Professionalization in Pensions and the U.S. Economy: A Chandlerian Framework for the Post-Chandlerian Age

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Alfred Chandler's analysis of the rise of managerial capitalism is today the dominant synthesis in U.S. business history. In the last two decades, however, stagnation has overcome the hero of the piece-- American big business. No longer do Chandlerian managers and administrative structures dominate the national business scene. Seizing the initiative are traditional entrepreneurs and financiers, of whom we hear much, and a new class of professionals, of whom we hear little. Professionals nevertheless grew from 8.7 to 14.9 percent of the work force between 1950 and 1970, while the share of managers actually declined from 8.8 to 8.3 percent [8]. This paper sketches the rise of the professionals in the pension business and then explores the implications of this development for the broader Chandlerian synthesis.[1]

Through the first half of the twentieth century, the private pension was a perfectly Chandlerian institution. Pensions were an instrument of personnel policy found almost exclusively among managerial enterprises, and the business of handling such programs became the domain of giant firms-- the nation's largest insurance companies. From the second half of the century forward, however, this Chandlerian structure was tipped out of balance. Corporate sponsors enlarged their role in pension programs. But instead of farming out the remaining tasks to integrated managerial enterprises, they turned increasingly to a network of specialized professional service firms. The triumph of this professional sector is the focus of this paper.

The insurance companies had created the pension business in the late 1920s and for twenty years defined the industry state-of-the-art. Their flagship "group deferred annuity" contract, which relied on voluntary employee contributions and corporate subsidies, delivered a reliable income upon retirement. This plan involved six operating functions: plan design, cost calculation, underwriting, marketing to employees, investing assets, and keeping the books. But in the 1950s, sponsor demand for underwriting, bookkeeping, and employee marketing declined sharply while interest in design, costing, and investment services expanded dramatically. This shrinkage in the number of extra-corporate services, the intensified demand for those

[1] I would like to thank the Pension Research Council of the Wharton School, University of Pennsylvania, for supporting my research on the history of the private pension institution. This article derives from chapter 9 of the manuscript history I am preparing for the P.R.C., copies of which are available upon request. The chapter, in turn, owes much to the work of James McNulty, to that of Oliver Williamson [9], to modern managerial agency theory as explicated in John W. Pratt and Richard J. Zeckhauser [6], and, of course, to the work of Alfred D. Chandler, Jr. [5].

BUSINESS AND ECONOMIC HISTORY, Second Series, Volume Eighteen, 1989.
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still needed, and the separability of these remaining functions, radically changed the industrial organization of the pension business.

Demand for external risk bearing, the most important service suffering a loss of interest, declined for a variety of reasons. Playing a central role was the New Deal's restructuring of U.S. labor markets. The creation of Social Security radically undercut the need for the carriers' ultra-secure products while the Wagner Act allowed the unions to emerge and replace the carriers as guarantors of labor's accrued pension benefits. The demand for pension insurance also fell sharply because the risks the carriers underwrote turned out to be relatively trivial (as in mortality or administrative expense) or the protection they provided was minimal (as in their interest rate guarantees). The carriers, on the other hand, could not underwrite the more volatile turnover and salary scale factors or the key and potentially catastrophic risk of inflation. The two other externally-supplied services in decline, record keeping and employee marketing, had been critical to the success of the insurers' voluntary, contributory pension programs. With the decline of insurance in the 1950s, and the shift to universal, noncontributory arrangements, demand for these ancillary services also fell away [6, pp. 23-24].

While the need for external insurance, administration, and marketing declined, that for design, actuarial, and investment services climbed sharply after 1950. Sponsors awakened to the possibility of tailoring pension funding to their overall business situation. By controlling pension expense and contributions, employers could influence the pattern of cash flows, tax liabilities, and reported earnings. Benefit offerings also grew increasingly complex, especially with the expansion of early retirement allowances in the mid-1960s. To complicate the benefit package and adjust contribution flows while simultaneously complying with IRS regulations required highly sophisticated design, actuarial, and financial skills. Pension investments also came to involve far more developed services after 1950. Only then did the plans move into common stock investments. In subsequent decades pension investments spread to real estate, foreign securities, and various ventures with high risk/high return profiles. This broadening universe of assets, and the interaction between pension and corporate finances, made investment management a far more intricate task. The future of the pension business thus lay in provision of high-quality design, actuarial, and financial services--in the efficient delivery of professional business skills.

The insurance companies, which had to retreat from risk bearing, record keeping, and marketing activities, did possess well-developed design, actuarial, and investment facilities. Extracting themselves from existing insured pension contracts and adapting their operations to the self-insurance regime was a difficult, decade-long process. But by the early 1960s, the major carriers offered sponsors pension arrangements completely devoid of insurance, bookkeeping, and marketing services; they would design, cost, and then invest pension funds across the full range of assets. They continued to present themselves to employers as large, vertically integrated suppliers of pension services. But by 1960 they faced vigorous and well-established competition from a disintegrated alternative: consulting actuaries and an assortment of financial managers, ranging from bank trust companies to individual investment advisors. The actuaries did not manage investments; and

the investment companies never developed sophisticated actuarial or plan design capabilities. And within the investment function, sponsors engaged an increasing number of firms offering both similar and disparate services. The competitive struggle thus became a fight between an integrated and a disintegrated solution to pension provision.

When pension plans had required six closely interconnected services (among them risk-bearing), the large, vertically integrated insurance enterprise had been the most efficient provider. The complexity of an insured pension system required transactions among the various functional specialists to proceed in a clear and consistent manner. In practice this meant defining a limited number of pension programs, work-flow processes, and ways of doing business. Investments specifically designed to facilitate these programs-- in physical, spatial, and human capital-- greatly increased the through-put, and thus the efficiency, of pension provision. A central managerial authority could define such pattern programs, maintain work flows and performance standards, avoid monopoly, and clear up errors far more effectively than a collection of independent suppliers. Thus the central direction of six closely and simultaneously interacting services, each involving transaction-specific investments, saved time and avoided conflict and confusion. While these factors promoted managerial coordination, hierarchic administration was feasible because the various pension services were relatively routine. The standardized group annuity programs involved only moderate adjustments in design, actuarial evaluation, underwriting, marketing, and record keeping services. With assets legally restricted to conservative, fixed-income securities, investments required similarly routine credit reviews.

Prior to 1950, providers that were integrated horizontally as well as vertically again proved most efficient. Underwriting displayed particularly clear economies of scale, for risk declines monotonically as the number of cases rises. Offering an integrated package of six services, each at a significant level of competence, also meant that a carrier needed a reasonably large pension staff, organized as a separate division, and a comparably large pension business. Thus a small number of giant Chandlerian carriers provided group annuity plans to large corporate employers.

The decline of external risk-bearing in the postwar period, and the restructuring of the remaining pension services, undermined the value of both horizontal and vertical integration. Where sponsors decided to retain primary plan risks, economies of scale in risk bearing no longer expanded the optimal size of external providers. And while the coordination of six interrelated services was best achieved through managerial control, this was not so much the case in the coordination of two or three professional activities. Providers of plan design and actuarial costing were in close and constant contact, and transactions between these services did benefit from organizational integration; delivering the two functions together became the role of the consulting actuarial firms. But there were few connections between investment decisions and this design and costing cluster. Actuaries merely needed to know the size of the plan's assets and its rate of return, while investment managers had to be informed of cash flows of the pension fund. Such information could be communicated quickly and infrequently, without complex interactions or transaction-specific investments. The transactions between actuaries and

investment managers thus had little to gain from direct coordination or integration into a common enterprise [6, pp. 94, 101].

There also were forces in the postwar period driving the pension industry asunder, just as earlier there had been pressures for integration. Plan design and costing remained intimately connected in the self-insurance regime. But there were reasons to disassociate this task cluster from the investment function. In the first instance sponsors wanted the greater flexibility it provided. Should an employer wish to drop its investment manager, for example, this was far easier to accomplish if the sponsor had no continuing design and actuarial relationship with the firm in question. A second reason for two-stop shopping was to avoid a conflict of interest inherent in the combination of services. The income of the investment company, whether insurer, bank, mutual fund, or money manager, was typically a function of the amount of assets managed. But the timing of pension contributions and the size of the asset pool was the province of the sponsor's design and actuarial advisor. As most employers wanted to minimize their current payments, they were thus uncomfortable using designers and actuaries supplied by their investment firm. Actuaries and investment companies developed informal alliances and referral networks. But these ties were quite volatile and did not lead to strong associations, let alone formal mergers [6, pp. 11, 66].

In the postwar period there likewise were forces acting to disintegrate the industry horizontally. Most important was the enormous array of options opened up by the release from insurance and the need for custom professional service to make the most of the new opportunities. Self-insurance gave sponsors freedom to design plans that fit their financial and human resource profiles. Firms developed unique if not idiosyncratic financial and personnel contours, as their capital and labor policies were peripheral to their more basic, more logically constructed production and distribution policies. Corporate personnel and financial officers, who understood the intimate details of these ancillary areas, also in the 1950s were replacing top management as the formulators of pension policy. Making use of their expertise and developing pension programs that made the most of the new options required careful attention. And as firms were constantly changing (as was the body of Internal Revenue regulations, a critical environmental constraint), their plans needed such consideration on a continuing basis. Prior to 1950, when the emphasis was on security, it was advantageous to fit the plan to the requirements of the service provider. But in the more confident postwar era, greater benefit flowed from fitting plans to the needs of the corporate sponsor [6, pp. 11, 66].

The value of customizing the financial side of a pension program to corporate financial requirements became increasingly apparent toward the end of the 1950s. Chief financial officers began recognizing the impact of pension contributions and investment income on the firm's taxes, reported income, and overall financial position. CFOs came to appreciate the flexibility in pension funding and began to view their plans as a manageable liability. As a source of short-term funds or an outlet for investment, the pension provided valuable financial slack. CFOs held greater sway in the corporate hierarchy than personnel directors, and they often assumed control over major plan decisions. As these financial managers could converse more fluently with their actuarial

consultants, pension planning became far more sophisticated and customized. James McNulty thus observed, at the end of the 1950s, "sophisticated manifestations of the trend towards weaving pension affairs into the total financial strategy of the firm" and the intent to make pension finances "a function of the venture position of the sponsoring firm" [6, pp. 48-49, also see pp. 14-16, 36-40].

To provide the intensive "local processing" that was needed to customize a pension plan, service firms had to delegate a great deal of discretion to professional personnel. As plan design became sophisticated and individualized, it thus became a horizontally disintegrated, client-centered practice. The major insurance companies, servicing large numbers of plans, could hardly monitor or motivate such providers, and they proved to be inefficient suppliers of custom pension services. The work of a carrier was typically too poor to satisfy a large corporate client and too expensive for the smaller employer. But the consultants operated like standard professional firms, using short hierarchies, limited managerial control over the work process, and compensation matched closely to market value. Companies sticking to this decentralized consulting model, such as the Wyatt Company, grew extremely quickly through both internal growth and external acquisition. Firms pursuing a more centralized or more narrowly actuarial strategy, such as the Buck Company, expanded at a slower pace. And all around the country, a cottage industry of small pension consulting and actuarial shops sprang up to provide custom service to small and mid-sized sponsors.

The primary advantage of size in the consulting business, at least in the 1950s and 1960s, was in marketing and market visibility. While such advantages accrue to any large enterprise, regardless of its business, visibility and marketing efficiency were especially advantageous in the subterranean world of pension planning. But in the control and performance of the work itself, a closely-coordinated large scale operation was now decidedly disadvantageous. Many of the insurance industry's best pension actuaries thus left the carriers to join the more efficient and higher-paying consulting firms. The insurers' consulting pension actuary departments shrunk as a result in size and importance. The Equitable, the major carrier in the postwar pension industry, would abandon this activity entirely in the early 1980s. Even in the 1960s, insurance companies had come to emphasize their investment, not actuarial, prowess.

Managerial enterprise did find greater success in the period after 1960 in the field of investments. By diversifying its portfolio, a large asset pool could significantly reduce risk without lowering expected yield. A big investment fund also could afford to employ a competent, well-trained staff. Such was the argument made for insurance company investment services--whether through a group deferred annuity contract or a separate investment fund. The carriers' proficiency in mortgages and direct placements indeed resulted in a consistently high yield in fixed-income investments. Also claiming the advantages of pooled, managed investments were trust company commingled funds and the increasingly popular mutual funds.

But even in the area of investments the tide was turning against the large bureaucratic providers. As in other parts of a pension program, the big plans with large pools of assets captured much of the risk reduction available

through portfolio diversification. These funds were large enough to justify their own full-time management. And having captured these key economies of scale, sponsors then sought to customize their portfolios. They often developed close relations with their bank trustees and directed plan investments to suit their own tastes, liquidity needs, or larger business strategies. Given the proper legal release from their statutory fiduciary responsibilities, trustees were reasonably responsive to sponsor direction; if they were not, sponsors could find new trustees. And as was the case in plan design, sponsors increasingly sought out sophisticated investment counselors to provide custom financial advice. Such professional advisors assessed factors such as the plan's liquidity requirements, the sponsor's risk tolerance, cash flow needs, and tax strategies. They then integrated these factors into a pension investment program. Such custom analysis and synthesis required a great deal of time, discretion, and expertise, and was best carried out by an experienced, independent individual. And whether operating their own companies or working in decentralized trust company settings, they quietly stole the march on bureaucratic investment operations that inevitably remained distant from particular plan sponsors [3; 4; 6, pp. 41, 73ff].

A comparable disintegration was developing simultaneously in the area of pension investment per se. Just as self-insurance had expanded benefit and funding options, the movement into equities in the 1950s opened the range of investment choice. As long as pension investments were largely limited to government securities and collateralized, fixed-income assets, selecting and monitoring securities had been a relatively routine activity. But common stock carried no collateral. And as a claim on a residual income stream, the performance of equity depended critically on a host of factors. Common stock investment thus required careful, continuous attention. When plan managers first moved into equities, they generally picked their own stocks or relied on their trust company's list of recommended securities or its commingled common stock fund. But by the end of the 1950s stock selection had become unduly burdensome for a corporation's busy treasury department and too treacherous an activity for its career officials. Investment counselors in the meantime were pressing pension mangers to abandon their conservative equity positions and adopt more aggressive financial strategies. These advisors suggested investing with the newly developing growth-oriented mutual funds and money managers. Pension executives, increasingly, responded to this advice. As they did, they discovered, then stimulated, the growth of a maze of funds and money managers. Each of these specialists tracked a specific investment strategy, focused on an individual industry or region, or followed securities with particular financial characteristics. All claimed above-average performance, which they attributed to their sagacious choice of investment strategy or market niche, or to some personal genius [4; 6, pp. 41-43, 46, 75].

Sorting through the claims of investment managers was difficult. Nevertheless pension sponsors, especially those with the larger plans, increasingly turned control of their investments over to such small-scale advisors. The success these specialists achieved derived from the intensive local processing they applied to their particular investment areas. But coupled with this promise of higher returns was higher risk growing out of myopia and limited diversification. Large plans found that they could capture the higher

returns of specialization, while avoiding much of the risk, by retaining responsibility for basic asset allocations and spreading investments across many such small money managers. Large banks, insurance companies, and mutual funds could likewise capture the advantages of local processing by decentralizing their operations and giving a large number of on-line money managers significant operational discretion. As managers could handle only so many clients or so much money, there were significant limits on the scale of an operation. Successful managers and funds thus limited the number of investors they served or amount of money they accepted by rationing allocations or by raising their compensation. As pension funds and their financial intermediaries adopted this strategy of diversified local processing, the investment industry became far more individualized and disintegrated. Managing pension portfolios had become a complex, ever-changing activity that was hostile to vertical, hierarchical supervision [2; 6, pp. 74, 78-79].

As sponsors assumed the risks in their plans, the business became populated by small professional offices. Actuarial consultants had by 1960 largely taken charge of plan design, costing, and funding policy, and the reorganized insurance companies never mounted a successful challenge to their hegemony. Professional specialization in investments came later and is perhaps still advancing. Unlike the insurance companies, these new organizations sold services rather than products; they contracted with the sponsor to be honest, diligent, and expert, not to deliver specific streams of income. But unlike the sponsors' own employees, who also contracted to provide labor services, these professionals maintained a great deal of control, if not complete autonomy, over the work process. The relationships that sponsors developed with these agents, and especially their mechanisms of monitoring and influencing performance, were far from simple. The structure of these agency relationships-- a subset of the interfirm transactional relationships upon which Chandler's analysis turns-- are thus critical components of the new pension institution [7, pp. 1-35].

With their actuarial consultants, sponsors typically developed tightly-intertwined, long-term relationships. Such bonds developed out of the close interactions and shared confidences that accompanied the design of customized plans. But this very complexity and uniqueness made it difficult for employers to evaluate the service received from their consultants. Designing and costing a pension plan was an esoteric practice that few sponsors were equipped to review. And the idiosyncrasy of the typical plan obstructed comparison with others done in the field. Like principals in other agency relationships suffering from such high monitoring costs, sponsors adopted a high-compensation/long-term relationship strategy to control their consultants. They paid inordinately high fees, holding out the promise of more in the future, thereby creating a performance bond precisely analogous to a discretionary pension. Should the sponsor become dissatisfied, the consultant stood to forfeit this future stream of surplus compensation. In the great majority of cases this premium pay retained the consultant's continuing loyalty and energy. Pension consulting thus became a lucrative and stable business not just for the sophisticated skills it demanded but due to the nature of its agency relationships [1; 6, p. 98].

Sponsors developed a radically different arrangement with their money managers. This was not because investing was a less complex activity. The difference instead grew out of the limited interaction between money manager and sponsor and, more importantly, out of a sponsor's superior ability to evaluate performance. While employers were never quite sure what they wanted from their actuaries, the basic investment output was well defined: a good rate of return. Sponsors had reason to prefer Smith if he earned nine percent and Jones just seven. Extenuating circumstances always clouded the issue: Jones's industry was depressed, and he had the best performance of all money managers in that area; Jones outperformed Smith over the past five years; or Jones had steadily produced seven percent while Smith's results varied substantially from year to year. But despite these complications, sponsors had a quantitative measure upon which to base their evaluations. And because of this monitoring ability, they built their agency relationships around periodic reviews of performance. Their most successful managers would get more assets to invest; those who had done poorly would get less or perhaps be replaced by a promising new operator. Compensation generally was tied to reputation and the size of the asset pool managed, so a money manager's income came to track these performance measures. But as investment returns were notoriously volatile, both tenure and compensation in the money management business was highly erratic.

Sponsors thus cultivated with their actuaries long-term ties characterized by high and stable compensation. With money managers they developed fickle relationships paying enormously volatile incomes. Banks, mutual fund operators, and insurance company pension investment departments had similar agency problems, and their solutions approximated this market pattern. To attract and retain the attractive money managers, and to eliminate the others, tenure was transitory and compensation highly volatile. And lest these arrangements interfere with the career-oriented employment relationships cultivated elsewhere in the firm, banks and insurance companies isolated their investment operations in separate departments [2].

In both the design and investment portions of the pension business, the specialized professional firm thus has supplanted the giant Chandlerian enterprise. Such firms emerged as the dominant players because they were most efficient in delivering intensive, custom local processing of complex business problems. In each case sponsors then developed special relationships to control these independent service providers. Should trends in the pension industry be representative, the broader professionalization of the U.S. employment structure poses an important challenge to managerial capitalism.

The Chandlerian synthesis is nevertheless far from dead. It is important to note that professional firms in the pension industry primarily served giant Chandlerian corporations. Among smaller firms-- including professional enterprises-- pension programs are more likely to use standardized products that are mass produced and mass distributed by giant hierarchic organizations. The popularity of 401(k) and 403(b) plans in the professional sector (such as TIAA/CREF in academe), is a case in point. Professional service firms are thus complementary as well as competitive with giant enterprise, and the expansion of the professional firms appears to be self-limiting.

Professional firms, moreover, are now growing rapidly and evolving big business-like structures. They are enlarging operations in existing specialties as well as moving into collateral areas. In pensions this is especially apparent in the evolution of the design and actuarial specialists into employee benefit and, in some instances, general compensation advisors. These firms are expanding because there are significant interconnections among the various employee benefits and between benefits and the larger compensation package. Common actuarial, legal, and financial expertise is needed to address these various issues. For analogous reasons, legal and accounting firms servicing the pension industry also are growing.

Professional firms becoming big businesses may represent a new hybrid genre of "managerial" enterprise. The firm handles "overhead" functions such as advertising, recruitment, and training. But the professional work itself remains esoteric and thus resistant to the layers of supervision and close coordination that characterize the Chandlerian firm. To a significant degree professionals still control the work process and claim much of the residual income, or profit, from their labor. (This is analogous to another fast-growing hybrid organization, the franchising enterprise.)

The professionalization of traditional managerial enterprise, as in high-tech manufacturing, also requires adaptations to the new mode of production. The reason why high tech firms become large and vertically integrated (when they do) increasingly may be found in the fleeting newness of their businesses more than in the economizing of stable transaction costs or through-put efficiencies. Here we extend Chandler's analysis of the rise of big business in producers' durables: introducing a major piece of equipment into the economy requires the production of custom components and continuing installation, training, and support services. Likewise the trading companies of early modern times were vertically integrated because they need inputs unavailable in the marketplace; if they did not supply such goods or services themselves, they could not produce their particular output. In the postwar period, professional work has become a primary locus of technical change. New products and processes continually emerge out of modern professional activity, and capitalizing on these innovations often requires vertical integration into collateral areas.

In high tech manufacturing and many business and financial service areas, the pace of change has turned turbulent. So short and unpredictable are product life cycles that management decentralization often becomes difficult if not impossible. The unstable environment, and the volatility contributed by professional creativity, has undermined the basic instrument of managerial control-- the budget. Thus high tech manufacturing firms and high flying business and financial service companies often fit neither of the two main paradigms in Chandler's synthesis: they are neither decentralized and diversified M-form corporations nor classic centralized enterprises.

The history of a professionalized U.S. economy clearly involves movement beyond the Chandlerian synthesis as received. The giant enterprise remains on the scene, but it no longer occupies so central a place and it is currently assuming novel forms. The history of the professionalized economy nevertheless should be written as an extension of the Chandlerian accomplishment. The categories Chandler brought into business history,

essentially Williamson's transaction cost economics, prove to be remarkably robust in the analysis of professional enterprise. The analysis of the professional sector moreover revolves around two issues that have always been basic subtexts in Chandler's work. Max Weber defined capitalism as economic rationalization, and Chandler's history of managerial enterprise is essentially a history of this process. Professionalization, if nothing else, is an extension of this drive toward rationalization. Finally, Chandler was most concerned with the Schumpeterian problem of innovation and its routinization in big businesses. In studying the professionalized economy, innovation and its routinization remain our central analytical concerns.

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