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Lessons from the Early Development of Public Pensions

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Chapter 11
Lessons from the Early Development of Public Pensions

What explains the timing of the establishment of public sector pensions and the adoption of specific provisions that influenced the behavior of public sector workers? As with any social science question, a definitive answer is not easily achieved. Any number of social and political factors could contribute to the explanation, and the offsetting effects of many of these factors could contribute more in the way of obfuscation than illumination. While acknowledging the importance of these broad and complex social factors, this volume focuses primarily on the *economic* factors that influenced the timing and character of public sector pensions over the past two millennia or so. Old age, retirement, and disability pensions were contractual arrangements between workers and the state. Hence, any analysis of these pensions will be colored by the economics of contracting between agents in the labor market. Various exogenous factors such as war between England and France or the American Revolution alter the prices and/or constraints of one or both parties to the pension contract. In reviewing the history of public sector pensions in this light, four major conclusions concerning the development of public sector pensions in the United States can be reached.

First, as with any contractual arrangement, monitoring costs played a crucial role in the timing and characteristics of public sector pensions. In no case was this issue more important than in determining the historic difference between the compensation of army and navy personnel. Because land forces were inherently easier to monitor than those at sea, governments explicitly compensated their naval forces with share contracts and the shares were paid from prizes. While prizes in the form of plunder and rapine had long been a feature of the compensation of land forces and were recognized as such by the laws of war and sound military doctrine, unlike the naval prize system the exact terms of these contracts were seldom explicitly determined. More importantly, the sacking of towns to compensate the troops experienced a period of long-run decline at exactly the time when the capture, adjudication, and liquidation of naval prizes reached an apex. Since the pension was part of overall compensation, it makes sound economic sense to tie the pension to prizes just as other compensation was tied to prizes. Starting with the medieval Danish kings and proceeding through the U.S. navy pension fund, which lasted until 1936, monies from the sale prizes paid Western naval personnel on duty, while disabled, or after retirement for a thousand years, a venerable institution indeed.

Second, for some time after their advent, funded pensions presented their trustees with a series of moral hazards and administrative problems that in some cases were not overcome and in others were only overcome fairly recently. With respect to both of these problems, the U.S. navy pension fund offers what could arguably be considered an example without peer. Fund managers faced two important moral hazards. One was the result of the absence of oversight of government and quasi-government accounts in the early republic. In the absence of standard accounting procedures, low-cost information technologies, and stringent reporting requirements, the managers and agents of the navy pension fund appear to have succumbed to the temptation to manipulate its accounts to their personal advantage. The second moral hazard faced by the navy pension fund was the asymmetry between the burden of losses and gains from the fund's risky assets. If the assets proved to be profitable, then the fund's beneficiaries (and to an extent its trustees and managers) stood ready to reap the rewards of those gains. If, however, the assets collapsed, then the fund simply turned to the Treasury to make its claimants whole. It proved to be a poor bargain for taxpayers.

The early pension fund trustees also faced major administrative problems associated with the management of a pension fund. There was little precedent for managing a pension fund. Private and public accounts were maintained only in the loosest sense of the terms. Considerable effort was needed to reassemble and value the assets of the navy pension fund. Recall that the fund was required by federal law to submit its accounts to Congress annually. Those accounts of pension fund activity remain part of the public record of the United States, although the estimates presented in this volume should be considered only educated guesses at the cash positions of the fund during the nineteenth century. In addition to the accounting and reporting problems encountered by the fund's managers, acquiring politically acceptable, blue chip assets proved to be a bit of a problem as well. The U.S. government retired its outstanding debt during the fund's heyday and the fund turned to high-risk private equities and ultimately insolvent state debt. The two leading candidates for high-quality equity shares were stock in the Bank of the United States and British government debt. Both were politically unacceptable due to various forms of opposition. The Bank of the United States was perceived to be a Federalist institution in an age of

Democratic ascendance. As for British consols, there were no bluer chips in Western finance, but the fact that the fund had been largely built with the blood of U.S. seamen on the decks of British prizes during the War of 1812 proved an insurmountable obstacle. British atrocities on land during the war did not help the case. Thus, the fund may have been ahead of its time or may simply be a lesson for those who wish to "privatize" assets that are irrevocably dedicated to paying "public" liabilities.

Third, there was a tremendous growth in public sector pensions at the local level in the early part of the twentieth century. This growth was the result of two fundamental features of public finance and political economy in the United States. The first feature is a function of the financial and hierarchical relationship between the various political units. The federal government creates states; states create minor *and subordinate* political units, like counties, cities, airport authorities and so forth. When the state creates a city, the state is essentially agreeing to share its tax collecting monopoly with another political unit. In return, the state expects the municipality to provide a set of public services. In many states, the city, town, or village must offer a certain number of such services in order to maintain a municipal charter. In addition, should the public entities created by the state become bankrupt, the state is ultimately the receiver of the bankrupt entity. This is a costly political crisis that no state legislature would like to encounter. Hence, the states constrained and encumbered the finances of the subordinate political units they created. A municipality or local school board was not typically at liberty to make promises to workers, collect revenues at will, and set the monies aside in a fund to be managed by municipally determined trustees. As the "politicians of last resort" should anything go wrong with this process, state legislators were careful to spell out the conditions under which minor political units could promise a pension, collect revenues for its payment, and manage any surplus that might result. Thus, it was ultimately enabling legislation at the state level that led to the rapid growth of public sector pensions in the early decades of this century.

What factors stimulated the state governments to enact legislation allowing the establishment of pensions by municipalities? Here the answer lies in the political economy of public sector employment. The late nineteenth and early twentieth centuries saw the beginning of the demise of patronage at the lower levels of public sector employment. Workers might still be hired because of their family's party affiliation and political connections, but increasingly subsequent employment at city hall, or the War Department for that matter, did not depend on which party controlled the mayor's office or the White House. Thus public sector employment became lifetime employment, and by converting patronage positions to what were essentially life tenured public jobs created an enormous opportunity for the party that could take advantage of it. Once the conversion from grateful patron to civil servant was well underway, public sector administrators realized that many workers would remain on the public payroll until they literally died on the job. As a result, implicit long-term contracts with public employees became the norm. The new employment relationship was one in which in exchange for a formal pension as a component of compensation, workers accepted mandatory retirement policies as a condition of employment.

Fourth, and finally, there is a need to consider the impact of the dramatic increase in public sector pension coverage in the early twentieth century. The early decades of that century saw a very rapid expansion in the share of public sector workers covered by a pension in the United States. This was also the period of rapid expansion of private sector plans (Ransom, Sutch, and Williamson 1991, 1993). Curiously, the impact on the labor force from this dramatic change is not as straightforward as one might think. On the one hand, we might logically expect that more pension coverage would lead to more retirement. Higher retirement income should lower the labor force participation rates of older workers. Another way of stating this would be to say that the accumulation of pension wealth might have increased the demand for leisure in old age; that is, pension income provides older workers with the opportunity to consider retirement as a viable option. Economists would call this an income effect.

On the other hand, the value of the pension typically grew with time on the job. At the margin, the possibility of accumulating more pension wealth by staying on the job increased the price of leisure. As the price of a good increases, typically people consume less of it. This is particularly true if the pension were conditional on the worker remaining with the firm up until the specified retirement age. Workers might lose the entire pension if they left government employment too soon. Economists would call this a substitution effect. After a person reaches retirement age, the accrual of further pension wealth drops sharply, thus encouraging retirement at this time. So the income effect suggests a decline in labor force participation at older ages, while the substitution effect suggests that workers first remain on the job until the retirement age and then leave after attaining that age. In fact, during the first few decades of the century, there was an upward trend in the labor force participation rate of older workers (Ransom, Sutch, and Williamson 1991, 1993). This finding suggests that the substitution effect of these early pensions overwhelmed the income effect, and thus they tended to induce older worker to stay on the job longer than they otherwise would have. While this seems slightly paradoxical at first glance, it might go a long way toward explaining why many early plans had mandatory retirement provisions. To the extent that these public sector pensions kept good workers on the job and rewarded them after they retired, it can be concluded that they represent an example of sound public policy.

Although the aggregate evidence suggests that the labor force participation of older men rose slightly at the time public sector pension coverage was expanding rapidly in the United States, the issue of cause and effect is somewhat more complicated. The basic theoretical question is, *ceteris paribus*, did an increase in pension wealth lead to an increase in time on the job? Dora Costa (1994) has explored this and other related questions, in considerable detail. Her evidence suggests that the income effect was large and that it probably overwhelmed the substitution effect. She estimated that the income elasticity of retirement (that is, not participating in the labor force) was between 0.50 and 0.73; that is, a one percent increase in income led to a roughly one-half percent *decrease* in the labor force participation of older men, controlling for other factors. The size of this effect is considerably larger than recent estimates of the retirement elasticity of Social Security (Costa 1994). The decline in the size of the income effect is probably the result of the increase in the quantity and quality of leisure activities. In other words, the real, quality-adjusted price of leisure has fallen, and the willingness of older workers to change their labor force participation in the response to a change in retirement income has fallen as well.

Lessons for the Twenty-First Century

While this analysis of the development of public sector pensions is primarily an economic assessment of the history of these plans, that history provides a set of lessons for policymakers in the twenty-first century. The dominant public sector pension issue of the new century is how to modify Social Security to the new economic and demographic realities. Optimal policy depends on a careful assessment of the risk of changing Social Security from a defined benefit plan to a defined contribution plan, and whether individually or collectively, the account balances of the system should be invested in assets other than government bonds. The history of the navy pension provides a unique opportunity to examine how a government pension fund was managed in the early days of our republic. The operations of the fund merit careful review by those interested in reforming the modern Social Security system.

The history of the navy pension fund shows that when given the opportunity to invest pension funds in private equities, the trustees devoted a substantial share of these funds to the stock of local politically connected banks. In the short run, these equities provided a somewhat higher return than at least some alternative investments; however, each of the institutions ultimately failed. This brief experience illustrates the well-known higher risk associated with private equities compared to government securities, a relationship that has frequently been considered in conjunction with proposals to devote some of the Social Security trust fund to the stock market or to allow participants with individual accounts in a revised Social Security program is to have a broad range of investment opportunities.

In addition to the inherent riskiness of equities relative to debt instruments, the risk-return choices of the navy pension fund managers were questionable. They did not purchase high-quality stock in the First or Second Bank of the United States. Ignoring these opportunities seems to have been related to political pressures; those banks were part of Federalist, and later Whig, policies during an age in which Democrats dominated the White House. Another aspect of proposed reforms of the contemporary Social Security program is whether investments would be targeted toward socially desirable investments and away from companies deemed to be "poor citizens." Many countries use some of their pension funds to support government projects and economic development that may mean lower returns for participants. The history of the navy pension fund indicates that such political involvement in investment decisions can cost the fund the opportunity for higher returns.

The issues surrounding the operation of the fund and the use of agents as investment managers also provide some guidance for today's debate. Evidence indicates that the operations of the pension fund had a rather high administrative cost in absolute terms, and they certainly were high relative to purchases of readily available government debt. Several analysts have pointed out the high administrative cost of individual accounts compared to the continued management of the existing Social Security trust fund.

Another type of risk that is often overlooked by many proponents of the current Social Security system is the risk that the government will change the rules of the pension plan. The history of the navy pension fund provides some clear guidance on this issue. When the pension system seemed to have sufficient, even surplus, funds, Congress regularly increased benefits and increased coverage often at the expense of the long-run financial status of the program—though by actuarial standards the surpluses were not as large as they appeared. Benefits were also decreased or eliminated when the impact of these changes was realized. When considering the risk of investing in private markets and the desirability of individual accounts, one should also consider the risk of the government's changing the rules and the impact of such changes on the status of the retirement program and one's individual benefits. Readers of this volume will note the striking parallels to the issues facing the United States as it considers major modifications to the Social Security program for the twenty-first century.