industrial Revolution, Exit, and the Failure of Internal Control
Systems', <u>Journal of Finance</u> 48, 831-880.

Jepson, J. (1998), 'US Defined Benefits and Defined Contribution: Comparison and
Implications', Paper presented at the 1998 NAPF Conference, Eastbourne, UK.

John, K., and Senbet, L. W. (1998), 'Corporate Governance and Board Effectiveness',
<u>Journal of Banking and Finance</u> 22, 371-403.

Kahn, C., and Winton, A. (1998), 'Ownership Structure, Speculation and Shareholder
Intervention', <u>Journal of Finance</u> 53, 99-129.

Karpoff, J. M. (1998), 'Does Shareholder Activism Work? A Survey of Empirical
Findings', Working Paper, University of Washington.

——— Malatesta, P. H., and Walkling, R. A. (1996), 'Corporate Governance and
Shareholder Initiatives: Empirical Evidence', <u>Journal of Financial Economics</u> 42, 365-
395.

Keasey, K. S., Thompson, S., and Wright, M. (1997) (ed.), <u>Corporate Governance: Economic, Management, and Financial Issues</u> (Oxford: Oxford University Press).

Lakonishok, J., Shleifer, A., and Vishny, R.W. (1994), 'Contrarian Investment, Extrapolation, And Risk', <u>Journal of Finance</u> 49, 1541-1578.

Lasfer, M. A. (1995), 'Agency Costs, Taxes and Debt: The UK Evidence', <u>European Financial Management</u> 1, 265-285.

———— (1996), 'Taxes and Dividends: The UK Evidence', <u>Journal of Banking and Finance</u> 20, 455-472.

———— (1997), 'On the Motivation for Paying Script Dividends', <u>Financial Management</u> 26, 62-80.

London Stock Exchange (1995), <u>Survey on Share Ownership</u> (London: London Stock Exchange).

Maug, E. (1998), 'Large Shareholders as Monitors: Is There a Trade-Off Between Liquidity and Control? ', <u>Journal of Finance</u> 53, 65-98.

McConnell, J. J., and Servaes, H. (1990), 'Additional Evidence on Equity Ownership and Corporate Value', <u>Journal of Financial Economics</u> 27, 595-612.

———— ———— (1995), 'Equity Ownership and the Two Faces of Debt', <u>Journal of Financial Economics</u> 39, 131-157.

Minns, R. (1980), <u>Pension Funds and British Capitalism: The Ownership and Control of Shareholders</u> (London: Heinemann).

Morck, R., Shleifer, A., and Vishny, RW. (1988), 'Management Ownership and Market Valuation: An Empirical Analysis', <u>Journal of Financial Economics</u> 20, 293-316.

Murphy, K., and Van Nuys, K. (1994), 'State Pension Fund Shareholder Activism', Working Paper, Harvard Business School.

NAPF (1996a), <u>Year Book</u> (London: National Association of Pension Funds).

——— (1996b), <u>Good Corporate Governance</u> (London: National Association of Pension Funds).

Nesbitt, S. L. (1994), 'Long-Term Rewards from Shareholder Activism: A Study of the 'Calpers Effect'', <u>Journal of Applied Corporate Finance</u> 6, 75-80.

Pension Funds and their Advisers (1996) (London).

Porter, M. E. (1997), 'Capital Choices: Changing the Way American Invests in Industry', in D.H. Chew (ed.), 5-17.

Prowse, S. (1994), 'Corporate Governance in and International Perspective: A Survey of Corporate Control Mechanisms amongst Large Firms in the United States, the United Kingdom, Japan and Germany', <u>BIS Economic Papers</u>, No. 41.

Romano, R. (1994), 'Public Pension Fund Activism in Corporate Governance Reconsidered', <u>Columbia Law Review</u> 93, 795-853.

Shleifer, A., and Vishny, R. W. (1997), 'A Survey of Corporate Governance', <u>Journal of Finance</u> 52, 737-783.

Short, H., and Keasey, K. (1997), 'Institutional Shareholders and Corporate Governance in the United Kingdom', in: Keasey, K. S., S. Thompson and M. Wright (ed.), 18-53.

Smith, M. P. (1996), 'Shareholder Activism by Institutional Investors: Evidence from CalPERS', <u>Journal of Finance</u> 51, 227-252.

Stapledon, G. P. (1996), <u>Institutional Shareholders and Corporate Governance</u> (Oxford: Clarendon Press).

Tomlinson, L. (1998), 'Should the Future Be All Passive?', Paper presented at the 1998 NAPF Conference, Eastbourne, UK.

Wahal, S. (1996), 'Pension Fund Activism and Firm Performance', <u>Journal of Financial and</u>

Quantitative Analysis 31, 1-23.

Yermack, D. (1996), 'Higher Market Valuation of Companies with a Small Board of Directors', Journal of Financial Economics 40, 185-211.

Table 1 Descriptive Statistics on Means of Selected Data on the Test and Control Firms

This table provides the descriptive statistics of the proxy variables. The test sample includes all companies that reported pension fund holding above 3% in 1995-96, a total of 586 observations. The control sample includes industry and size matched firms. *Block* is the proportion of outstanding equity owned by blockholders other than directors and occupational pension funds; *Dir* is the proportion of outstanding equity capital owned by directors; *ME* is market value of equity at balance sheet date; *TA* is total assets; *Q* is the ratio of market value of equity plus book value of debt over total assets; *M/S* is the market value of equity plus book value of debt over sales; *M/B* is the market value of equity over book value of equity; $R_{i,\,t\text{-}12\,to\,t}$ is a one-year stock return; *P/E* is the price-earnings ratio at the balance sheet date; *BLev* is the ratio of long-term debt over long-term debt plus shareholders' funds; *MLev* is the ratio of long-term debt over long-term debt plus market value of equity; *Split* is a dummy variable equals to 1 if the roles of chairman and CEO are split; *#DIR.* is the number of directors in the board; *% NED* is the proportion of non-executive directors. ***, **, *: Significant at 0.01, 0.05 and 0.10 levels respectively.

Variables	Test Sample		Control Sample		t- statistics of difference in means	Mann Whitney p-value
	Mean	Median	Mean	Median		
Block	34.00	32.48	36.54	34.82	-1.29	0.135
Dir	14.53	6.02	14.01	7.38	0.32	0.875
ME (£m)	96.7	28.1	121.1	31.1	-1.26	0.875
TA (£m)	125	33.4	122	32.0	0.12	0.519
Q	1.16***	0.87***	1.61***	0.94***	-2.21	0.005
M/S	1.33*	0.60*	2.65*	0.65*	-1.68	0.051

M/B	2.78*	1.68***	3.44*	1.87***	-1.68	0.004
ROA %	6.13	8.90	4.10	8.70	1.03	0.550
ROE %	-1.10	11.30	11.95	12.00	-1.16	0.113
ROS %	5.49	6.80	-0.00	6.50	1.11	0.758
$R_{i,\ t\text{-}12\ to\ t}$ %	23.57	15.40	20.04	5.75	0.74	0.133
P/E	9.68	8.25	9.33	8.36	0.48	0.101
Mlev %	11.34***	5.80**	17.90***	12.75**	-3.21	0.012
BLev %	14.58***	9.90	21.01***	13.30	-3.08	0.458
Split	0.84	1.00	0.88	1.00	-1.61	0.121
#DIR	5.92	6.00	5.80	6.00	0.85	0.382
% NED	0.40	0.40	0.38	0.40	1.31	0.334

Table 2 Logit Regressions of the Probability that pension fund holdings exceeds 3% of shares 95-96.

The dependent variable is equal to 1 for companies that reported pension fund holding above 3% in 1995-96 and to 0 for industry and size matched control firms. *M/S* is market value of equity plus book value of debt over sales; *Q* is the ratio of market value of equity plus book value of debt over total assets; *BLev* is the ratio of long-term debt over long-term debt plus shareholders' funds; $R_{i,\ t-12\ to\ t}$ is a one-year share price return; *Split* is a dummy variable equals to 1 if the roles of chairman and CEO are split; *#DIR* is the number of directors on the board; *% NED* is the proportion of non-executive directors in the board; *Dir* is the proportion of outstanding equity held by directors; *Block* is the proportion of outstanding equity capital held by blockholders other than directors and occupational pension funds; χ^2, the chi-squared, is used to test that all slopes of the Logit regression are zero by comparing the restricted and the unrestricted log likelihood's. t-values are in parentheses. ***, ** , * Significant at the 0.01, 0.05 and 0.10 level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Constant	0.71***	0.61***	0.52***	0.52***	0.47*	0.79***
	(6.64)	(6.69)	(31.91)	(32.16)	(1.84)	(6.93)
Split	-0.014	-0.017				-0.005
	(-0.27)	(-0.31)				(-0.09)
#DIR	0.011	0.016				0.008
	(1.18)	(1.58)				(0.70)
%NED	0.04	0.042				-0.02
	(0.37)	(0.36)				(-0.19)
Dir	-0.003	0.005				-0.00
	(0.28)	(0.53)				(-0.00)
Block	-0.002				0.001	-0.002*

	(-1.55)				(0.10)	(-1.85)
Q			-0.01***		-0.108*	-0.015***
			(-2.14)		(-1.72)	(-2.20)
M/S				-0.01***		
				(-2.51)		
ROA			0.04			
			(0.92)			
ROS				0.013		0.05
				(0.75)		(0.64)
$R_{i,\ t\text{-}12\ to\ t}$					0.006	
					(0.03)	
Blev					-1.65***	-0.025
					(-3.48)	(-0.95)
χ^2	1.05	0.66	2.33*	2.81*	16.53***	1.42

Table 3 Determinants of board structure for low and high growth firms.

In each regression the dependent variable is computed for the period 1996/97, while all independent variables are 1-year lagged (i.e., 1995/96). The regressions are run separately for all 250 companies, *All*, low-growth companies (119), and high growth companies (131). Growth opportunities are measured using the median E/P ratio. The first 6 columns are Logit regressions where *Split* or *Nechair* are equal to 1 if the company has split the roles of its chairman and chief executive officer or has a non-executive director as a chairman, and zero otherwise. In these regressions the Pseudo-R^2 measures the goodness of fit. In the last 3 columns we run OLS regression with the proportion of non-executive on the board *%NED* as the dependent variable. *TPF* is the proportion of outstanding equity owned by all identified pension funds; *IPF* is the ratio of occupational pension funds holdings over their total assets; *LNPFA* is the log of the asset value of the pension fund; *Dir* is the proportion of outstanding equity owned by the directors; *Block* is the proportion of outstanding equity capital held by blockholders other than directors and occupational pension funds; $R_{i,\ t-12\ to\ t}$ is a one-year stock return,. ***, **, * Significant at the 0.01, 0.05 and 0.10 level respectively.

	Split			*Nechair*			*%NED*		
	All	*Low growth*	*High growth*	*All*	*Low growth*	*High growth*	*All*	*Low growth*	*High growth*
Constant	-8.322*	-7.691	-10.648	-4.915	-6.596	-3.103	0.193	0.047	0.326
	(-2.12)	(-1.38)	(-1.32)	(-1.15)	(-0.92)	(-0.53)	(0.72)	(0.13)	(0.79)
Dir	-0.007	-0.003	-0.008	-0.026**	-0.023	-0.025	-0.00003	-0.00004	0.00004
	(-0.80)	(-0.22)	(-0.52)	(-2.25)	(-1.23)	(-1.51)	(-0.04)	(-0.05)	(0.04)

Block	0.002	-0.003	0.023	0.003	0.011	0.003	0.0003	-0.0002	0.001
	(0.14)	(-0.21)	(0.98)	(0.31)	(0.58)	(0.22)	(0.44)	(-0.21)	(0.76)
TPF	0.077	0.009	0.205	0.051	0.034	0.063	0.002	0.003	-0.001
	(1.11)	(0.19)	(1.22)	(1.50)	(0.76)	(1.22)	(0.88)	(1.34)	(-0.28)
LNPFA	0.263	0.402	0.148	0.376*	0.586	0.220	-0.008	-0.001	-0.010
	(1.47)	(1.50)	(0.62)	(1.92)	(0.69)	(0.80)	(-0.69)	(-0.06)	(-0.60)
IPF	0.917	1.655	0.085	3.509*	6.124	2.209	0.001	0.062	-0.001
	(0.81)	(0.75)	(0.11)	(1.91)	(1.53)	(1.28)	(0.08)	(1.08)	(-0.09)
Blev	-0.528	0.269	-1.567	0.489	0.724	0.312	0.092	0.165	0.064
	(-0.63)	(0.13)	(-1.13)	(0.52)	(0.46)	(0.24)	(1.51)	(1.52)	(0.79)
$R_{I,t-12 \text{ to } t}$	0.230	0.028	0.421	-0.480	-0.491	-0.456	0.014	-0.002	0.029
	(0.75)	(0.07)	(0.84)	(-1.24)	(-0.69)	(-0.94)	(0.73)	(-0.09)	(1.07)
LN(TA)	0.217	0.013	0.459	-0.217	-0.418	-0.112	0.019**	0.019	0.016
	(1.19)	(0.04)	(1.36)	(-1.25)	(-1.31)	(-0.51)	(2.12)	(1.19)	(1.25)
Pseudo R^2 or R^2	5.31%	4.13%	10.81%	13.70%	18.85%	9.21%	1.10%	3.28%	0.00%

Table 4 Relationship between firm value and pension fund holdings

The sample includes all companies that reported occupational pension fund holding above 3%. In columns (1) to (3) we use Q, the ratio of market value of equity plus book value of debt over total assets, as the dependent variable. In columns (4) and (5) the results are simulated using the market value of equity to sales as dependent variable. The dependent variables are measured in 1996/97 while the independent variables are measured in 1995/96. *TPF* is the proportion of outstanding equity owned by all identified pension funds; *IPF* is the ratio of occupational pension funds holdings over their total assets; *LNPFA* is the log of the market value of the largest pension fund's asset; *NPF* is the number of occupational pension funds; *Dir* is the proportion of outstanding equity owned by the directors; Dir^2 is its squared value; *Block* is the proportion of outstanding equity capital held by blockholders other than directors and occupational pension funds; *#DIR* is the number of directors; *Split* is a dummy variable equals to 1 if the roles of chairman and CEO are split; *% NED* is the proportion of non-executive directors; *P/E* is the price-earnings ratio at the balance sheet date. t-values are in parentheses *, **, *** Significant at 10%, 5% and 1% level respectively.

	Q			M/S	
	1	2	3	4	5
Intercept	-0.972	2.139**	1.027	0.878	1.092***
	(-0.64)	(2.45)	(0.65)	(0.43)	(3.23)
TPF	-0.031**	-0.041***	-0.052***	0.006	
	(-2.48)	(-3.09)	(-2.73)	(0.25)	
NPF			0.096	-0.309	-0.275*
			(0.61)	(-1.53)	(-1.96)
LNPFA	0.109		0.094	0.005	
	(1.60)		(1.49)	(0.07)	
IPF	0.035		0.094	0.378***	0.376***

	(0.48)		(1.52)	(4.73)	(5.43)
Dir		0.004	0.002	0.005	
		(1.48)	(0.23)	(0.41)	
Dir^2			0.00002	-0.0001	
			(0.17)	(-0.55)	
Block			-0.003	0.001	
			(-0.70)	(0.22)	
Blev			-0.045	-0.842	-0.788
			(-0.10)	(-1.48)	(-1.53)
Ln(TA)		-0.094*	-0.147**	-0.005	
		(-1.88)	(-2.32)	(-0.06)	
Split		-0.202	-0.215	-0.549***	-0.518***
		(-1.39)	(-1.44)	(-2.86)	(-2.85)
No.Dir		0.073**	0.076**	0.063	0.067*
		(2.20)	(2.26)	(1.46)	(1.70)
%NED		0.664*	0.702*	0.464	
		(1.78)	(1.82)	(0.94)	
P/E		0.036***	0.034***	0.032***	0.032***
		(5.98)	(5.55)	(4.04)	(4.13)
Adj. R^2 %	1.98%	19.67%	18.91%	18.13%	20.18%
F	2.80**	8.83***	5.02***	4.80***	10.40***

Table 5 Pension funds holdings and long term stock price performance

The sample includes all companies that displayed (at least) one relevant pension fund holding. The abnormal returns are buy-and-hold returns adjusted for the industry index. The sample is dividend into a sample of underperformers and overperformers based on the median performance of the firm in 1994-95. For example, if the industry-adjusted Q (Share Price Return) for a firm is lower (higher) than the median, the firm is classified as an underperformer (overperformer). *, **, *** significant at 10%, 5% and 1% respectively.

	N	1994-95		1996-97		t-statistic difference in means	Mann-Whitney p-value
		Mean	Median	Mean	Median		
Panel A. Industry-Adjusted Firm Value Q							
Full Sample	255	0.163***	-0.082***	0.072***	-0.095***	2.72	0.009
Overperformers	128	0.674***	0.346***	0.480***	0.15***	3.22	0.000
Underperformers	127	-0.353	-0.322	-0.339	-0.306	-0.58	0.237
Panel B: Industry Adjusted Share Price Return %							
Full Sample	255	11.65	-3.44	14.4	0.00	-0.41	0.233
Overperformers	128	62.66***	30.75***	18.59***	0.00***	-4.51	0.000
Underperformers	127	-38.96***	-33.35***	10.25***	-0.42***	6.94	0.000

Notes

---

[1] Hutton (1995) argues that "pension funds... have become classic absentee landlords, exerting power without responsibility and making exacting demands upon companies without recognizing their reciprocal obligations as owners" (p.304).

[2] For example, Drucker (1976) stipulates that "pension funds are not 'owners', they are investors. They do not want control ... If they do not like a company or its management, their duty is to sell the stock" (p.82). More recently, Porter (1997) argues that institutional investors, despite their substantial aggregate holdings, do not sit on corporate boards and have virtually no real influence on management's behavior because they invest nearly all their assets in index funds rather than directly in companies. Short and Keasey (1997) suggest that once pension funds are locked in, it is costly to get involved in monitoring and they cannot exit in case they are considered to trade on insider information. Murphy and Van Nuys (1994) argue that pension funds are run by individuals who do not have the proper incentives to maximize fund value.

[3] In contrast, in the US, investments and activism programs of pension funds are developed and implemented by fund staff then overseen and approved by trustees (Del Guercio and Hawkins, 1999).

[4] Cadbury (1992) notes that "Because of their collective stake, we look to the institutions in particular, with the backing on Institutional Shareholders' Committee, to use their influence as owners to ensure that the companies in which they have invested comply with the Code" (para. 6.16). The National Associate of Pension Funds also endorses such recommendations (NAPF, 1996b)

[5] A number of studies document the free cash flow problem in the UK. For example, Franks and Mayer (1994) find that UK companies pay high dividends relative to German

companies; Lasfer (1995) shows that debt mitigates the free cash flow problem; Lasfer (1997) provides evidence that firms with free cash flow problems pay scrip, rather than cash, dividends. The reports of Cadbury (1992) and Greenbury (1995) are a manifestation of the previous wider debate on the various corporate governance issues detailed in Charkham (1995), Stapledon (1996) and Keasey, Thompson and Wright (1997).

[6] Companies Act 1995, Sections 198 and 199 requires UK companies to disclose in their accounts the name of any investor who holds 3% or more of the issued share capital.

[7] See Chew (1997) for a collection of papers dealing with these two corporate governance systems.

[8] see Black (1998) and Karpoff (1998) for a survey

[9] Similarly, in the US, the value of DC plans in 1993 was $1,068 bn compared to $1,248 bn for DB plans. However, DC schemes are growing at much faster rates of 19% per year, compared to 14% for DB plans (Jepson, 1998).

[10] The report states that "no one individual has unfetted powers of decision. Where the chairman is also chief executive, it is essential that there should be a strong and independent element on the board, with a recognised senior member".

[11] The Code of Best Practice No 4.3 recommended an audit committee of at least three non-executive directors with written terms of reference and No 4.30 recommends the institution of a nomination committee as an internal committee within the board. This committee should be composed of majority of non-executive directors and chaired by the chairman of the board.

[12] The report summarizes the functions of the board as follows: "The responsibilities of the board include setting up the company's strategic aims, providing the leadership to put them into effect, supervising the management of the business and reporting to shareholders on

their stewardship". As to the financial aspects of corporate governance, the report mentions: "The way in which boards set financial policy and oversee its implementation, including the use of financial controls, and the process whereby they report on the activities and progress of the company to the shareholders".

[13] See John and Senbet (1998) for an extensive survey of the monitoring role of corporate board of directors and Stapledon (1996) pp 138-153 for the monitoring role of non-executive directors.

[14] The choice of 1995-96 sample period is driven by data availability. The data on shareholding is inserted manually because Extel Financial provides only the latest data on shareholding in text format and this data is not available in machine-readable form. Other similar studies use also short time period (see Karpoff, 1998, for a review). Our results are sample-period dependent because we find, but did not report, that the vast majority of companies (83% of our test firms) had large pension funds holdings in both 1992 and 1996 periods and the magnitude of those holdings has not changed significantly.

[15] Extel Financial is a financial database micro-system which provides accounting as well as financial and reference data for all UK companies and many international companies.

[16] The ideal would be to exclude from the denominator of this ration other assets such as property, cash and fixed income securities, but the desegregated data on equity investment is not available.

[17] This variable includes directors holdings but excludes those of officers. UK quoted companies are required to disclose in their financial statements the proportion of shares held directly and indirectly by executive and non-executive directors (Companies Act 1985). However, no similar disclosure applies to officers. This legal disclosure requirement means that we had to define managerial ownership as ownership by members of the board of

directors. Although this definition is consistent with that of Morck *et al.* (1988), it differs from that of McConnell and Servaes (1990) and Denis and Sarin (1999) as we do not include shares owned by corporate officers not members of the board.

[18] We exclude 58 companies with negative book value of equity due to goodwill write-offs when we use the market-to-book ratio, book leverage and return on equity. The inclusion of these companies did not, however, alter our reported results.

[19] The negative relationship between pension fund investments and Q has been widely documented in the investment literature. For example, Lakonishok, Shliefer and Vishny (1994) show that pension funds invest in glamour stocks (low book-to-market firms), because the previous success of the glamour stocks helps institutions justify their portfolio selection to their investors but these stocks generally underperform value stocks (high book-to-market firms).

[20] We obtained similar results by using the industry median return and market index as benchmark and by matching our test firms by prior performance or market-to book and size. Similar results are obtained when we concentrate on survived companies, and exclude IPO firms.

Our papers can be downloaded at:

http://cerp.unito.it

CeRP Working Paper Series:

N° 1/00	Guido Menzio	Opting Out of Social Security over the Life Cycle
N° 2/00	Pier Marco Ferraresi Elsa Fornero	Social Security Transition in Italy: Costs, Distorsions and (some) Possible Correction
N° 3/00	Emanuele Baldacci Luca Inglese	Le caratteristiche socio economiche dei pensionati in Italia. Analisi della distribuzione dei redditi da pensione (only available in the Italian version)
N° 4/01	Peter Diamond	Towards an Optimal Social Security Design
N° 5/01	Vincenzo Andrietti	Occupational Pensions and Interfirm Job Mobility in the European Union. Evidence from the ECHP Survey
N° 6/01	Flavia Coda Moscarola	The Effects of Immigration Inflows on the Sustainability of the Italian Welfare State
N° 7/01	Margherita Borella	The Error Structure of Earnings: an Analysis on Italian Longitudinal Data
N° 8/01	Margherita Borella	Social Security Systems and the Distribution of Income: an Application to the Italian Case
N° 9/01	Hans Blommestein	Ageing, Pension Reform, and Financial Market Implications in the OECD Area
N° 10/01	Vincenzo Andrietti and Vincent Hildebrand	Pension Portability and Labour Mobility in the United States. New Evidence from the SIPP Data
N° 11/01	Mara Faccio and Ameziane Lasfer	Institutional Shareholders and Corporate Governance: The Case of UK Pension Funds