Pensions in the US: An Institutional and Historical Inquiry

Brayden Panazzi

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Introduction

Why are pensions almost no longer found in American companies? What caused their decline? What is used today in their stead? In this paper I examine the answers to these questions, outlining the economic and historical institutions that led to the emergence, prevalence, and eventual decline of centrally managed private pension plans in the US. This paper draws on previous research in the areas of pension economics, incentive management, and economic history of the US through the 1900s. With this research, I intend to shed some light on the institutional shifts and legislative actions that led to the widespread decline of private pensions as an efficient form of worker compensation. This paper is meant to build on the existing literature of pension economics, specifically adding to the historical analysis of the shift between two major types of pension systems.

One major institutional shift that contributed greatly to the fall of pensions was the establishment of the 401(k) individual retirement account (or IRA) as part of the Revenue Act of 1978. Widespread adoption of this account indicated that it was a more efficient way to prepare workers for retirement, and its use contributed significantly to the decline of centrally managed systems. The 401(k) served as a more cost-effective means of worker compensation for private firms. In this paper, I will outline a few of the distinct costs and benefits to each style of pension system, and show how their differences in structure have led to the observed discrepancies in outcome for each type.

Definitions

To better understand the systems at play and their relationships with each other, I will first define some important terms. The most important distinction to be made here is between the different types of pension plans. The two main forms discussed in this paper are defined benefit and defined contribution plans. Pensions can take many forms, but these two main types are essential to the argument I make here and must thus be explained beforehand. Importantly, any 'pensions' mentioned previously are of the first type I discuss here; the defined benefit system.

In a defined benefit plan, employees are distributed retirement compensation based on several factors, such as total time spent working with the company, average yearly salary, or a combination of the two. These types of plans are offered through a single employer only, and cannot be shifted between companies – if an employee is fired or leaves voluntarily, they give up any claim to these pension benefits. These are structured in the same way as deferred nominal life annuities. It is deferred because the employee must wait until some age (usually 65, or close to it) to start receiving benefits, and it is nominal because the employer is only obligated to pay a certain dollar amount, as specified in the worker's contract. The 'life annuity' term indicates that a particular amount of money will be paid to the former employee for the rest of their life, usually monthly. Defined contribution plans are those where employees are responsible for contributing a certain amount of their salary, and are essentially tax-deferred savings accounts for workers that can be transferred between employers. The 401(k) is a prime example of a defined contribution savings plan (Bodie, Marcus, and Merton 1988).

Defined benefit plans obligate the employer to carry more of the risk, because they must pay some nominal amount to their employees and thus entirely bear the market risk associated with the investments that the overseers of the plan have made. This option also allows less say to the worker in how these investments are structured, especially with regards to risk management. This is because most defined benefit plans pool all the pension funds which are then centrally managed by either the employer or a contracted third party. Defined contribution plans must be managed by the worker themselves – or, again, a third party. Here, the employees have more discretion as to the amount of funds set aside in this type of account. Some employers offer a 'matching' program as well; this means that the firm will contribute the same amount to the account that the employee does, up to a certain cutoff point.

1. The History

To understand the fall of the centralized pension system, I will first examine the conditions that lead to its widespread adoption by private corporations. Pensions are, ostensibly, a way for an employer to provide for their workers' retirement, versus allowing them to save for old age of their own accord. However, this system of personal saving was essentially the norm before the Industrial Revolution; during the time when agriculture was the most prominent form of employment, most people simply worked until they could no longer do so. Whether they had died or become too old or weak to continue their work, there were few individuals who could successfully retire or provide for themselves during old age or infirmity. If such an individual did become disabled, they would usually rely on their children or other extended family for support; barring this, the Church became a final provider of assistance for such individuals (Kreiser 1976).

The shift in employment focus from agriculture to the factory setting necessitated several institutional changes that would greatly impact how workers would save for their retirement. At the beginning of the Industrial Revolution, most manual laborers were severely impoverished. Faced with little to no opportunity for improving their standards of living, many turned to the safety and protection offered by organized labor unions; by 1900, there were over 100 such institutions in existence (Hannan and Freeman 1987, 913). These organizations offered workers significant bargaining power with their employers. With the combination of increased political power for workers and a growing social concern for poverty in general, government officials found it prudent to enact legislation to quell any social unrest. This included old age pensions established by some states, even though they could often only be relied on to a limited extent. Many private companies started offering pensions around this time as well, with over 250 formal programs established between 1900 and 1925 (Kreiser 1976).

However, this attitude would soon change with the dawn of the Great Depression in the early 1930s. Faced with an apparent failure from the previous laissez-faire style of American economy, many turned to the government for a way to cure the perceived plague of widespread poverty that was sweeping the nation. Much legislation meant to alleviate these issues was passed during this time, including the Social Security Act of 1935 (Martin and Weaver 2005). Social Security quickly became and remains to this day a significant portion of the federal budget, and a heavily relied-upon source of income for many older Americans. Although seemingly paradoxical, its passage also marks the beginning of widespread adoption of these private, centrally managed pension plans. While Social Security became an important factor in the retirement decisions that workers faced, it nonetheless had little to no effect on the decision of companies and government alike to enact new pension plans for their workers – rather, private companies merely integrated the benefits promised by Social Security into the pension schemes they had already laid out for their employees.

One reason for this shift in employee compensation was due to the increased size and scope of both government agencies and US corporations. For example, at the peak of the railroad industry in the 1920s, over 80 percent of rail workers were covered by some form of defined benefit pension system (Seburn 1991, 17). When the manufacturing industry began to expand during the early mid-20th century, many firms saw the success railroad companies enjoyed with this system of delayed compensation and began to establish programs of their own. An important point to note is that most workers did not have legal rights to their promised pension benefits, and companies could terminate or change benefits at will, with no repercussions (Seburn 1991). The fact that these systems continued to persist for this time despite the existence of Social Security means that this legislation essentially had very little (if any) effect on the decision of private companies to cease enacting new pension schemes or retire existing ones. It would have been relatively easy for companies to simply stop their pension programs, if Social Security would take up any relevant slack. Rather than cease offering pension benefits, most companies simply reduced the amounts they offered their employees, meaning that for many employees there was little to no change in total amounts received. The main differences were now in the structure of how benefits were paid out, since some would be through the government and some through the state. This indicates that the issuance of defined benefit pensions from firms to their employees served some efficient purpose that benefited at least one party. In short, the sudden growth of industry and population during the early 1900s led to an overall increase in demand from both workers and employers for the subjective utility brought by defined benefit pension plans.

Defined benefit pensions were an innovation meant to offer an alternative option for retirement, so that the average worker did not have to save to provide for themselves. In contrast to the disability insurance provided to military servicemen, as was the case in the beginning of America's story (Clark, Craig, and Wilson 2003, 5), this relatively new form of employee compensation had an entirely new set of purposes. Namely, both were originally created with the same intended goal of helping align the incentives of employer and employee alike. In this section, I will explain some of the existing economic literature as it relates to pensions. I will draw from some works on transaction costs and apply their analysis to the problem of moral hazard as it relates to the structure and economic theory of defined benefit pension plans. Then, I will go over how these facts mesh with the economic structure and implications of pensions, integrating these with an analysis of the costs and benefits that are faced by firms and employees. Some potential alternative options to pensions will be acknowledged as well, with an analysis of why they weren't relied upon as primarily during the heyday of the defined benefit pension plan.

2. Economic Costs and Benefits

Pensions are a way for employers to defer worker compensation to a later date. Because time preference is positive, the deferred pension benefits must be a greater nominal amount than the expected wages if no pension was offered. That is, the present wage of an employee will be lower than if no pension were offered, with the differential equal to the sum of all future benefits discounted to the present. Thus, the total present value of compensation to workers will be the same under both schemes, *ceteris paribus.*

One important economic problem that pensions help to mitigate is that of moral hazard, which is a subset of the transaction cost branch of economic analysis. Moral hazard arises when there is imperfect information between two contracted parties, one of whom is hired by the other to perform some tasks that the first cannot perform as efficiently. This is known also in economics as the principal-agent problem. Moral hazard arises when it is costly for the principal to monitor every aspect of the agent's effort or output. This means that the agent is afforded some degree of freedom in how they go about completing the tasks they are contractually obligated to perform, and thus some opportunities to shirk or otherwise commit an *ex post* violation of their contract in order to maximize their own utility, regardless of what would be best for the company. Thus, there are efficiency gains to be had by firms choosing payment and incentive schemes meant to reduce the opportunity for moral hazard to arise. If the individual employee gains in utility whenever the firm performs well or efficiently, they will be more likely to pursue the goals of the firm since they can indirectly fulfill their own desires by doing so (Holmström 1979, 74).

Economic Benefits of Pensions

Pensions fulfill several economic functions but have since been mostly replaced by other incentive arrangements. Perhaps their most alluring benefit for companies that were fighting to quickly outperform their competition in the early days of industrialization was the fact that a pension is, in essence, a promise. During the beginning of the rise of private pension systems, there was no legislation in place requiring corporations to fully back their pension plans (Clark, Craig, and Wilson 2003). Thus, companies could easily promise full pension benefits to their workers with the hopes that the lower wage rate in the present would allow them to offer products at a more competitive price to drive out competition. Given a 20–25-year minimum vesting period for workers before they would be allowed to receive their pension, companies could put off some of their workers' wages to some future date, effectively borrowing from their employees. However, companies rarely promised pensions right before reneging on their promise to provide them, even though an unsustainably allocated pension fund can cause problems for companies that adhere to it without making the adjustments necessary to continue offering the workers their benefits.

Another upside companies face when they integrate a pension system with their overall compensation package is an increase in worker morale. By providing for their workers during their old age, companies can expect better service during the covered individual's working years. The structure of a firm's pension system can act as a kind of incentive for loyalty as a worker ages; if an employee were to leave the company or be fired for any reason and come back for reemployment, the number of years of service they must provide to qualify for the pension would reset. This means that they would effectively become a new employee, and must start over on their pension as would a worker entirely new to the firm (Conyngton 1926, 23). This stipulation, given that prospective workers are aware of it, could certainly help foster attitudes of commitment to the firm, given that these workers' incentives are bound with the long-term performance of the company. Conyngton also asserts that this contractual stipulation caused a general rise in worker morale (Conyngton 1926).

The final and perhaps most discussed economic advantage granted by a defined benefit pension system is the ability for companies to retire older and less productive workers without subjecting them to significant hardship. A pension allows for a worker who needs some form of income during his retirement to safely leave the company instead of continuing to work there, especially when he is no longer considered as effective. One argument against this point is that it would be efficient for companies to simply lower the wages of the less productive workers, in line with the total discounted marginal revenue product that they bring to the company. However, some research indicates that it is more efficient to simply adjust employment instead of wages, with one economist arguing that this arrangement of earlier retirement allows for employers to bring in new workers at a more efficient rate (Lazear 1979).

Economic Costs of Pensions

There are several economic costs associated with implementing pension systems, which I will discuss in detail here. Besides the clear monetary costs associated with paying former employees when they are no longer explicitly producing anything of value to the company, pension funding incurs several forms of opportunity cost as well. Although pensions allow for incentives for worker retention and reduced turnover, this can become costly for the worker if they find some other opportunity for employment they would otherwise prefer, since they are in effect giving up a portion of their wages if they choose to leave the first company.

One of the most significant downsides to pensions is that they tend to become a cumbersome financial burden to the company and may severely impact future cash flow. An example given by economist Mary Conyngton (1926) details one company whose pension plan system had been structured in a similar fashion to most others at the time. This corporation’s yearly pension obligations increased significantly over just a ten-year period, starting at $37,031 in 1913 and measured at $199,100 in 1924. This is an increase of over five times the original amount, which she asserts was not uncommon for other corporation’s pension plans during this time as well. However, firms could take actions to prevent this problem, and they did. Conyngton cites one company’s policy on this issue to be that they simply reserved the right to lower the pension allowance given an unsustainable increase in costs associated with it. While the decision to simply lower the amounts paid out to retired workers would certainly benefit this company in the short term, it hardly serves to inspire workers towards confidence in this system (Conyngton 1926, 52).

Another cost of defined benefit pensions during this time was borne not by firms or employees, but directly by unions. As discussed previously, it was common during this time for employers to stipulate in their pension agreements that any worker who broke employment for even a day would forfeit any claim to previously accrued pension benefits and would have to start the accumulation process over again. In some cases, the worker would give up his future right to join any pension system with that company permanently. This clearly reduced the incentive for workers to go on strike, a crucial bargaining tool for union organizers. One firm even went so far as to specify in their contract that pensions were limited to those employees who “have not been engaged in demonstrations detrimental to the company’s best interests (Conyngton 1926, 53).” This provision significantly reduced the bargaining power that unions had, especially among older members of the workforce. Unions also disliked the fact that pensions usually meant lower overall wages, since their goal was to increase wages for their members. The tendency of wages to stay consistent under pension schemes was another downside for them, since their very existence of unions depended on the workers’ need for a third party to increase their bargaining power when negotiating with their employer.

Pensions, while costly to employers and labor unions, nonetheless remained economically efficient and an integral part of worker compensation throughout the early and mid-1900s in America. As the century continued, several legislative and institutional shifts, along with the large cumulative monetary costs required to support pension plans, caused them to fall out of favor with most American employers. One major exception to this rule, however, is most civil service positions - whether local or federal. Defined benefit pensions experienced an overall decline in popularity during this time as well.

3. Response to Institutional Changes

At the end of the 1950s, more than 10.3 million individuals (over one-fourth of all non-government workers) were covered by some form of private pension system, with half a million retired persons receiving pension benefits upwards of $370 million in total (Seburn 1991, 20). 75 percent of these plans were noncontributory, meaning they were still of the defined benefit type (Rowe 1953, 718). One institutional shift that occurred during this time is a 1948 National Labor Relations Board ruling that mandated employers include company-funded (i.e., defined benefit) pension plans in the collective bargaining process when negotiating with unions (Seburn 1991, 20). During the 60s and 70s, the proportion of workers that were required to contribute to the system they received their pension from sank slightly to 20 percent, mostly due to increased growth in industries where defined benefit pensions were more prominent. However, in 1974, one of the most significant pieces of legislation in the history of pensions was passed: the Employee Retirement Income Security Act, or ERISA.

Congress, by passing ERISA, standardized the requirements employers faced when implementing or maintaining a pension system. ERISA covered all facets of pension system creation – from initiation to closure, and nearly every step along the way. This legislation required that employers providing pensions comply with several new rules, such as mandatory employee vesting after ten years. Along with ERISA, the Pension Benefit Guaranty Corporation, or PBGC, was established in 1974. The PBGC was meant to act as a form of insurance against failures of private pension systems, requiring payments from employers with defined benefit pensions and offering reduced payouts to covered employees should the firm go bankrupt and dissolve (Donovan 1984). This entirely self-funded government agency has been heavily criticized by academics, with one economist asserting that it encourages moral hazard on the part of firms who are nearly bankrupt. He claims that under the provision of the PBGC, firms close to bankruptcy would take on more investment risk than otherwise, since the PBGC would be there to bail out their employees should these investments turn sour (Blitzstein, Mitchell, and Utkus 2006, 88). The structure of the PBGC does seem to invite shirking on the part of pension-holding companies, since it becomes more costly to keep the firm's pension system in good shape (due to the premiums required by the PBGC) and less costly to simply let it collapse and let this agency pick up the slack.

The History and Structure of the 401(k)

However, the death knell of defined benefit pensions was truly sounded with the passing of the Revenue Act of 1978 by Congress. This piece of legislation preceded a monumental shift in the world of pension guarantees, as it established new ways for employees to save for their retirement – including, along with other types of tax-protected savings accounts, the 401(k). This type of individual retirement account (or IRA) didn't gain much popularity until the IRS issued some further regulations meant to clarify the legal standing of these accounts in 1981. After this regulatory clarification, they saw a steady rise in adoption through the 1980s and beyond. Employers were quick to recognize the benefits of the 401(k), and employee enrollment rose from 7.1 million in 1983 to 38.9 million in 1993, an increase of over five hundred percent (Friedberg and Webb 2000, 1).

The 401(k) is essentially comparable to a defined contribution pension plan, as described earlier. While this plan is legally just a savings account, both the employee and employer commonly contribute to it over the worker's time at the firm. Here, the employee has discretion over how to invest the money, meaning that those with higher tolerance for risk can satisfy their preferences for such without endangering the assets of other employees. This contrasts with the defined benefit pension plan structure, where the employer generally makes all investment decisions and employees are unable to stratify based on their various levels of risk tolerance. Another defining feature of 401(k)s is that the money accrued for retirement is almost always paid in a lump sum, as opposed to the steady annuity-style trickle of defined benefit pensions. The total amount available to the retiree will vary based on previous market performance; they are not owed a specific amount under their contract with the company (Munnell, Haydock, and Sundén 2005).

The Costs and Benefits of 401(k)s

The introduction of 401(k)s brought employers many advantages that do not apply under the defined benefit systems. First, these accounts are portable; they can be transferred between firms with very little hassle. They are also, by definition, fully funded. This means there are no extra expenses associated with meeting funding requirements, and no obligation to pay out contributions to the PBGC. In fact, there is no need for insurance at all, since the employer guarantees nothing in terms of the final value of their retirement account. If the firm has agreed to match the employee's contributions up to a certain amount, they may treat this as a normal business expense and have no reason or need to insure their employees in this way either. They also tend to incur significantly fewer administrative costs than defined benefit plans (Munnell, Haydock, and Sundén 2005). However, implementing the 401(k) does mean that employers must forgo the benefits associated with defined benefit style of pension system, unless they decide to combine the two in a sort of hybrid plan. This form of pension compensation is somewhat rare, and as such will not factor into the historical analysis regarding the transition to defined contribution plans.

The Shift from DB to DC Pensions

These advantages to 401(k) plans led many companies to implement them for their workers soon after their introduction. While entrepreneurs could clearly understand the many benefits in use inherent to these types of plans, there were also some other institutional factors that influenced this mass exodus from defined benefit to defined contribution pensions. One of these reasons was the decline in union strength around this time, especially during the 1970s and 80s. There is a myriad of reasons for this downturn, including sharp decreases in employment in heavily unionized industries. Some of these areas that were weakened the most include the steel, automobile, and rubber industries (Goldfield 1989). No longer as subject to the compensation constraints brought by powerful labor unions, entrepreneurs now faced a slightly different set of incentives regarding how they should most efficiently pay their workers. Since unions now had less bargaining power, the provision that pensions be an open part of labor negotiations was now less relevant than it had been during the time this legislation was established. Thus, companies were now freer to choose alternative options when considering retirement options for their workers; as historical evidence indicates, the privately managed 401(k) made an excellent alternative.

Yet another reason why defined benefit pensions had become an inferior option was that their cost of continued use had clearly demonstrated a significant risk of ballooning to an unmanageable size. This continued to be a problem for pension managers due to a decrease in both death and birth rates, meaning there were more individuals at or over retirement age than in earlier times (Barr 2006). With an increase in retired individuals drawing from their employers' pension systems, and a decrease in those contributing funds to it, many companies found yet another reason to shift their plan type.

Another cost to 401(k)s that employers must bear is the fact that they cannot be used as extensively to influence worker behavior and sentiment. Economist Richard Ippolito argues that given the new regulations and reduced economic incentives regarding defined benefit pensions, companies now find it prohibitively costly to implement these plans. However, employee behavior and attitudes are both key factors in firm performance, and he establishes that the 401(k) offers an alternative way of managing these important components. This type of account, instead of guiding employee behavior over time, selects up front for workers who are expected to behave a certain way. By offering incentives that appeal to those with low time preference and simply hiring these 'desirable' workers up front, Ippolito asserts that companies can find a close substitute for the behavior-management advantages brought by defined benefit pension systems. As a critical foundation to his point, he argues that some employees are more attracted to a position where some portion of their wages will be deferred to the future. These workers are more likely to value future outcomes higher than others, and can thus be expected to be less present-oriented than their high-time-preference peers (Ippolito 1993). However, this option does fail to include the final-period incentives that defined benefit plans offer.

Firms found it economically viable to implement 401(k)s for their employees at such a large scale due to another final burst of regulation regarding defined benefit pensions. This was the Tax Reform Act of 1986, which restricted smaller defined benefit plans that were mostly meant for higher-paid individuals, and a new excise tax on the reversion of money from plans that were overfunded. This legislation, along with the relative advantages of 401(k)s discussed previously, caused the number of defined benefit plans to fall from 175,143 in 1983 to just 56,405 in 1998, a decrease of over 70 percent (Munnell, Haydock, and Sundén 2005). Faced with increased regulation of and a decline in need for the advantages provided by defined benefit pension systems, many companies in the US chose to phase out these plans in favor of the more portable and economically efficient 401(k).

Conclusion

Pensions in the US are no longer what they used to be, in terms of their structure, benefits, or the legislation that surrounds them. Because of the institutional changes that have occurred over the past hundred years or so, and the consequential shift in costs and benefits associated with each pension type, companies have found it more economically efficient in recent years to steadily reduce worker enrollment in these types of plans. Instead, as the data show, they now tend to favor the more recent defined contribution style of retirement management found with 401(k)s.

Defined benefit pensions went through several stages of popularity as their relative economic efficiency (given the surrounding institutional conditions) grew and then waned. The first form of retirement provision during the early years of the US was simple thrift, although most couldn't afford to stop working once they reached old age. They saved to provide for themselves when they grew infirm or otherwise incapable of providing for themselves, but generally there was no 'retirement' like what we see today. However, as soon as this became a viable option during the Industrial Revolution, companies started providing options for their workers to incentivize their long-term cooperation. They also became a useful tool to increase the cost to older employees of going on strike, a fact that union managers ostensibly disliked. During later years, they grew in scope and importance until federal regulators started to notice. Once pensions became a political issue, companies had to comply with more and more regulations as time went on. Eventually, a final increase in government restrictions on pensions combined with a new option for retirement management (the 401(k)) led many companies to begin the mass exodus from defined benefit pension plans to the current form of defined contribution that we see today.

Limitations and Areas of Further Study

One weakness in the conclusions I make in this paper is a difficulty in establishing the proportion of each institution's effect on the decisions made by companies to switch pension systems. Also, although this is meant to focus mostly on the legislative forces that led to this shift, there are certainly many other significant factors that have simply gone unnoticed, thus perhaps confounding the effects of the institutional shifts as I have put forth. Another potential downfall is a lack of analysis regarding the current state of the institutions surrounding defined benefit pensions where they do exist in the private sector today. This would likely offer some insight into other potential pressures that could affect a company's decision to stay with defined benefit pensions instead of opting for the more popular 401(k). However, an in-depth examination of the current institutional regime, while informative, would likely bring the scope of this paper's topic past the appropriate boundaries.

Further research on the relationship between labor unions and pensions may also prove helpful in affirming the arguments I lay out in this paper. It may be insightful to investigate further any causal links between union prevalence and the structure of pensions, and how the decline of unions in the US over time could have affected companies' decisions to implement these systems. However, a main point of further analysis would be to investigate any potential differences between private pensions and those provided to civil service workers, since their use has continued in the public sector to this day. Perhaps the increase in government agencies and employees has allowed those who would self-select into a position with a defined benefit pension to satisfy their preferences, thus reducing the demand for these in the private sector. Given an opportunity for a more expansive topic, it would certainly be fascinating to track the differences in public pension systems over time and analyze how they compare with the changes I show in the private sector. Certainly, the institutional pressures I outline in this paper would affect a bureaucratic system far differently than those subject to market constraints, but any further research in this area is currently beyond the scope of this paper.

Final Words

In this paper, I outline the institutional pressures that affected pension plan choice for firms through the 1900s in America. Both the defined benefit and defined contribution style have certain economic advantages, and an increase in legislative pressure (along with other factors) has led many companies to value those of the latter more highly overall. The history of pension structure in the US is a long and intricate one, involving several interrelated factors that have influenced the implementation of each type over time. No doubt the currently popular 401(k) will see some significant changes sometime in the future; perhaps these alterations, along with some other institutional pressures, will be enough to spark another shift to a currently unknown or unpopular form of retirement provision.

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