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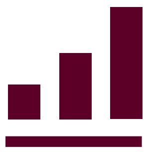

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PERCSPECTIVES ON POLICY

RETIREMENT PLAN CHOICE AND PUBLIC PENSION REFORM

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Suppose you must make plans for a coming Saturday afternoon, and you have two options: watch a movie at a local theater or hike in the nearby state park. To you, the relative desirability of the two activities depends on the weather: You prefer watching the movie to hiking if it rains, and your preferences are reversed if it shines. Ideally, you would postpone your decision until you know the weather conditions on that Saturday afternoon, and then choose your preferred activity based on the realized weather condition. This is referred to as ex post (after the event) decision making.

However, it is quite possible, for planning purposes, that you may not be able to postpone your decision and may have to commit to an activity before you know for sure what the weather will be like on Saturday afternoon. This is referred to as ex ante (before the event) decision making. In this case, you bear some risk regardless of which activity you choose because the corresponding weather condition may not materialize.

It is easy to see that, for truly uncertain situations, ex ante decision making, rather than ex post decision making, is the more relevant decision model. We often must make a decision before we have all of the information. But what does ex ante decision making have to do with public pension reform? This matters because workers, when faced with different retirement plan options, either from an employer or when choosing between employers, must commit to a particular option and stick with it.

There are two basic types of employer-sponsored retirement plans: defined benefit plans and defined contribution plans. A defined benefit plan typically specifies a retirement age and an annuity formula that is based on the number of years of employment, the average of the highest several years of earnings, and a conversion factor. Employees' implicit wealth positions at retirement are equal to the discounted present value of their pension payments for the remainder of their lives taking into account the anticipated life expectancies of the workers receiving the pensions.

In contrast, a defined contribution plan specifies the contribution rates by both the employer and the employee to the employee's retirement account, and the contributions are invested in stock and bond markets by the employee. The employee's wealth from the defined contribution plan at retirement depends on past contributions from both the employer and the employee, as well as on the performance of the chosen investments.

The dominant form of pensions for public sector workers are defined benefit plans. In 2018, 83% of full-time state and local government workers participated in a defined benefit plan.[1] Under a public defined benefit plan, both the public employer and employees make monthly contributions to the plan and these contributions are invested in equity and bond markets to fund retirement benefits. However, the retirement benefits current and future retirees receive don't directly depend on these contributions or the investment performance. As a result, the public defined benefit plan is vulnerable to investment risk and the longevity risk of the covered retirees. Being slow to increase funding in response to investment under-performance and longevity increases, state and local government defined benefit pension plans are universally plagued by the problem of underfunding. In Texas alone, the officially reported liabilities in the state's public pension plans exceeded the assets in these plans by $86 billion in 2019, corresponding to a funding ratio of 77%.[2]

These numbers, already quite alarming, considerably underestimate the severity of the problem because in calculating liabilities – these liabilities are the present value of future benefit payments – the discount rate used in official calculations is the ex-

pected rate of return on the assets held in the plans. This practice does not agree with the basic principles of financial economics, and it fails to account for investment risk. When investment risk is accounted for and an appropriately lower discount rate is used, the gap between plan liabilities and assets, or the unfunded liability, is much larger, and correspondingly the funding ratio is much lower. For example, the Teacher Retirement System in Texas (TRS), the largest pension plan in the state, had an officially reported unfunded liability of $52 billion in 2019 and a corresponding funding ratio of 75%. If we use a correct risk-free discount rate to calculate the present value of promised future benefits, the unfunded liability rises to $122 billion, and the corresponding funding ratio drops to 56%.[3]

Given this intrinsic underfunding problem in defined benefit plans, many public employers are seriously considering moving their defined benefit plans to a defined contribution plan or a hybrid plan with a defined contribution component. Transitioning public defined benefit plans to defined contribution plans can get public employers out of their recurring financing crises and remove taxpayers from the role of pension underwriters.

There is a concern, however. The persistent unfunded liabilities in defined benefit plans are essentially costs to taxpayers for providing public sector employees with insurance against investment and longevity risks. If public sector employees prefer their defined benefit plan to a comparable, equal cost defined contribution plan, perhaps because they value such insurance, then transitioning from defined benefit to defined contribution plans may make public sector jobs less attractive and, as a result, negatively impact the quality of workforce in the public sector.

The question then is: Do public sector employees prefer the defined benefit plan to the defined contribution plan? The answer to this question depends on how long a worker anticipates staying with a public employer. Certain features like back-loading in the defined benefit plan favor long-time employees relative to employees who leave their job to work for other employers. Employees who spend their entire career covered by the same pension plan are usually better off under the defined benefit plan, while employees who switch to private sector jobs or to public sector jobs in other states will often find defined contribution plans are best for them.

Using TRS in Texas for example, some of its main provisions help financially sustain the generous formula of retirement benefits for long-time workers but work against workers who leave for another job early are the following. First, TRS requires a 5-year period for a worker to be vested in the program, otherwise the employer's contributions are forfeited. Second, even for vested workers who decide to leave, the balance they can roll over to another IRA is based on a mere 2% rate of return on past contributions by the worker. Third, the retirement benefits are directly proportional to the average of a worker's earnings in the 3 (or 5 for newer hires) highest earning years, and these tend to occur in later years of employment.

In contrast, under the Optional Retirement Plan (ORP), the defined contribution plan that is offered (along with TRS) to many employees at public universities in Texas, a worker's retirement account balance – built up based on the past employee and employer contributions and by earning a market rate of return reflecting investment performance – is fully portable after the 1-year vesting period.

The comparison between the defined benefit plan and the defined contribution plan is very much like the comparison of the two Saturday-afternoon activities: watching a movie or hiking. In the latter comparison, the weather on Saturday afternoon is the decisive event. The movie is preferred to hiking if it is raining, whereas hiking is preferred to the movie if the weather is good. Similarly, in the case of the retirement plan choice, the decision criterion is how long a worker expects to stay with their current public employer. The defined benefit plan is more attractive if the worker stays with the employer long enough, whereas the defined contribution plan is more appealing if the worker desires portability.

Just as with the movie-versus-hiking comparison, the relevant comparison between the two retirement plans is an ex ante one. That is, the comparison takes the perspective of workers newly hired by a public employer, when the choice between a defined benefit plan (say TRS) and a defined contribution plan (say ORP) must be made, and when the workers do not know for sure exactly how long they are going to stay with the employer. There is evidence suggesting that, based on the ex ante perspective, the defined contribution plan might be more attractive than the defined benefit plan.

Data from Texas A&M University for 1,402 new

employees hired between January 2018 and March 2021 who are eligible for ORP as well as TRS show that 1,046, about 75%, choose ORP over TRS.[3] This clearly indicates the attractiveness of defined contribution plans' portability. Similar preference patterns are reported for faculty members at the State University of New York (SUNY) and the City University of New York (CUNY) systems, with about 75% of the faculty in both systems choosing a defined contribution plan over a defined benefit plan.[4] That the majority of people choose the defined contribution plan over the defined benefit plan when given the choice reflects the fact that leaving a job early is a real possibility for many workers. For example, a third of teachers leave the profession within the first few years of their careers.[5,6] TRS reports that the probability of termination within the first three years of services is 38% for males and 41% for females.[7] In a sense, TRS relies on the unclaimed state contributions for these individuals to subsidize the retirement contributions for continuing workers.

The preferences of potential employees should be taken into account in weighing the relative desirability of a defined benefit plan or a defined contribution plan that may be offered to new hires. From the perspective of an average potential public sector employee, the defined contribution plan is at least as appealing as the defined benefit plan. This suggests that a transition from a defined benefit plan to a defined contribution plan or some hybrid plan with a defined contribution component would not reduce the attractiveness of public sector jobs in the eyes of potential employees.

In fact, this is the strategy followed in the newly passed legislation affecting new employees who are covered by the Employees Retirement System (ERS) of Texas. This legislation both shores up the system's funding of current plan participants' benefits and converts the plan to a cash-balance plan for new employees. Of the statewide defined benefit plans in Texas, ERS is in the worst financial position. Its funding ratio of assets to liabilities was only 42.4% in 2020.

The reforms were necessary to make the program sustainable for current workers and to set up a sustainable program for new hires. The cash-balance plan offered to new employees is a hybrid between a defined benefit and defined contribution plan in that new workers' own contributions and employer contributions will grow at a prespecified rate of return up to retirement, at which time the workers' cash balances are converted to a retirement annuity. The size of workers' annuities will be contingent on the amount they have saved, not on a benefit formula.

Sustainability of cash balance plans are built into their designs. Texas has two large, established, and well-funded cash balance plans. Through the Texas County and District Retirement System (TCDRS) established in 1967, almost 800 counties and special districts provide cash balance plans to their employees. Established in 1947, the Texas Municipal Retirement System (TMRS) has over 114,000 active members and over 69,000 annuitants across almost 900 municipalities. TCDRS guarantees a 7% return and TMRS guarantees a 5% return on employer and employee deposits. The new cash balance plan for new ERS hires will guarantee a 4% return plus half of any additional return, based on a five-year average, up to 7%.

The reforms to ERS will not adversely affect the quality of potential new hires. Instead, it will make the total compensation package more attractive for a broader set of workers.

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