POLICY BRIEF

An Introduction to Collective Defined Contribution Plans

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I. Introduction

Over the past four decades, the US retirement system has largely shifted from defined benefit pension (DB) plans to retirement saving accounts within the broader defined contribution (DC) category – mainly 401(k) plans – and to individual retirement accounts (IRAs). A key factor driving this change is employers' desire to avoid the risks associated with providing guaranteed pension benefits. This guarantee – a defining feature of DB plans – can entail large funding obligations that can change unpredictably and can wreak havoc on corporate balance sheets and budgets. But the flight from DB plans to 401(k)s and IRAs did not make financial risks disappear; instead, it transferred the risks to individual workers, many of whom are ill-equipped to handle the resulting contingencies.

Collective defined contribution (CDC) plans offer a way to rethink risk sharing between employers and individuals and among savers and retirees. CDCs and other hybrid retirement plan formats combine DB and DC elements in different ways. Variants already exist in several countries, are receiving serious consideration in the United Kingdom, and have counterparts and

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close parallels in the US.

In CDCs, employers avoid the funding volatility and investment risk of DB plans. In general, CDCs are technically DC plans, but provide some DB-like features for savers and retirees. Compared to 401(k) plans, which feature individual accounts, participant-directed investing, and typically lump-sum payouts, CDCs provide DB-style pooling of investments, professional investment management, and lifetime retirement income. They reduce financial risks for individuals, relative to DC plans, but generally without guaranteed benefits (Millard, Pitt-Watson, and Antonelli, 2021).

In this brief, we examine the opportunities and challenges associated with implementing CDCs in the US. We highlight the advantages of CDC plans as well as several issues that CDC plans must confront, regarding expectations, equity, transition, and trust. We conclude that, under appropriate circumstances and contingent on addressing those issues, adding particular CDC features to a 401(k) or a conventional DB plan can improve outcomes for workers, retirees, and employers. More generally, we emphasize that evaluations of CDCs depend greatly on the answers to two questions: "Compared to what?" (e.g., traditional DB plans or 401(k) plans) and "From whose point of view?" (e.g., employees, retirees, or employers).

II. Typical Retirement Plan Forms

Retirement plans generally come in three main types – DB, DC, and hybrids. In the typical DB plan, eligible workers are automatically covered and do not make contributions. Employers guarantee and pre-fund benefits, make investment choices, and bear the risks of low asset returns or retirees living longer than anticipated. Benefits are based on employees' tenure with the company and a measure of average earnings, typically over the worker's career or in the last 3 or 5 years. Benefits are offered and often paid as monthly income guaranteed for the

lifetime of the retiree and spouse. However, there are numerous qualifications and exceptions to this skeletal description.[2]

DB participants do not need to make decisions about, or face risks associated with, enrollment, contribution levels, investment allocations, or portfolio rebalancing. Their only real decisions are when and in what form to claim benefits, and they benefit from having pooled and professionally managed investments meeting strict fiduciary standards. DB drawbacks include typically "back-loaded" benefit accumulation patterns that limit portability and provide significantly smaller benefits to those, including many women, with interrupted careers or frequent job changes. Private-sector DB plans involve underfunding risk, although mitigated by PBGC benefit guarantees, and inflation risk. For employers, DB sponsorship can entail costly and volatile pre-funding requirements, complexity, and administrative burdens, and is often seen as underappreciated by employees.

These drawbacks, combined with several other trends, led to a steady decline in DB plans. The unionized and manufacturing sectors – where DBs were common -- have shrunk; women's labor force participation increased, and DB costs rose as life expectancy and the ratio of retirees to active workers has increased.

A DC plan maintains an individual account for each participant that bases benefits exclusively on employer and/or employee contributions and any investment returns. The employee bears all investment risk.

The prevalent U.S. DC plan is the 401(k). Sponsors do not face risks related to asset

[2] For example: Many DBs allow participants to forgo this longevity risk protection and opt for a lump sum payment instead. Private-sector employees seldom contribute to their DB plans, although they often bear the cost of contributions by receiving lower wages. State and local government plans (where DB remains prevalent) usually require employee as well as employer contributions. Although employers bear the financial risk, most DB plan benefits are insured by the Pension Benefit Guaranty Corporation (PBGC) in the event of employer insolvency with unfunded plan benefits.

returns, inflation, or retiree longevity, and typically have lower funding costs than under DB plans. In addition, employer matches of employee 401(k) contributions are relatively predictable and can be reduced or suspended in a bad economic climate, thus avoiding funding volatility. Finally, 401(k)s are simpler to administer.

Participants seem to like 401(k)s. For many, the appeal of owning growing account balances seems to outweigh the DB's less tangible, long-term promise of post-retirement income. Also, 401(k)s are more accessible and portable than DBs during hardships and job changes.

As 401(k)s became the primary retirement vehicle for more and more people, traditional 401(k)s became more automated, essentially re-inserting some DB-like features into 401(k)s. In a fully automated 401(k), enrollment, contribution increases, reasonable investments, and rollovers upon job changes occur automatically unless the participant overrides the automatic settings. Although they benefit from professionally determined investment options, 401(k) participants don't benefit from the additional pooling available in DBs, often face retail pricing of fees, and still bear investment risk. In addition, 401(k) plans usually receive smaller employer contributions than DBs and pay lump sums. CDCs might maintain the benefits of automated 401(k)s while addressing their weaknesses.

III. Collective Defined Contribution Plans

CDC plans aim to share financial risks in ways that emphasize the strengths and minimize the drawbacks of DBs and DCs. CDC plans come in many variants (Doonan and Wiley, 2021). This section focuses on a typical CDC design to highlight the differences with standard DB and DC plans and addresses the variety of hybrid plans in the U.S. and other countries that share similar features.[3]

[3] Millard, Pitt-Watson, and Antonelli (2021) provide a recent analysis of CDC plans.

As in DC plans, it is common for both employer and/or employees to contribute to a CDC. As in a DB plan, employees generally do not have full 401(k)-style individual accounts (with account balance determined by contributions and individual investment returns), although contributions by and on behalf of individual workers are tracked and reported to them. Contributions are pooled and professionally managed. The fund managers target future annual benefit levels, but those benefit amounts are not guaranteed.

For plan sponsors, CDCs avoid the volatile funding costs of DB plans. For workers, CDCs (a) pay benefits in the form of periodic retirement income, (b) share longevity risk among participants; and (c) provide pooled, professional investing, correcting these weaknesses of most DC plans. Regular income – such as an annuity – and pooling longevity risk helps retirees balance the risks associated with either over-consuming early in retirement, thereby risking running out of funds later, or under-consuming early in retirement, potentially limiting themselves to a lower standard-of-living than necessary. This pooling also enables individuals to save for an average life expectancy rather than needing to save for an extremely long one. Because CDCs pool investment and longevity risk and do not guarantee benefit amounts, they can provide lifetime income without the regulatory, marketing, and profit-margin costs of commercial annuities.

Pooled, professional investing reduces administrative fees compared to account balances. It expands participants' access to a wider range of asset classes, including those that might offer an illiquidity premium, which are harder for an individual to invest in. It also helps spread risks over time and across workers, including routine asset volatility and the sequence-of-return and timing risks associated with having to liquidate assets at a certain point. Some CDC plans, for example, accumulate reserve funds from surplus returns in good markets to buffer losses during

down markets. Finally, professional investing helps workers avoid "amateur" mistakes – such as overinvesting in the employer's stock or failing to diversify and rebalance.

For employers, one drawback of CDCs, relative to a DC, is the inability to reduce or suspend contributions during economic adversity. For workers, the key drawbacks are that benefit levels are not guaranteed, the plans are less portable than DCs, and employees bear the investment risk, in the form of potential benefit cuts or increased employee contributions if the plan is doing poorly.

These risks have been partially addressed using a "defined ambition" (DA) design that distinguishes "base" and "ancillary" benefits. Base benefits are not guaranteed but expected to be paid even under very conservative financial assumptions. "Ancillary" benefits – such as cost-of-living adjustments or basing benefits on final average pay rather than less generous career average pay – are more explicitly contingent on the plan's financial condition; if benefits need to be reduced, they will be cut first.

Is this simply a pyrrhic victory for workers, though, insofar as CDCs reduce "risk" by reducing expected benefits? The key question, we would argue, is "compared to what?" Compared to a conventional 401(k), CDCs provide pooled investment and longevity risk protection. Compared to an unsustainable DB plan, CDCs offer a systematic, orderly process that helps savers manage uncertainty, set reasonable expectations, and plan for retirement.

CDC-type and related hybrid pension plans have been developed in the Netherlands and Canada, where they are often called "defined ambition" or "shared risk" plans, and are under discussion in the United Kingdom, where they are sometimes called "collective money purchase" plans. In the U.S., collective features are also present in some hybrid designs, including money purchase pension plans, target benefit plans, floor-offset plans, and cash

balance plans.

Recent years have seen further experimentation with hybrid plans in the U.S., especially in the collectively bargained and state and local government sectors. The objective is to manage the shift from traditional DB plans to a plan design that shares risks with participants in a more collective manner than the individualized 401(k). Labor unions have been particularly creative in developing hybrid, employer-funded pension plan designs that might also have employee contributions, define targeted benefits in a DB-like manner, invest professionally and collectively without employee involvement, and pool longevity risk to provide lifetime retirement income. Like defined ambition and CDC plans, these variable benefit plans protect employers from potentially volatile funding obligations. Although they have DB-like benefit formulas, some do not guarantee benefits, while others include both a base guaranteed DB component and a variable component.

The "Variable DB" plan design developed by the United Food and Commercial Workers (UFCW), for example, combines traditional DB and CDC designs by guaranteeing a DB benefit as a base amount and providing a potentially higher variable benefit depending on investment performance (Blitzstein, 2016). Investment risk is shared: employers bear underfunding risk up to the base benefit amount while employees bear the risk that the variable benefit will not exceed the base benefit. The plan seeks to limit the employer's DB funding cost and volatility by designing the guaranteed benefit to be manageable in amount and by prescribing conservative funding rules to minimize the risk of underfunding that base benefit.

Proposed legislation would authorize a CDC-style, "composite" hybrid plan solution to U.S. multiemployer plan underfunding (Defrehn and Shapiro, 2013; Topoleski, 2020), which has aroused considerable controversy, including strong support and strong opposition within

organized labor.[4] Composite plans would be neither DB nor DC. They would not have individual accounts, and assets would be pooled and professionally invested. Employers would make fixed contributions negotiated between labor and management. Benefits would be determined by the plan formula and paid as a life annuity. Employees would bear the risk that investment shortfalls would necessitate benefit reductions. Unless a composite was funded up to a specified benchmark, corrective actions, potentially including benefit cuts, would be required. The joint union-management boards of trustees that manage multiemployer plans would be granted broad powers to provide for benefit reductions, but increased contributions would require agreement of both management and labor. If a plan was doing well, benefits could be increased only subject to extensive conditions and limitations.

The proposal lets current multiemployer DB plans transition to composite plans, with the original DB remaining as a "legacy plan" (still PBGC-insured). When employers switched from DB to composite, participants would cease accruing new benefits under the legacy plan and begin accruing new benefits under the composite plan. Employers would be required to continue funding the legacy plan, but at a slower pace, and the proposed risk shift from employers to employees would also include significant reduction of "withdrawal liability" for employers choosing to exit the multiemployer plan. One major concern has been whether composites would unduly weaken funding of the legacy DB plans – another illustration of how new hybrids, including CDCs, can create transition risks and put a premium on effective plan governance.

IV. Challenges for CDCs

As the discussion above demonstrates, CDC and hybrid plans have made inroads into pension systems in the US and in several other countries. Whether they can expand further

[4] See GROW Act (2018) and The Heroes Act (2020)

depends on the resolution of several issues.

First, can participants understand and ultimately accept the partial nature of the benefit guarantee? CDC participants with benefits that are targeted but not guaranteed might eventually develop expectations beyond those justified by the plan's terms – especially when plan provisions are complex, potentially nuanced, and ultimately subject to the exercise of discretion by plan management. After some years of stable investment returns, participants might naturally tune out a plan's caveats and qualifications, coming to expect and rely on benefits (especially those already being paid) being at least equal to the target.

Second, can the plans be designed to meet intergenerational equity considerations? CDCs need to mediate between different generations of workers, new and old members, and employees versus retirees. Disparities in treatment – actual or perceived, equitable or not – follow from the inevitable changes over time in business cycles, investment returns of various asset classes, interest rates, wage levels, and other factors. For example, because CDC plans pool contributions and payouts for workers of different ages, fund managers' decisions at a particular time to increase payouts benefit current retirees at the expense of current workers, who are contributing but not receiving payouts. For these and other reasons, CDCs have given rise to inter-generational tensions and challenging sustainability problems.

Third, can transition effects be managed appropriately at the plan level? Where a CDC or variable DB starts as an existing DB plan – as composite plans would – transition is critical. Conversions of traditional DBs to hybrid cash balance plans created major transition problems adversely affecting mid-career and older participants and generating litigation and turmoil.

Fourth, can transition effects be managed appropriately at the retirement system level? For several reasons, CDCs and similar designs may prove more likely to be adopted as

replacements for existing DBs than for 401(k)s. First, employers have already shifted most financial risks associated with retirement plans to employees and retirees through 401(k)s and IRAs. Second, it may be easier to persuade employers with DB plans – who face higher costs and risks – than those with 401(k)s that CDCs can help reduce costs and risks. Among employers with 401(k)s, the realistic prospect may be incremental addition of collective features such as regular retirement income with longevity risk pooling and collective, professional investing.

Fifth, is there enough trust and convergence of interests between labor and management to make CDCs work? On an ongoing basis, CDCs' shift of risk from employers to participants and added flexibility to reduce benefits have raised questions about whether they provide too much discretion to make changes adverse to participants without sufficient guard rails or protections. The more adjustments a plan makes or has discretion to make that result in differential treatment in the pursuit of equity among different classes of participant groups, the greater the scope for misunderstanding, disagreement, mistrust, and blame.

Finally, CDCs raise a variety of questions about the tradeoff between pooling and portability when an employee changes jobs well before retirement. For the most part, DC savings are relatively easy to move between employer plans. Moving DB benefits can be more challenging, and it is likely that CDCs would be, too.

If CDCs can address these issues successfully, adding particular CDC features to conventional DB plans or 401(k) plans in appropriate circumstances could improve outcomes for workers, retirees, and employers. Accordingly, where a traditional DB plan is well funded by a strong sponsor, for example, in the public sector or in collectively bargained settings, CDCs and similar variable designs might provide some helpful flexibility such as adjustable COLAs, but could also unnecessarily add complexity, new kinds of uncertainty, intergenerational equity

issues, and potentially unclear expectations for employees and retirees. In the many situations, however, where the driver of change is the DB sponsor's unwillingness or inability to continue bearing costly and volatile investment and funding risks, maintaining an existing DB in its current form may not be an option. When the alternative is a 401(k) plan, a better solution could be either to modify the DB to add CDC features and flexibility or to add CDC features to the 401(k), including more investment pooling and professional investment management, pooling of longevity risk among retirees, and facilitating retirement income.

A CDC is also an option for a 401(k) sponsor that wants to provide a retirement benefit with better features without the potential expense of a DB. A CDC could provide both higher benefits and retirement income, rather than forcing new retirees to either incur the cost of a commercial annuity or determine for themselves how to invest and at what pace to draw down their 401(k) or IRA balance.

V. Conclusion

Looking beyond the conventional, traditional DB and DC plan designs to explore a new, richer, and more nuanced array of risk-sharing and pooling strategies is a welcome development that will help identify more optimal allocations of financial risks and retirement benefits.

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