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"Cult of Equity": Actuaries and the Transformation of Pension Fund Investing, 1948–1960

This article examines the mid-twentieth-century transformation of U.K. pension fund investment policy known as the "cult of equity." It focuses on the influence exercised by the Association of Superannuation and Pension Funds over actuarial and corporate governance standards, through actuaries who were members of its council. This intervention led to increasingly permissive actuarial valuations that reduced contributions for sponsors of pension funds investing in equities. Increased demand for equities required pension funds to adopt a more permissive approach to corporate governance than insurance companies and investment trusts, and contributed to declining standards of corporate governance.

In the mid-twentieth century, there was an important shift in the investment policies of pension funds in the United States and United Kingdom, known as the "cult of equity."[1] In the interwar period, pension funds invested almost exclusively in fixed income. However, by 1960, U.S. pension funds invested 40 percent of their assets in equities.[2] Similarly, U.K. pension funds increased the proportion of assets invested in equities from 10 percent in 1945 to 47 percent in 1962.[3] By 1993, U.S. and U.K. pension funds were investing around 50 percent and 81 percent, respectively, of their assets in equities.[4]

A consequence of the cult of equity was that pension funds owned an increasing proportion of issued common shares. In 1993 in the U.K., institutional investors in total owned 62 percent of all equities, of which pension funds owned 31 percent.[5] In the United States, comparable figures were 40 percent and 24 percent, respectively.[6] However, the pace of this change differed in the two countries, reflecting the excess of investment by institutional investors over the supply of new issues by corporations. Domestic U.K. institutional investors increased the proportion of equities that they owned from 17.9 percent in 1957 to 25.1 percent in 1963.[7] In the U.S., broadly equivalent levels of institutional investor ownership of equities were reached in around 1980, when domestic institutional investors owned 27 percent of all equities.[8]

The mid-twentieth century also saw in both the U.S. and U.K. an increasing prevalence of hostile takeovers and the emergence of a market for corporate control.[9] In both countries, managements attempted to repel hostile takeovers by issuing stock splits, raising dividends, and initiating public relations drives.[10] However, antitakeover defenses that constituted more permissive standards of corporate governance developed at different times in the two countries. In the U.K., defense took the form of the issuance of nonvoting ordinary shares, a practice that peaked in the mid-1950s, when "seven percent of the market value of the industrial and commercial sector of the U.K. equity market took the form of 'non-voting' ordinary shares."[11] In contrast, in the U.S., where the issuance of nonvoting stock was banned on the NYSE, the poison pill takeover defense emerged in the early 1980s.[12]

In both the U.S. and U.K., therefore, deterioration in the governance of antitakeover techniques, and in corporate governance more generally, approximately coincided with institutional investors owning around a quarter of issued ordinary shares. This coincidence between increasingly permissive corporate governance standards and increased ownership by institutional investors is puzzling since institutional investors have generally been understood to have invested in equities because of improved standards of governance and, subsequently, to have sought such improvement.[13] The U.K. is particularly useful to understanding the relationship between equity investment by institutional investors and more permissive standards of governance, since U.K. rules relating to corporate governance have traditionally been determined through a self-regulatory system by associations of institutional investors "behind the scenes."[14] In contrast, in the U.S., where collaboration among investors was prohibited, corporate governance rules were determined by case law.[15]

In examining the governance aspects of the cult of equity in pension fund investment policy, this article suggests that pension funds adopted a more permissive approach to corporate governance than that adopted by other institutional investors, and that this contributed to deterioration in the rigor of corporate governance standards. Further, this article examines the influence exercised by pension fund managers upon the actuarial practices used to determine sponsoring firms' contributions to the pension fund. While booming postwar markets, high corporate and personal tax rates, foreign exchange restrictions, and emergence of hostile takeovers contributed to the cult of equity, the role of actuarial practice in the determination of investment policy has been understudied.[16] Yet this was a seminal period in which consulting actuaries engaged for the first time with the financial aspect of actuarial practice and during which actuarial practices became more permissive. This essay identifies change in actuarial practice as a potential explanation of the transformation of pension fund investment policy, which is also consistent with the role of pension funds in promoting more permissive corporate governance standards.

Pension funds' influence over actuarial and corporate governance standards was exercised through the Association of Superannuation and Pension Funds (ASPF). The ASPF increasingly engaged in the determination of governance standards through a sequence of actuaries who were ASPF council members. These included Reginald Underwood, at the Liverpool and Victoria Friendly Society; Gordon Hosking, pension manager of Courtaulds; and most significantly, George Henry Ross Goobey, pension manager of the Imperial Tobacco pension fund. In 1955, Ross Goobey persuaded the trustees of Imperial Tobacco's defined-benefit pension fund, one of the largest pension funds in the U.K., to adopt an idiosyncratic investment policy investing exclusively in equities.[17] Due to the subsequently stellar performance of the pension fund, Ross Goobey acquired a reputation as "one of the most successful professional investors of all time" and, through his public advocacy of equity investment by pension funds, as the "father of the cult of equity."[18] This article examines Ross Goobey's investment policy in the context of the debate on actuarial standards and corporate governance. It argues that Ross Goobey drew on the developments initiated by his predecessors, most notably Hosking, to bring to culmination the ASPF's engagement in the setting of governance standards at this time.

Defined-Benefit Pension Funds and Actuarial Practice

Defined-benefit pension funds promise the beneficiary a level of income in retirement that typically relates to his or her years in service and salary. These promises constitute the pension fund's liabilities. The sponsoring firm makes contributions to the pension fund to ensure there are sufficient resources to pay pensions to beneficiaries at retirement. These contributions are invested and constitute the pension fund's assets. The actuarial valuation compares the values of assets and liabilities to determine the pension fund's level of funding and the sponsor's contributions, and has two parts. The statistical part forecasts the magnitude of future payments to beneficiaries. The financial part selects a discount rate to assign a present value to these statistically estimated magnitudes and assigns a value to the assets. A defined-benefit pension fund is solvent when the market value of assets equals or exceeds the value of liabilities, where the discount rate used to value liabilities is the yield on risk-free assets such as government bonds. In such a circumstance the pension fund can be transferred from the sponsor to an insurance company without the need for additional sponsor contributions. Such a valuation restricts the discretion available to the actuary for selecting assumptions. Conversely, when the actuarial valuation enables the actuary to employ discretion in selecting assumptions, it is permissive.

Interwar Pension Fund Governance and Investment Policy

In the interwar period, the discount rate used to value pension fund liabilities reflected the expected rate of return on a pension fund's assets. This was typically the risk-free interest rate and was based on the yield on the pension fund's fixed income securities, adjusted to reflect an estimate of future interest rates.[19] Further, if the sponsor provided a solvency or interest guarantee, or both, guaranteeing to make good any deficit or a shortfall in returns from its own resources, the discount rate was set at the sponsor's guaranteed rate of return.[20] This rate of return was regarded as the most independent estimate of the pension fund's long-term return since, given that the sponsor had to make up any shortfall in returns from the guaranteed rate, it would not guarantee a rate of increase on the pension fund's assets differing from its best estimate of that return. The pension fund's assets were valued at the lower of cost or market price, ignoring unrealized capital gains.[21] The actuarial valuation of pension funds sought to ensure the solvency of the pension fund, treating it as an insurance company.[22]

The aim of pension fund investment policy was to achieve a yield on the portfolio exceeding the actuarial discount rate.[23] However, if a high-risk investment policy was adopted—for example, investing in equities—in the absence of a durable and demonstrable competitive advantage to investing in riskier assets, the actuary protected the solvency of the pension fund by reducing the value of assets or increasing the value of liabilities. Funds investing in riskier assets were therefore penalized in that unrealized gains were not reflected in lower contributions. Actuarial practice enforced a focus on fixed income as the most appropriate asset class for pension funds and insurance companies.

The need to maintain a sufficiently high investment income to meet guarantees led—in response to the low long-term interest rates in the "cheap money" era following the 1929 financial crash—to an incremental broadening in the range of investments adopted by pension funds toward higher-risk corporate securities, such as debentures, preference shares, and equities. Pension funds such as the Rowntrees fund, managed by Sam Clayton and then by Frank Comer, sought higher returns by adopting an "active investment policy," which combined investment in riskier assets with market timing techniques.[24] There was a similar shift among insurance companies, including by John Maynard Keynes as chairman of the National Mutual Insurance Company.[25]

The marginally increasing risk profile of institutional investors' investment policy led to a concentration on standards of financial-market governance in two ways. First, actuarial publications increasingly focused on the long-term returns available from equity investment, reflecting an emergent attention to the financial rather than the statistical aspect of actuarial work.[26] Second, institutional investors began to negotiate collectively with issuers of securities and their merchant banks regarding securities restructurings. The term for this activity was "investment protection." In 1932, the British Insurance Association (BIA) established an Investment Protection Committee (IPC).[27] Also in 1932, the Association of Investment Trusts (AIT) was established, with the primary purpose of coordinating investment protection by investment trusts.[28] These associations sought to increase the influence exercised by their members by acting collectively in negotiations with securities issuers. In exercising such collective influence, investment protection committees had to reconcile potential conflicts between members investing in different securities, such as senior and junior debt securities and preferred and common equity of the same issuer.[29] Investment protection committees viewed the application of the "principles of sound finance" in adjudicating between the claims of the securities holders as key to reaching cooperation.[30]

Investment protection committees achieved fairness by working through case committees. Case committees were composed of members who had invested in an issuer's security. The committee first assessed whether members held a significant enough proportion of the issuer's securities to make intervention worthwhile. Then the committee would suggest a course of action for the association's members. In the interwar period, investment protection committees dealt primarily with the restructuring of defaulted fixed-income securities issued by international governments and public authorities. As London's dominance over international banking declined in the postwar period, and the City's focus shifted toward the financing of domestic industry, these associations increasingly engaged with domestic corporate management in contexts that included financial distress, corporate reorganization, and new issues.[31] There was a shift toward committees making recommendations based on negotiations with issuers in advance of any formal proposal.

In contrast to the BIA and AIT, the ASPF was initially inactive with respect to investment protection. The ASPF was founded in 1923 following successful lobbying by a group of treasurers and pension managers for tax exemptions granted in the 1921 Finance Act.[32] The ASPF consequently considered its primary mission to be harnessing the collective strength of pension funds to lobby for favorable legislation. Additionally, pension funds were not run by investment experts, and in contrast with the BIA and AIT, the ASPF had a large and heterogeneous membership, further complicating coordination. As a result, the ASPF council saw investment protection services as conflicting with its mission. Lack of engagement by the ASPF meant that corporate governance standards were determined by insurance companies and investment trusts.

Postwar Divergence in Actuarial and Corporate Governance Practices

In the postwar period, standards relating to the actuarial valuation of insurance companies and pension funds, and the investment policies of insurance companies and pension funds, began to diverge, with consequences for standards of corporate governance. First, papers were published on the financial aspect of practices relating to pension fund actuarial valuation.[33] In 1948, Colin Puckridge, an actuary and assistant secretary at the Prudential insurance company, published a paper that was the first to discuss the financial assumptions used within the actuarial valuation of pension funds, proposing that the value of pension fund assets be determined by discounting their future income.[34] Following prewar practice, the discount rate reflected the expected investment return. However, increasingly, if a pension fund invested in equities, the discount rate now reflected the expected long-term equity return. Adopting a discount rate that included a risk premium and exceeded the risk-free rate had the consequence that the actuarial valuation recognized in advance the expected future outperformance of equities over fixed income. This approach to determining the funding level of a pension fund reduced the value of liabilities below the level required for the actuarial valuation to seek to achieve the solvency of the pension fund, and thus reduced the sponsor's contributions.[35]

Second, with growing investment in corporate securities, pension funds increasingly required investment protection services. Nevertheless, the ASPF declined to establish an investment protection committee or to organize investment protection for its members, instead dealing with members' investment enquiries in a cursory, formulaic, and unhelpful fashion.[36] In 1947, to deepen the financial expertise of the ASPF council (which had been composed primarily of lawyers and secretaries), R. E. Underwood, MBE—past president of the Institute of Actuaries, actuary at the Liverpool and Victoria Friendly Society, and author of an actuarial textbook—was elected to the ASPF council.[37] However, Underwood was a traditionalist in actuarial matters and did not initiate change at the ASPF. Ross Goobey would critique Underwood's conventional actuarial approach at the 1950 ASPF conference.[38] In 1949 another actuary, Gordon Hosking, joined the ASPF council.[39] Hosking had qualified as an actuary in 1930 and then worked at the Prudential insurance company. In 1946, Hosking had made the rare career move for an actuary of becoming a pension manager, by joining the Courtaulds pension fund, while also working as an independent part-time consulting actuary.[40] Hosking coauthored the standard textbook on pension fund management, in which he advocated a relatively aggressive allocation of 40 percent of a large pension fund's portfolio to equities.[41]

Hosking initiated two modernizing initiatives within the ASPF. First, he advanced the ASPF's communication with its members—despite opposition by John Mitchell, the association's cofounder—by introducing "occasional papers" that evolved into *Superannuation*, the ASPF's journal, in 1952.[42] Second, in 1950, Hosking revived discussions relating to the establishment of an investment protection committee.[43] Hosking consulted with the BIA IPC on its procedures and collaborated with pension managers whose investment background complemented his own.[44] The first was Francis Andrews, investment manager at the Unilever pension fund. In 1955, Andrews would cofound the Society of Investment Analysts.[45] The second was H. W. Naish, director of establishments (finance) at the Coal Board. On establishment of the Coal Board's pension fund, at the request of the Bank of England, two representatives from the AIT were invited to serve as advisors.[46] The Coal Board pension fund was consequently a public-sector pension fund that was relatively active with respect to investment protection. The third was the pension manager of Esso Petroleum. However, since the ASPF council was reluctant to set recommendations regarding investment protection, it neither established an investment protection committee nor, as the BIA had done, hired Price Waterhouse to provide the relevant administrative services.[47] Instead, the ASPF introduced a trial arrangement, coordinated by Hosking, where twenty large pension funds collaborated on investment protection.[48]

Demand for investment protection soon led to calls, including from Naish at the Coal Board, for ASPF engagement in investment protection. In response, the ASPF council declined again to establish an investment protection committee and established instead a decentralized "investment cooperation service."[49] This service was managed by the ASPF's secretary and assistant secretary, the former based at the ASPF's headquarters and the latter working at the Unilever pension fund.[50] Again, no recommendations were made. Rather, the ASPF secretary held the list of investments of pension funds participating in the service. Pension funds seeking to engage the issuer of a security could notify the secretary who would establish contact with other pension funds owning the issuer's securities. These pension funds would collectively consider whether and how to engage with the issuer.[51] Around 120 pension funds indicated interest in this service, and sixty provided their investment list.[52] The BIA and AIT consented to cooperate with the ASPF, including by allowing pension funds to participate in their case committees and receive their recommendations.[53] In return, the ASPF proposed to contribute to the BIA IPC's expenses.[54] Nevertheless, identity of interest with the BIA was not assumed. Hosking noted that the ASPF may make decisions that are "against" the BIA IPC's recommendations.[55]

An example of such differences and of the ASPF's more permissive approach relates to preference shareholders' rights, which in the immediate postwar period was the primary investment protection concern of the BIA and AIT. Insurance companies and investment trusts sought to protect their preference share investments in cases where common shareholders made decisions that impacted the value of preference shares without the consent of preference shareholders.[56] Practices generating concern included redemption of preference shares at inequitable prices, nonpayment of preference dividends, and "a considerable number" of issues of common stock diluting the proportion of the vote controlled by preference shareholders.[57] In protecting preference shareholders, the BIA initiated legal proceedings, hired counsel to check the feasibility of changing company law, and, with the AIT, lobbied the London Stock Exchange for amendments to rules relating to the disclosures of preference shareholders' rights in prospectuses.[58] The BIA also developed—but then did not promulgate—a code of rights for new issues of preference shares.[59] In contrast, since pension funds held less preferred stock and invested more and more in equities, the ASPF was less concerned with protecting preference shareholders.

The Equities-Only Investment Policy at the Imperial Tobacco Pension Fund

The distinctive approach to governance adopted by the ASPF was implemented most emphatically by George Ross Goobey. Ross Goobey had enrolled as an actuarial student in 1930, qualifying in 1941.[60] During these eleven years, he pursued sporting ambitions and also worked, mainly at various small and mid-sized life and general insurance companies in investment, at a time when it was atypical for an insurance company actuary to conduct investment work.[61] Between 1934 and 1936, he worked at the Legal and General Assurance Society, whose actuary Harold Raynes advocated equity investment for insurance companies.[62] Ross Goobey would later draw on Raynes's work to advocate an equity investment policy for pension funds.[63] In 1947, Ross Goobey emulated Hosking's move to Courtaulds by joining Imperial Tobacco as pension manager.[64]

Imperial Tobacco, which was formed from the merger of thirteen British tobacco firms, had been making unfunded pension arrangements for its employees in the early twentieth century.[65] In 1929 the company formalized these arrangements by establishing a contributory pension fund.[66] R. J. Sinclair, Imperial's company secretary, participated in establishing the pension fund and administered it along with Imperial Tobacco's chief accountant, who managed the investments.[67] At the pension fund's inception, Imperial Tobacco committed to a 5 percent interest guarantee.[68] This guaranteed rate, around 1 percent higher than government bond yields, reflected the adoption of an aggressive investment policy that attempted to cheapen pension provision for Imperial Tobacco. However, low interest rates in the interwar and early postwar periods caused the yield of the pension fund's assets to fall below 5 percent, triggering the need for additional sponsor contributions at each quinquennial actuarial valuation.[69] In the attempt to procure a yield that could meet the sponsor guarantee, the portfolio had been diversified into corporate securities. From 1933 there was a declining allocation to U.K. government bonds, known as "gilts," and increasing investment in corporate bonds, preference shares, and equities. Thus, in contrast with narratives in which the pension fund was "almost exclusively" or "predominantly" invested in gilts when Ross Goobey joined the fund, it was invested half in gilts, 10 percent in corporate fixed income, 20 percent in preference shares, and 20 percent in equities.[70]

This relatively sophisticated investment policy implies that Imperial Tobacco was a supportive environment for Ross Goobey's ideas about investment. Ross Goobey also received encouragement from three individuals. First, Sir James Grigg, nonexecutive director of Imperial Tobacco, trustee of its pension fund, and chairman of its investment committee, supported Ross Goobey's investment policy.[71] Grigg had previously worked as chairman of the board of the Inland Revenue and as nonexecutive director of the Prudential Assurance Company and the National Provincial Bank.[72] Second, Imperial Tobacco's chief accountant, who was a prominent member of the Institute of Chartered Accountants of England and Wales, urged Ross Goobey to volunteer to join the ASPF council and participate in discussions relating to standards and best practice.[73] Third, in 1951, fellow actuary Randall Haigh joined Ross Goobey at Imperial Tobacco from the Equity & Law insurance company.[74]

In common with traditional practice, Ross Goobey conceived of the objective of pension fund investment policy as seeking to achieve a yield exceeding the actuarial discount rate.[75] The yield of each security was compared to this benchmark.[76] Asset allocation was determined by the relative availability of investments with a sufficiently high yield within each asset class.[77] Investing solely in equities reflected the fact that in the early 1950s the dividend yield of the shares of large companies was 4.3 percent, compared with a yield on U.K. government gilts of around 3 percent.[78] This income differential would be further increased by judicious selection of investments and by increasing dividends.[79] In seeking diversification, the pension fund invested in as many as a thousand equity securities.[80] Rising equity markets and the decline in the yield of large capitalization stocks below that of gilts in 1959 led Ross Goobey to invest in higher yielding mid-sized and small companies' stocks and private equity.[81] He also pioneered pension fund investment in property.[82] With the focus on maximizing income, in the early 1970s, when the yield of gilts exceeded the dividend yield of equities by around 5 percent, Ross Goobey invested in fixed-income securities.[83]

Under Ross Goobey's management the value of the pension fund's assets increased from £12 million in 1947 to £20 million in December 1954, £35 million in October 1958, and £75.9 million in April 1961.[84] Assuming that the sponsor's and beneficiaries' net contributions totaled £1.25 million annually between December 1954 and 1961, the value of the pension fund's assets increased by approximately 270 percent over the period that Ross Goobey had permission to invest the pension fund exclusively in equities; the FT 30 index in this period rose by 200 percent.[85]

Ross Goobey, the ASPF, and Actuarial Practice

Ross Goobey's equity-only investment policy was also developed with the objective of challenging actuarial and corporate governance standards. At the 1949 actuarial valuation, to align Imperial Tobacco's sponsor guarantee with prevailing rates of return, the guarantee was reduced from 5 to 4 percent.[86] Consistent with this lower expected return, Imperial Tobacco's trustees did not permit Ross Goobey to increase the equity allocation. To increase the portfolio's yield, Ross Goobey ceased purchases of gilts and purchased preference shares instead of corporate bonds.[87] He was permitted to opportunistically invest more in equities in 1952, when the market receded.[88] The equity allocation reached 28 percent in early 1953.[89] In October 1953, Ross Goobey recommended the exclusively equity-oriented investment policy to the Imperial Tobacco trustees.[90] In rejecting his proposal and seeking to avoid selling fixed-income holdings at a loss, the trustees agreed only to invest all new contributions in equities and property.[91] The trustees' decision is understandable given that less than a third of the pension fund was allocated to equities, and as discussed further below, suggests that Ross Goobey considered criteria that were not directly related to the investment of the Imperial Tobacco pension fund when recommending the equity-only investment policy.

Around this time, in January 1953 and July 1953, Ross Goobey was nominated and then elected to the ASPF council.[92] He replaced Underwood, who was retiring and "wished to make way for a younger man."[93] Shortly after, assisted by his team at Imperial Tobacco and liaising with the ASPF's assistant secretary, Ross Goobey took charge of the ASPF's investment cooperation service.[94] This remarkable appointment was indicative of the ASPF's distinctive approach to corporate governance relative to the BIA and AIT. For example, possession of confidential information required BIA and AIT case committee members not to trade securities during ongoing negotiations with an issuer, but the ASPF had little means of monitoring Ross Goobey in this respect.[95] Further, in contrast with the incremental and transparent consultation process characterizing the establishment of the service by Hosking, and with the procedural formalities of the BIA IPC and AIT, the ASPF council informed its membership of its arrangement with Ross

Goobey only following other pension managers' complaints that Ross Goobey's involvement provided him with an unfair informational advantage.[96]

Nevertheless, delegation of the investment cooperation service to Ross Goobey presented various advantages for the ASPF. First, he contributed free investment expertise. By 1955, the team at Imperial Tobacco was processing information on more than twelve thousand investments of 116 pension funds.[97] Second, the ASPF sought the necessary flexibility to pursue governance objectives that might conflict with those of insurance companies and investment trusts. Consequently, it did not wish to issue recommendations.[98] Unlike Hosking, who was a part-time consulting actuary, and Price Waterhouse, Ross Goobey had no commitments relating to the provision of professional advice and could act discretely and flexibly in pursuing such a policy.

Third, as a qualified actuary Ross Goobey could credibly participate in the debate on actuarial practice in such a way that would promote the interests of the ASPF and its members. In late 1953 and early 1954, there was escalating client opposition, led by local authority pension funds, to conservative actuarial practice. The 1954 Bedfordshire County Council parliamentary bill sought to eliminate the actuarial valuation of local authority pension funds and to pay for local authority pensions from local taxation on a pay-as-you-go basis.[99] A legislative failure, the Bedfordshire Bill nonetheless succeeded in initiating discussion between the Institute of Actuaries and the Association of Municipal Corporations regarding actuarial practice, focused initially on statistical and then on financial assumptions.[100] It thereby illustrated the need for actuarial expertise in engaging in debate regarding actuarial practice.

Moreover, as the manager of the Imperial Tobacco pension fund, Ross Goobey was personally involved in such debate. Shortly after the bill failed, Ross Goobey wrote to the Imperial Tobacco pension fund trustees to report his discussions with the actuary John Gunlake regarding the discount rate to be used in the 1954 actuarial valuation.[101] Gunlake had rejected Ross Goobey's request that the discount rate reflect the high yield achieved by investing in equities. Instead, adopting the traditional method, Gunlake offered to raise the discount rate to 4.25 percent if Imperial Tobacco increased its guarantee from 4 to 4.25 percent.[102] This proposed compromise produced a small surplus, eliminating the need for deficit payments, but did not cede to Ross Goobey's request that the actuarial valuation consider the yield on the equities as appropriate for setting the discount rate.[103]

In late 1954, at the ASPF council, Ross Goobey circulated a memorandum distinguishing between the appropriate investment policies for insurance companies and pension funds; in early 1955, he published it in *Superannuation*.[104] He argued that, in contrast with insurance companies, pension funds had longer dated, irredeemable, inflation-linked liabilities and therefore required investments potentially retaining their long-term real value. He also argued that pension funds could establish a sinking fund from extra income to protect against losses arising from bankruptcy without paying tax and that, since pension funds were smaller than insurance companies, they were less constrained by illiquidity. Moreover, he asserted that pension funds, unlike insurance companies, did not have to make annual solvency disclosures potentially adversely impacting the sponsor's financial accounts.[105] In this way Ross Goobey contended that contrasting actuarial practices were appropriate for insurance companies and pension funds. Following this publication, the ASPF council requested that he write a memorandum on investment for the 1956 ASPF conference. Over the eighteen months prior to its publication in the spring of 1956, Ross Goobey reworked the 1954 article, incorporating comments from ASPF council members and other investment experts.[106] Concurrently, in August 1955, he reiterated to the Imperial Tobacco trustees his recommendation to invest entirely in equities, receiving approval at the end of 1955.[107]

There are several indications that Ross Goobey's recommendation to invest entirely in equities was not concerned solely with investment performance. First, his articles and recommendations to the trustees recycle text, suggesting that he viewed the internal and external arguments relating to equity investment as linked. For example, he did not discuss in print how much a pension fund should allocate to equities before his recommendation to invest entirely in equities had received the trustees' consent. Second, following that consent, the pension fund allocated 46 percent to equities, 27 percent to preference shares, 10 percent to gilts, 8 percent to corporate bonds, and the balance to cash.[108] Since a more incremental change to the investment policy would have sufficed for investment purposes, this suggests that Ross Goobey had other considerations in mind. Third, following the trustees' decision, the allocation to equities increased slowly, rising to 68 percent in June 1957, 85 percent in October 1958, and 96 percent in April 1961.[109] Fourth, although only approximately two-thirds of the portfolio was invested in equities, Ross Goobey drew on the trustees' permission to advocate an equity-only investment policy at the ASPF's 1956 autumn conference.[110] By publicly advocating equity investment, Ross Goobey potentially made certain securities—those that Imperial's pension fund needed to acquire—more expensive, suggesting again the salience of considerations other than those relating to investment.

Thus, permission to invest exclusively in equities enabled Ross Goobey to publicly demonstrate the benefits of transgressing traditional, conservative actuarial investment practice. More explicitly, he also supported new actuarial valuation techniques, emphasized how investment policy might influence the selection of discount rate in actuarial valuations, critiqued traditional actuarial practice for ignoring inflation, and mocked actuarial practice that eliminated actuarial discretion for treating actuaries as mere "calculating machines."[111] He also argued against pension fund financial accounting that would reduce actuarial discretion.[112] In 1960, as respondent to Gunlake, who was speaking as the first consulting actuary to have been elected president of the Institute of Actuaries, Ross Goobey exposed Gunlake's actuarial valuation of the Imperial Tobacco pension fund to public ridicule, signaling the emergence of a generation of consulting actuaries propounding new actuarial techniques.[113]

Ross Goobey, the ASPF, and the Market for Corporate Control

Adoption by pension funds of an equity-oriented investment policy also led to these funds engaging with the market for corporate control in distinctive ways. Insurance companies participating in the first hostile takeovers in the early 1950s provided debt financing to entrepreneurs conducting the takeovers, which was repaid by selling the acquired companies' properties, perhaps to the insurance companies, and leasing those properties back.[114] Entrepreneurs involved in such takeovers, such as Charles Clore and Isaac Wolfson, provided insurance companies with access to high-yielding, high-quality mortgage and real estate investments.[115] In contrast to insurance companies, pension funds sought equity participation in such ventures, making equity returns even scarcer.

The "heavy *increase* in the issue of non-voting shares" and increasingly unequal treatment of shareholders of the acquired firms within takeovers in the mid-1950s enabled entrepreneurs to simultaneously accommodate the need of pension funds to invest in equity while retaining control.[116] Nonvoting shares thus facilitated rather than constrained hostile takeovers, albeit in a self-limiting fashion, and represented the qualified support of pension funds for the emergence of the market for corporate control.[117]

The ASPF's permissive approach to corporate governance thus undermined the coalitions through which the BIA and AIT investment protection committees upheld high standards of corporate governance. In contrast with the BIA and AIT, the ASPF did not inform companies issuing nonvoting shares of its opposition to this practice.[118] In 1955 the BIA initiated a collective appeal by the three associations to the London Stock Exchange, seeking that it follow the New York Stock Exchange in banning nonvoting common stock.[119] The ASPF adopted the most permissive approach of the three associations.[120] The ASPF did not participate in the AIT's initiative, conducted jointly with the BIA, to lobby the London Stock Exchange to ban nonvoting shares.[121] The BIA and AIT, but not the ASPF, participated in a working party convened by the Bank of England in 1959, setting guidelines regarding the market for corporate control.[122] In describing cooperation with the ASPF, the secretary to the BIA IPC, L. W. Kempe, remarked, "The experience has not been good."[123]

The ASPF initiated some formalization of its procedures relating to corporate governance in 1957, when the ASPF council created the role of "organizing secretary" at Unilever, paying for services rendered.[124] However, procedures for collecting data on pension funds' holdings, developed by the organizing secretary with assistance from the BIA IPC, were abandoned, again indicating a rejection of the BIA IPC's formal approach.[125] It was on this informal basis that in 1960 the organizing secretary and ASPF council, assisted by Ross Goobey, initiated the formation of an investment protection committee.126 The ASPF IPC, which was established in 1963, had a membership of approximately forty pension funds. The great majority of these pension funds were sponsored by employers in the private sector.[127] At this point, Ross Goobey withdrew from the ASPF's corporate governance activities. Haigh represented Imperial Tobacco on the ASPF IPC rather than Ross Goobey.[128] Ross Goobey also relinquished the actuarial role within Imperial Tobacco's pension fund to Haigh but retained responsibility for investment of the pension fund.[129] He subsequently was president of the National Association of Pension Funds, the successor body to the ASPF, from 1972 to 1981.[130]

TIAA-CREF: A U.S. Parallel

Although R. Minturn Sedgwick in the U.S. suggested that pension funds invest exclusively in equities and American actuarial practice also became more permissive in the 1950s, debate in the U.S. Society of Actuaries on defined-benefit pension fund investment policy dismissed the idea of investing a pension fund only in equities.[131] Instead, the variable annuity, developed by Dr. William C. Greenough, founder and subsequently president and chairman of the College Retirement Equity Fund (CREF), was the exclusively equity-oriented retirement vehicle that was discussed. CREF, established as a New York insurance company in 1952, provided an equity-based alternative to the traditional annuities available to policyholders of the Teachers Insurance and Annuities Association of America (TIAA), established by the Carnegie Foundation in 1918. In contrast to traditional annuity guarantees, against which the insurer invested in fixed-income securities, CREF invested entirely in equities and so increased the risk relating to the level of retirement income but also raised its potential level. Policyholders could determine the level of risk associated with their retirement income through their allocation to TIAA or CREF.

In common with Imperial Tobacco, CREF exploited the high yield available on stocks relative to bonds. However, in contrast to Imperial Tobacco, CREF sought increased rigor in actuarial and corporate governance practice. Designed as a defined-contribution arrangement providing annuitized retirement income, the CREF variable annuity equated the value of liabilities with the market value of assets so that fluctuations in asset values could not generate insolvency.[132] Additionally, CREF developed a socially responsible investment policy and opposed the development of the poison pill in takeovers.[133] CREF thus pursued improved actuarial standards and corporate governance standards, differing in this respect from Imperial Tobacco.

Conclusion

This article examines the transformation of British pension fund investment policy in the mid-twentieth century known as the "cult of equity." It finds that pension funds sought more permissive actuarial and corporate governance standards at this time. In explaining the role of governance in pension funds' change of policy, the article highlights the seminal shift in actuarial thinking in which actuaries began to focus upon the financial aspect of actuarial practice. Actuaries emerged as financial and investment experts within stockbrokerage firms, actuarial consultancies, and pension funds. Concurrently, the ASPF increasingly developed a permissive approach to actuarial practice and corporate governance through a succession of actuaries who were its council members, including Underwood, Hosking, and Ross Goobey. Ross Goobey both managed the ASPF's investment protection service and implemented an equity-only investment policy at the Imperial Tobacco pension fund that played a role in influencing actuarial practice.

In the late 1940s actuarial valuations began to include an equity-risk premium within the actuarial discount rate used to determine the value of pension funds' liabilities. This lowered sponsor contributions for pension funds investing in equities and increased the attractiveness of equities as an asset class for pension funds.[134] Conversely, the increased rigor of actuarial practice over the past fifteen years, associated with the promulgation of fair-value pension fund financial accounting standards, has been argued to contribute to the "de-risking" and reallocation of pension portfolios to fixed income.[135]

The determination of corporate governance standards by U.K. institutional investors through means such as investment protection committees had two further consequences. First, this context enabled private-sector pension funds, such as Imperial Tobacco, to dominate public-sector pension funds, such as the Coal Board, and mute their activism. Consequently, public-sector pension funds were less engaged in setting corporate governance standards in the U.K. than in the U.S., where the absence of investment protection committees enabled public-sector pension funds to adopt a more activist stance.[136]

Second, since pension funds adopted a permissive approach to corporate governance, private investors in the U.K. were more willing to issue shares in their firms without retaining a block holding and thus accepted greater risk of a hostile takeover than private investors were willing to accept in the United States.[137] British owners of firms understood, correctly, that the pension funds that owned shares in their firms would only partially enforce shareholders' objectives in hostile takeovers. Actuaries played an important role in facilitating the confidence displayed by private investors at this time.

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[1] Harold Wincott, "The Cult of Equity with Particular Reference to Institutional Investing," *Superannuation* (Apr. 1961): 2–10. On the U.K., see Brian R. Cheffins, *Corporate Ownership and Control: British Business Transformed* (Oxford, 2008), 337–81; Leslie Hannah, *Inventing Retirement: The Development of Occupational Pensions in Britain* (Cambridge, U.K., 1986), 74–80; David Kynaston, *The City of London,* vol. 4, *A Club No More* (London, 2001), 99–100. On the U.S., see Peter Drucker, *The Unseen Revolution: How Pension Fund Socialism Came to America* (London, 1976); Stephen Sass, *The Promise of Private Pensions* (Cambridge, Mass., 1997).

[2] Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States (1955–1964)* (Washington, D.C., 2013), 73, table L.116; see also E. Jack Moorhead, *Our Yesterdays: The History of the Actuarial Profession in North America, 1809–1979* (Schaumburg, Ill., 1989), 186.

[3] K. Muir McKelvey, "Pension Fund Finance," *Transactions of the Faculty of Actuaries* 25 (1957): 113–65; UBS Asset Management, *Pension Fund Indicators* (London, 2012), 96, appendix B.

[4] E. Philip Davis and Benn Steil, *Institutional Investors* (Cambridge, Mass., 2001), 94; Federal Reserve, *Flow of Funds Accounts*, 113, table 116.b; UBS, *Pension Fund Indicators*, 96.

[5] Office for National Statistics, *Share Ownership Report, 1997* (London, 1997), 8, table A.

[6] Federal Reserve, *Flow of Funds Accounts*, 92, table L.213.

[7] Richard J. Brinston and Richard Dobbins, *The Growth and Impact of Institutional Investors* (London, 1978), 139, exhibit 13.

[8] Federal Reserve, *Flow of Funds Accounts*, 53, table L.116.

[9] George Bull and Anthony Vice, *Bid for Power*, 3rd ed. (London, 1961); Peter Otto Steiner, *Mergers: Motives, Effects, Policies* (Ann Arbor, 1975), 6; Richard Roberts, "Regulatory Responses to the Rise of the Market for Corporate Control in Britain in the 1950s," *Business History* 34 (1992): 183. See also Leslie Hannah, "The Shareholders' 'Dog' That Did Not Bark: Contested Takeover Bids in Long Run Comparative Perspective," in *Men, Women, and Money: Perspectives on Gender, Wealth, and Investment, 1850–1930*, ed. David R. Green et al. (Oxford, 2011), 228–47.

[10] Laurence Cecil Bartlett Gower, "Corporate Control: The Battle for the Berkeley," *Harvard Law Review* 68 (1954–1955): 1176–93; David S. Bradshaw, "Defensive Tactics Employed by Incumbent Managements in Contesting Tender Offers," *Stanford Law Review* 21 (1969): 1104–28.

[11] Cheffins, *Corporate Ownership*, 31; Julian Franks, Colin Mayer, and Stefano Rossi, "Spending Less Time with the Family: The Decline of Family Ownership in the United Kingdom," in *A History of Corporate Governance around the World: Family Business Groups to Professional Managers*, ed. Randall K. Morck (Chicago, 2005), 584; "Marks and Spencer Today," *Investors' Chronicle*, 16 Oct. 1954, 1157–61; "Shares without a Say," *Economist*, 14 Apr. 1956, 167–68.

[12] John Fred Weston, Kwang S. Chung, and Susan Hoag, *Mergers, Restructuring, and Corporate Control* (Englewood Cliffs, N.J., 1990), 505; Marco Becht and J. Bradford DeLong, "Why Has There Been So Little Block Holding in America?" in *History of Corporate Governance around the World*, ed. Morck, 613–66.

[13] Cheffins, *Corporate Ownership*; Franks, Mayer, and Rossi, "Spending Less Time," 585; Leo Herzel, "Boards of Directors versus Institutional Investors," in *Institutional Investors and Corporate Governance*, ed. Theodor Baums, Richard M. Buxbaum, and Klaus Hopt (Berlin, 1994), 161–80.

[14] Ronald E. Artus, "Tension to Continue," in *Creative Tension*, ed. National Association of Pension Funds (London, 1990), 12–17; Roberts, "Regulatory Responses"; Bernard S. Black and John C. Coffee, "Hail Britannia? Institutional Investor Behavior under Limited Regulation," *Michigan Law Review* 92 (1994): 2002; Cheffins, *Corporate Ownership*, 375.

[15] Mark J. Roe, *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance* (Princeton, 1994); John Armour and David Skeel, "Who Writes the Rules for Hostile Takeovers and Why? The Peculiar Divergence of U.S. and U.K. Takeover Regulation," CBR Working Paper 331 (Cambridge, U.K., 2006); Black and Coffee, "Hail Britannia?" 1999–2007.

[16] Cheffins, *Corporate Ownership*; but see Hannah, *Inventing Retirement*, 96; Sass, *Private Pensions*, 153, 155, 161; Moorhead, *Our Yesterdays*, 165–210.

[17] On the size of Imperial Tobacco's pension fund, see McKelvey, "Pension Fund Finance," 135; on Ross Goobey's engagement with the trustees, see George Ross Goobey, "Pension Fund Investment Policy," 30 Aug. 1955, paper prepared for the trustees of the Imperial Tobacco pension fund, LMA/4481, George Henry Ross Goobey Collection (hereafter RGC), London Metropolitan Archives, London, U.K. (hereafter LMA).

[18] Charles D. Ellis and James R. Vertin, eds., *Classics: An Investor's Anthology* (Homewood, Ill., 1989), 253–59; John Plender, "Obituary: George Ross Goobey: A Pension Fund Maverick Who Advocated the 'Cult of Equity,'" *Financial Times*, 22 Mar. 1999; on Ross Goobey as "father of the cult of equity," see Cheffins, *Corporate Ownership*, 355, 361; T. A. B. Corley, "Goobey, George Henry Ross (1911–1999)," *Oxford Dictionary of National Biography*, online ed. (Jan. 2012), http://www.oxforddnb.com/view/article/72071, accessed 15 Apr. 2015; Laurie Dennett, *Mind over Data: An Actuarial History* (London, 2004), 44; Ellis and Vertin, *Classics*; Hannah, *Inventing Retirement*, 74, 105; Geoffrey Heywood, "Obituary: George Henry Ross Goobey," *Actuary* (July 1999): 20; Charles Gordon *The Two Tycoons: A Personal Memoir of Jack Cotton and Charles Clore* (London, 1984), 127; Kynaston, *A Club No More*, 99–100; John Plender, *That's the Way the Money Goes* (London, 1982), 40–41, 45; Plender, "Obituary"; William Joseph Reader and David Kynaston, *Phillips and Drew: Professionals in the City* (London, 1998), 52; Alastair Ross Goobey, *The Money Moguls: The Inside Story of Investment Management* (Cambridge, U.K., 1987), 72; "Obituary: George Ross Goobey," *Times* (London), 30 Mar. 1999.

[19] R. J. W. Crabbe and Cyril A. Poyser, *Pension and Widows' and Orphans' Funds* (Cambridge, U.K., 1953), 164–70.

[20] Reginald Edward Underwood, "Widows' and Orphans' Pension Schemes," in *Circular Letter 147: Report of the ASPF Autumn Conference, London, 24 November 1950* (London, 1950), 16, LMA/4494/A/04, Collection of the National Association of Pension Funds (hereafter NAPF collection), LMA; Crabbe and Poyser, *Pension and Widows' and Orphans' Funds*, 168–70; Gordon Hosking and R. C. B. Lane, *Superannuation Schemes* (London, 1948), 200–204; McKelvey, "Pension Fund Finance," 140.

[21] McKelvey, "Pension Fund Finance," 125.

[22] Colin Puckridge, "The Rate of Interest Which Should Be Employed in the Valuation of a Pension Fund and the Values Which Should Be Placed on the Existing Investments," *Journal of the Institute of Actuaries* 74 (1948): 17, 20, 21–22; McKelvey, "Pension Fund Finance," 163; J. Gilfrid Day and K. Muir McKelvey, "The Treatment of Assets in the Actuarial Valuation of a Pension Fund," *Journal of the Institute of Actuaries* 90 (1964): 136.

[23] Henry Lesser, introductory remarks in *Circular Letter 121: Report of the ASPF Autumn Conference, London, 25 November 1947* (London, 1947), 5, LMA/4494/A/04, NAPF collection, LMA.

[24] Hannah, *Inventing Retirement*, 74; Frank A. Comer, comment on Ross Goobey lecture "Pension Fund Investments," in *Circular Letter 255: Report of the ASPF Autumn Conference, Brighton, November 1956* (London, 1956), 27–40, LMA/4494/A/04, NAPF collection, LMA.

[25] F. W. Paish and G. L. Schwartz, *Insurance Funds and Their Investment* (London, 1934), 97–117; Peter Scott, "Towards the 'Cult of Equity'? Insurance Companies and the Interwar Capital Market," *Economic History Review* 55 (2002): 78–104.

[26] Harold Raynes, "The Place of Ordinary Stocks and Shares (as Distinct from Fixed Interest Bearing Securities) in the Investment of Life Assurance Funds," *Journal of the Institute of Actuaries* 59 (1928): 21–50; Harold Raynes, "Equities and Fixed Interest Stocks during Twenty-Five Years," *Journal of the Institute of Actuaries* 68 (1937): 483–507.

[27] Minutes of the British Insurance Association general purpose committee (hereafter BIA minutes), 28 June 1932, 19 Dec. 1932, CLC/B/017/MS29134, collection of the Association of British Insurers and Predecessors (hereafter ABI collection), LMA.

[28] Minutes of the Association of Investment Trusts general committee (hereafter AIT minutes), 10 Oct. 1932, CLC/B/018/MS38449, collection of the Association of Investment Trust Companies (hereafter AIT collection), LMA.

[29] Minutes of the British Insurance Association Investment Protection Committee (hereafter BIA IPC minutes), 12 Dec. 1949 and 9 Jan. 1950, CLC/B/017/MS29134A, ABI collection, LMA; AIT minutes, 26 Sept. 1949 and 20 Nov. 1950, CLC/B/018/MS38449, AIT collection, LMA.

[30] AIT chairman, lecture, AIT annual general meeting, 18 Nov. 1957, CLC/B/018/MS38449/1, AIT collection, LMA.

[31] Roberts, "Regulatory Responses"; Cheffins, *Corporate Control*; Gordon Hosking, comments in *Report of the ASPF Annual General Meeting 6 August 1953* (London, 1953), 14–16, CLC/B/018/MS38490, AIT collection, LMA.

[32] Hannah, *Inventing Retirement*, 19–21; L. A. Ellwood, "The National Association of Pension Funds: An Outline History," *Pensions World*, Nov./Dec. 1972, 63–66.

[33] Day and McKelvey, "Treatment of Assets"; Dennis Gilley and Dudley Funnel, "Valuation of Pension Fund Assets," *Journal of the Actuarial Students Society* 15 (1958): 43–68; Puckridge, "Rate of Interest"; Geoffrey Heywood and Max Lander, "Pension Fund Valuations in Modern Conditions," *Journal of the Institute of Actuaries* 87 (1961): 314–70.

[34] Puckridge, "Rate of Interest."

[35] Andrew Dyson and Jon Exley, "Pension Fund Asset Valuation and Investment," *British Actuarial Journal* 1 (1995): 421–69; Jon Exley, Shyam Mehta, and Andrew Smith, "The Financial Theory of Defined-Benefit Pension Schemes," *British Actuarial Journal* 3 (1997): 835–966.

[36] On the refusal by the Association of Superannuation and Pension Funds to establish the committee, see the minutes of the Association of Superannuation and Pension Funds (hereafter ASPF minutes), council meeting, 21 Jan. 1947, LMA/4494/A, NAPF collection, LMA; on the ASPF's

unwillingness to provide investment protection, see ASPF minutes, 14 Oct. 1948, 15 May 1949, and 30 Jan. 1950, LMA/4494/A, NAPF collection, LMA; on the ASPF's unhelpful response to members' issues, see ASPF minutes, 13 May 1946, 21 Jan. 1947, 14 Oct. 1948, 15 May 1949, 14 Oct. 1949, and 30 Jan. 1950, LMA/4494/A, NAPF collection, LMA.

[37] Reginald Edward Underwood, *The Elements of Actuarial Science* (London, 1922); ASPF minutes, 21 June 1947, and minutes of the ASPF annual general meeting, 23 June 1947, LMA/4494/A, NAPF collection, LMA.

[38] George Ross Goobey, comment on Underwood, "Widows' and Orphans' Pension Schemes," 17–18.

[39] ASPF minutes, 29 June 1949, LMA/4494/A, NAPF collection, LMA.

[40] Institute of Actuaries, *The Institute of Actuaries Yearbook* (London, 1945); Institute of Actuaries, *The Institute of Actuaries Yearbook* (London, 1946).

[41] Hosking and Lane, *Superannuation Schemes.*

[42] ASPF minutes, 14 Oct. 1949, 30 Jan. 1950, and 22 May 1950, LMA/4494/A, NAPF collection, LMA.

[43] ASPF minutes, 20 Oct. 1950, LMA/4494/A, NAPF collection, LMA.

[44] Ibid.; ASPF minutes, 31 May 1951, 19 Oct. 1951, and 18 Jan. 1952, LMA/4494/A, NAPF collection, LMA; BIA IPC minutes, 13 Nov. 1950 and 11 Dec. 1950, CLC/B/017/MS29134A, ABI collection, LMA.

[45] Minutes of the first meeting of council of the Society of Investment Analysts, 13 May 1955, uncatalogued records, CFA Institute, London.

[46] AIT minutes, 25 Sept. 1950, 21 Jan. 1952, and 21 Jan. 1957, CLC/B/018/MS38449, AIT collection, LMA.

[47] On the ASPF's reluctance, see letter from L. W. Kempe, secretary of BIA IPC, to H. Hanks, organizing secretary of the ASPF investment coordination service, 2 Sept. 1959, CLC/B/018/MS38490, AIT collection, LMA; on Price Waterhouse, see BIA minutes, 10 May 1934 and 8 Apr. 1957, CLC/B/017/MS29134, ABI collection, LMA; ASPF minutes, 31 May 1951, 19 Oct. 1951, and 18 Jan. 1952, LMA/4494/A, NAPF collection, LMA.

[48] ASPF minutes, 30 Jan. 1950, LMA/4494/A, NAPF collection, LMA.

[49] On Naish, see ASPF minutes, 16 May 1952 and 17 Oct. 1952, LMA/4494/A, NAPF collection, LMA; on the investment cooperation service, see *Report of the ASPF Annual General Meeting 6 August 1953,* 10; ASPF, *Circular Letter 166: Investment Cooperation* (London, 1952); ASPF minutes, 29 Nov. 1952 and 29 Jan. 1953, LMA/4494/A, NAPF collection, LMA.

[50] BIA IPC minutes, 14 Sept. 1953, CLC/B/017/MS29134A, ABI collection, LMA.

[51] ASPF minutes, 29 Jan. 1953, LMA/4494/A, NAPF collection, LMA; *Report of the ASPF Annual General Meeting 6 August 1953,* 15.

[52] Ibid.

[53] ASPF minutes, 22 Sept. 1953 and 1 Feb. 1954, LMA/4494/A, NAPF collection, LMA; and BIA minutes, 4 Dec. 1953, BIA IPC minutes, 14 Sept. 1953, CLC/B/017/MS29134A, ABI collection, LMA; AIT minutes, 5 Oct. 1953, CLC/B/018/MS38449, AIT collection, LMA.

[54] ASPF minutes, 15 Apr. 1954, LMA/4494/A, NAPF collection, LMA.

[55] *Report of the ASPF Annual General Meeting 6 August 1953*, 14.

[56] See Hannah, "Shareholders' 'Dog.'"

[57] BIA IPC minutes, 14 Nov. 1949, CLC/B/017/MS29134A, ABI collection, LMA.

[58] On collaboration with the AIT, see BIA IPC minutes, 14 Nov. 1949 and 12 Dec. 1949; on lobbying, see BIA IPC minutes, 13 Feb. 1950; BIA IPC minutes, 13 Nov. 1950, CLC/B/017/MS29134A, ABI collection, LMA.

[59] BIA IPC minutes, 10 Sept. 1951 and 8 Oct. 1951, CLC/B/017/MS29134A, ABI collection, LMA.

[60] A. Ross Goobey, *Money Moguls*, 72; *Institute of Actuaries Yearbook* (London, 1930, 1933, 1937, 1940, 1941).

[61] McKelvey, "Pension Fund Finance," 113.

[62] On Ross Goobey's employment at Legal and General, see *Institute of Actuaries Yearbook* (London, 1934 and 1936); Raynes, "The Place of Ordinary Stocks"; Raynes, "Equities and Fixed Interest."

[63] For example, George Ross Goobey, "The Use of Statistics in the Investment of Funds," *Journal of the Royal Statistical Society, Series C (Applied Statistics)* (1956): 2; George Ross Goobey, "Pension Fund Investments," *ASPF 1956 Autumn Conference* (London, 1956), 33

[64] A. Ross Goobey, *Money Moguls*, 72.

[65] Leslie Hannah, *The Rise of the Corporate Economy* (London, 1983), 190; B. W. E. Alford, *W. D. and H. O. Wills and the Development of the U.K. Tobacco Industry, 1786–1965* (London, 1973).

[66] "The Imperial Tobacco Company (of Great Britain and Ireland) Trust Deed and Rules Relating to Pension Fund and Saving Fund," 4 Apr. 1929, File 38169/HAF/20/4, Bristol Records Office, Bristol, U.K.

[67] Imperial Tobacco Company, Ogden branch, correspondence with the chief accountant of the Imperial Tobacco Co., file reference 380 OGD/1/7/7/9, Liverpool Records Office, Liverpool, U.K. (hereafter OC, LRO); on Imperial Tobacco's chief accountant, see A. Ross Goobey, *Money Moguls*, 72.

[68] "Imperial Tobacco Trust Deed and Rules," point 14.

[69] G. Ross Goobey, "Pension Fund Investment Policy."

[70] A. Ross Goobey, *Money Moguls*, 73; see also Corley, "George Ross Goobey"; Heywood, "Obituary," 20; George Ross Goobey, "Review of Investment Policy for the Pension Fund," appendix, 4 June 1957, LMA/4481/01/009, RGC, LMA.

[71] Offer letter from N. Sullivan, Imperial Tobacco Company, to Sir James Grigg, 25 Feb. 1947, File 12/1, P. J. Grigg Collection, Churchill Archives Centre, Cambridge, U.K.; Plender, *That's the Way the Money Goes*, 40–41.

[72] G. Ross Goobey, "Review of Investment Policy," appendix.

[73] George Ross Goobey, retirement lecture, National Association of Pension Funds, undated, uncatalogued records, RGC, LMA.

[74] *Institute of Actuaries Yearbook* (London, 1950, 1951).

[75] G. Ross Goobey, "Pension Fund Investments," 1956, 28.

[76] George Ross Goobey, comment on McKelvey, "Pension Fund Finance," in *Transactions of the Faculty of Actuaries* 25 (1957): 149; George Ross Goobey, "Pension Fund Investments" undated working paper of speech given at the ASPF 1956 Autumn Conference, Nov. 1956, 3, LMA/4481/01/007, RGC, LMA.

[77] Cheffins, *Corporate Ownership*, 354.

[78] A. Ross Goobey, *Money Moguls*, 73; Lewis G. Whyte, *Principles of Finance and Investment*, vol. 1 (Cambridge, U.K., 1949), 31; see also Heywood, "Obituary"; Plender, *That's the Way the Money Goes*, 40.

[79] G. Ross Goobey, "Review of Investment Policy," 1.

[80] See also Gilfrid Day, "Developments in Investment Policy over the Past Decade," *Journal of the Institute of Actuaries* 85 (1959): 139.

[81] George Blakey, *The Postwar History of the London Stock Exchange* (Oxford, 1993), 44–45; Wincott, "Cult of Equity," 4.

[82] James Grigg, "Notes by Sir James Grigg," 23 Aug. 1960, LMA/4481/01/10, RGC, LMA; see also Brian Paul Whitehouse, *Partners in Property: A History and Analysis of the Provision of Institutional Finance for Property Development* (London, 1964), 107–13; Gordon, *Two Tycoons*, 60, 71.

[83] George Ross Goobey, comment on B. C. Johnson, "Savings and Investment," in *NAPF Conference Report, Brighton 27 June 1970, Part 2* (London, 1970), 28–54, 50–52, LMA/4494/A/04/002, NAPF collection, LMA; George Ross Goobey, "So Simple to Manage Your Money," *Accountants Weekly*, 6 June 1973, 35–38.

[84] On 1947, see A. Ross Goobey, *Money Moguls*, 73; Plender, *That's the Way the Money Goes*, 40. On 1954, see G. Ross Goobey, "Use of Statistics," 5; on 1958, see "A Pension Fund's Policy: An Interview with the Manager of the Imperial Tobacco Pension Fund," *Financial Times*, 8 Dec. 1958; on 1961, see George Ross Goobey, "Pension Fund Investment," *Stock Exchange Journal* 7 (Winter 1961/2): 15-18, undated reprint 15-18, CLC/B/018/MS38490, AIT Collection, LMA.

[85] G. Ross Goobey, "Pension Fund Investment," 18; Blakey, *Postwar History*, 32–53.

[86] G. Ross Goobey, "Pension Fund Investment Policy"; see also correspondence from the assistant accountant at the Imperial Tobacco Company to the secretary of the Tuebrook Packing Case Co., 28 Oct. 1948, file reference 380 OGD/1/7/7/9, OC, LRO.

[87] George Ross Goobey, "The Effect of the Change in the Investment Policy of the Pension Fund, 2nd Draft," 1, LMA/4481/01/006, RGC, LMA

[88] G. Ross Goobey, "Pension Fund Investment Policy."

[89] G. Ross Goobey, "Review of Investment Policy."

[90] George Ross Goobey, "Notes on Investment Policy for the Pension Fund," LMA/4481/01/002, RGC, LMA.

[91] George Ross Goobey, "Note Prepared for Sir James Grigg to Endeavour to Reassure Him Why It Is Not Unsound to Sell a Security at a Loss," LMA/4481/01/006 RGC, LMA; George Ross Goobey, "Random Thoughts on the Timing of Exchange from Fixed Interest Securities to Equities," LMA/4481/01/001, RGC, LMA; G. Ross Goobey, "The Effect of the Change."

[92] ASPF minutes, 29 Jan. 1953, LMA/4494/A, NAPF collection, LMA; *Report of the ASPF Annual General Meeting 6 August 1953*, 8.

[93] ASPF minutes, 17 July 1953, LMA/4494/A, NAPF collection, LMA.

[94] ASPF minutes, 15 Apr. 1954, 6 Dec. 1954, and 4 Feb. 1955, LMA/4494/A, NAPF collection, LMA.

[95] Black and Coffee, "Hail Britannia?"

[96] ASPF minutes, 4 Feb. 1955; ASPF minutes, 5 Apr. 1955, LMA/4494/A, NAPF collection, LMA.

[97] ASPF minutes, 17 Sept. 1954 and 6 Dec. 1954, LMA/4494/A, NAPF collection, LMA; and 4 Feb. 1955.

[98] Kempe to Hanks, 2 Sept. 1959.

[99] Bedfordshire County Council (Superannuation) Bill, 23 Mar. 1954, House of Commons Session 1953–54, File CCV32/5, Bedfordshire and Luton Archives and Records Service, Bedford, U.K.

[100] Draft minutes of the Institute of Actuaries and Faculty of Actuaries Joint Standing Committee on Actuarial Practice, 4 Feb. 1955 and 4 Mar. 1957, uncatalogued records, Institute of Actuaries, London, U.K.

[101] George Ross Goobey, "The Pension Fund Valuation Rate of Interest," 19 May 1954, LMA/4481/01/003, RGC, LMA.

[102] Ibid., 1.

[103] Plender, *That's The Way the Money Goes*, 40.

[104] ASPF minutes, 24 Sept. 1954, LMA/4494/A, NAPF collection, LMA; ASPF minutes, 6 Dec. 1954, appendix 1; George Ross Goobey, "Pension Fund Investments," 4 Oct. 1954 ASPF minutes, 6 Dec. 1954, LMA/4494/A, NAPF collection, LMA ; ASPF minutes, 4 Feb. 1955; George Ross Goobey, "Pension Fund Investments," *Superannuation*, Apr. 1955, 4.

[105] G. Ross Goobey, "Pension Fund Investments," 1955.

[106] ASPF minutes, 4 Feb. 1955 and 5 Apr. 1955; ASPF minutes, 23 Sept. 1955, 19 Jan. 1956, and 6 Mar. 1956, LMA/4494/A, NAPF collection, LMA.

[107] On the recommendation, see G. Ross Goobey, "Review of Investment Policy," 1; Ellis and Vertin, *Classics*, 253. In the memorandum to the trustees dated 4 June 1957, Ross Goobey repeatedly states that the decision to invest in equities was made eighteen months previously, namely, at the end of 1955.

[108] G. Ross Goobey, "Review of Investment Policy," appendix.

[109] For 1957, see G. Ross Goobey, "Review of Investment Policy," 12; for 1958, see "A Pension Fund's Policy"; for 1961, see G. Ross Goobey, "Pension Fund Investment."

[110] G. Ross Goobey, "Pension Fund Investments," 1956, 34.

[111] George Ross Goobey, comment on John Gunlake, "Surplus or Deficit," in *Circular Letter 319: Report of the ASPF Autumn Conference, London, 22 November 1960* (London, 1960), 2–27, NAPF collection, LMA; G. Ross Goobey, "Pension Fund Investments," 1956, 29; G. Ross Goobey, comment on Underwood, "Widows' and Orphans' Pension Schemes," 17–18; G. Ross Goobey, comment on McKelvey, "Pension Fund Finance," 150; G. Ross Goobey, comment on Heywood and Lander, "Valuations," 355.

[112] G. Ross Goobey, comment on Gunlake, "Surplus or Deficit," 10–21.

[113] ASPF minutes, 22 Sept. 1960, LMA/4494/A, NAPF collection, LMA; G. Ross Goobey, comment on Gunlake, "Surplus or Deficit," 10–21.

[114] Roberts, "Regulatory Responses," 189; Bull and Vice, *Bid for Power*.

[115] David Clutterbuck and Marion Devine, *Clore: The Man and His Millions* (London, 1987), 53.

[116] AIT minutes, 13 May 1957, emphasis in original; AIT minutes, 18 Mar. 1957 and 3 May 1957, CLC/B/018/MS38449, LMA; Bull and Vice, *Bid for Power*; Clutterbuck and Devine, *Clore*; Cheffins, *Corporate Ownership*, 316.

[117] There were earlier examples of entrepreneurs using similar tactics for the purpose of retaining control following an acquisition. See Armour and Skeel, "Who Writes the Rules," 45–54; Cheffins, *Corporate Ownership*, 375; Hannah, "Shareholders' 'Dog,'" 237, 244.

[118] BIA IPC minutes, 10 Oct. 1955, CLC/B/017/MS29134A, ABI collection, LMA.

[119] Bull and Vice, *Bid for Power*.

[120] BIA IPC minutes, 12 Dec. 1955, CLC/B/017/MS29134A, ABI collection, LMA; ASPF minutes, 19 Jan. 1956.

[121] On the ASPF, see AIT minutes, 18 Mar. 1957; on the AIT and the BIA, see AIT minutes, 21 Nov. 1955, 16 Jan. 1956, 21 Jan. 1957, CLC/B/018/MS38449, LMA; BIA IPC minutes, 11 Feb. 1957, CLC/B/017/MS29134A, ABI collection, LMA.

[122] Roberts, "Regulatory Responses," 194–95; Issuing Houses Association, *Notes on Amalgamations of British Businesses* (London, 1959), 2.

[123] Kempe to Hanks, 2 Sept. 1959, 2.

[124] ASPF minutes, 17 Sept. 1956, 22 July 1957, LMA/4494/A, NAPF collection, LMA; Kempe to Hanks, 2 Sept. 1959, 2; on the payment, see ASPF minutes, 16 Apr. 1959, LMA/4494/A, NAPF collection, LMA.

[125] Kempe to Hanks, 2 Sept. 1959, 2.

[126] ASPF minutes, 14 July 1960, 6 Apr. 1961, 19 Oct. 1961, 20 Nov. 1962, 17 Jan. 1963, LMA/4494/A, NAPF collection, LMA.

[127] Minutes of the first annual general meeting of the Investment Protection Committee, 19 Nov. 1964, LMA/4494/A, NAPF collection, LMA.

[128] Minutes of the second annual general meeting of the Investment Protection Committee, 19 Nov. 1965, LMA/4494/A, NAPF collection, LMA.

[129] "Appointments: Mr. G. H. Ross Goobey joins board of Imperial Tobacco," *Financial Times*, 21 Mar. 1963; see also cutting saved at CLC/B/018/MS38490, AIT collection, LMA.

[130] Heywood, "Obituary."

[131] On the suggestion, see R. Minturn Sedgwick, "A New Pension Plan: Maximum Benefits at Minimum Cost," *Harvard Business Review* 31 (Jan./Feb. 1953): 70–82; on the rejection, see Day, "Investment Policy," 131; Dennis N. Warters and William M. Rae, "The Risks in Equity Investment for Pension Funds," *Transactions of the Society of Actuaries* 31 (1959): 920–75.

[132] William C. Greenough, *It's My Retirement Money—Take Good Care of It: The TIAA-CREF Story* (Homewood, Ill., 1990), 98–99.

[133] Ibid., 184–95; Sass, *Private Pensions*, 301–2; Black and Coffee, "Hail Britannia?" 2014.

[134] Jeremy Gold, "Accounting/Actuarial Bias Enables Equity Investment by Defined-Benefit Pension Funds," *North American Actuarial Journal* 9 (2005): 1–21; Julia Lynn Coronado and Stephen A. Sharpe, "Did Pension Fund Accounting Contribute to a Stock Market Bubble?" *Brookings Papers on Economic Activity* 1 (2003): 323–71.

[135] Eli Amir, Yanling Guan, and Dennis Oswald, "The Effect of Pension Accounting on Corporate Pension Asset Allocation," *Review of Accounting Studies* 15 (2010): 345–66; David Blake, "U.K. Pension Fund Management: How Is Asset Allocation Influenced by the Valuation of Liabilities?" Discussion Paper PI-0104, Pension Institute, London, 2001, www.pensions-institute.org/workingpapers/wp0104.pdf, accessed 16 Apr. 2015; Elizabeth C. Chuk, "Economic Consequences of Mandated Accounting Disclosures: Evidence from Pension Accounting Standards," *Accounting Review* 88 (2013): 395–427.

[136] Black and Coffee, "Hail Britania?" 2014.

[137] Hannah, "Shareholders' 'Dog.'"