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# HAVE LOCALITIES SHIFTED AWAY FROM TRADITIONAL DEFINED BENEFIT PLANS?

By Jean-Pierre Aubry and Kevin Wandrei\*

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## INTRODUCTION

As of 2019, 18 states offered something other than the traditional stand-alone defined benefit (DB) plan as their primary retirement plan. In the wake of the 2008 financial crisis, states were more likely to introduce a hybrid and/or cash balance plan rather than a stand-alone defined contribution (DC) plan.<sup>1</sup> But less is known about the adoption of alternative plans among local governments. This *brief* documents the extent of the shift away from stand-alone DB plans for a sample of 180 major local governments to see how it compares to the changes at the state level.

The *brief* proceeds as follows. The first section describes the alternative plan types that governments introduce when they shift away from a stand-alone DB plan. The second section describes the local government sample and documents the extent and nature of the shift. The third section describes the

impact of the shift on government contributions and employee benefits. The final section concludes that the activity at the local level is similar to states in volume and geography, but localities rely more on stand-alone DC plans.

## ALTERNATIVES TO THE TRADITIONAL DB PLAN

The traditional DB plan, which provides an inflation-adjusted lifetime benefit that is defined by an employee's years of work and salary, is the predominant type of public sector retirement plan. The benefit is pre-funded by employer and/or employee contributions, which are pooled and invested by professional managers. Employer – and, occasionally, employee –

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contribution levels are periodically adjusted to ensure that accumulated assets will be sufficient to pay the annuity amounts defined by the DB formula.

When governments move away from a traditional stand-alone DB plan, they generally adopt one of three alternatives: defined contribution, cash balance, or hybrid.

*Defined Contribution:* The most extreme departure from a traditional DB plan is the DC plan. DC plans are savings vehicles – typically 401(k)s in the private sector – that allow for regular (or, “defined”) contributions to a tax-deferred retirement account. Employer and/or employee contributions are invested at the direction of the employee to accumulate assets to draw upon in retirement. As such, in a traditional DC plan, the employee bears all the responsibility for investing their savings and drawing them down in retirement.

*Cash Balance Plan:* A cash balance (CB) plan is technically a DB plan, but exhibits some features of a DC plan.<sup>2</sup> Like DBs, employer and employee contributions are pooled and invested by professional managers. However, like DCs, a CB plan maintains individual notional accounts for employees, which are regularly credited with investment returns. The credited return is determined by the plan as a fixed flat rate or is tied to the overall performance of the pooled assets, although the credited return may not be below zero. At retirement, the employee’s account balance can be taken as a full or partial lump sum – as in a traditional DC – or annuitized to provide a guaranteed lifetime income – as in a traditional DB.

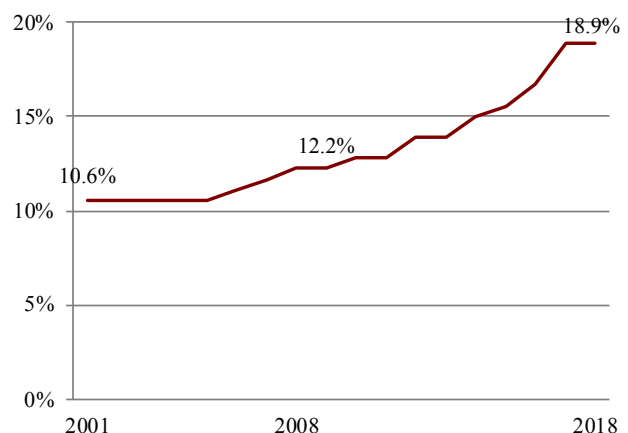
*Hybrid Plan:* Hybrid plans combine a traditional DB plan with a traditional DC plan, and the DB component is generally less generous than a stand-alone DB. The DB and DC portions of the hybrid plan operate separately. In many cases, employers contribute only to the DB and employees contribute only to the DC, but it is not uncommon for both employers and employees to contribute to both portions of the plan. DB assets are pooled and professionally invested, while DC assets are invested at the direction of the employee. In retirement, employees receive an annuity from the DB, and draw funds from their DC account at their discretion.

## LOCAL TRENDS IN PLAN DESIGN

Most local governments do not run their own retirement plans; instead they participate in state-administered plans. The localities that do run their own plans are much more likely to be the larger cities or counties. So, to investigate the trends in plan design among localities, the CRR initially examined the five largest cities and counties in each state, roughly 500 localities in total.<sup>3</sup> Of these large localities, the sample was then narrowed down to the 180 localities that administer their own plans – which cover about 40 percent of all city and county employees, as measured by the U.S. Census of Governments.

The data show that the percentage of large localities that has moved away from a traditional stand-alone DB is meaningful (see Figure 1).<sup>4</sup> As of 2001, 19 localities – 10.6 percent of the 180 governments in the sample – offered an alternative plan as the primary retirement benefit for newly-hired employees. Since 2001, 15 additional localities have shifted away from stand-alone DBs (mostly after the financial crisis). As a result, 34 localities – representing 18.9 percent of the sample – offered an alternative plan as of 2018 (the most recent year of complete data at the time of this analysis).<sup>5</sup>

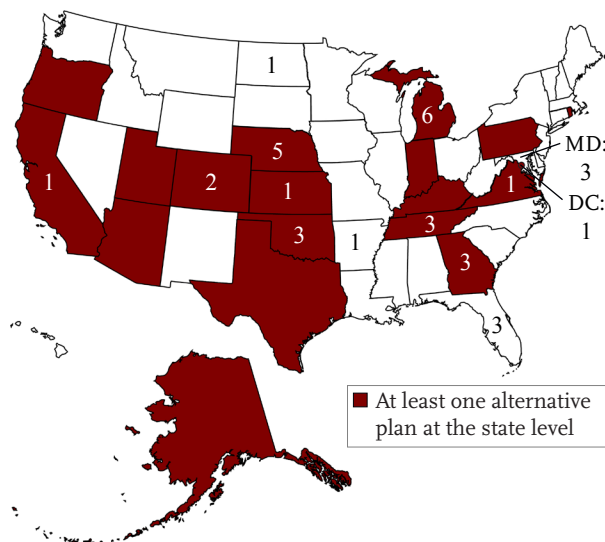
FIGURE 1. PERCENTAGE OF LOCALITIES THAT HAVE SHIFTED AWAY FROM A STAND-ALONE DB PLAN, 2001-2018



Note: Each locality’s reforms are counted only once, even if the locality changed more than one of its retirement plans. Sources: Various plan Comprehensive Annual Financial Reports (CAFRs), and authors’ analysis.

A closer look at the local governments that have shifted reveals some interesting relationships between activity at the state and local levels. First, the localities that have introduced an alternative plan are generally in states where the state government has also done so (see Figure 2). For example, alternative plan designs at the local level are more common in Michigan (6 localities) and Nebraska (5 localities), where the states have a long history with stand-alone DC plans and CB plans, respectively.<sup>6</sup>

FIGURE 2. ALTERNATIVE PLANS ADOPTED BY STATES AND LOCALITIES, WITH NUMBERS INDICATING TOTAL LOCALITIES ADOPTING SUCH PLANS IN EACH STATE

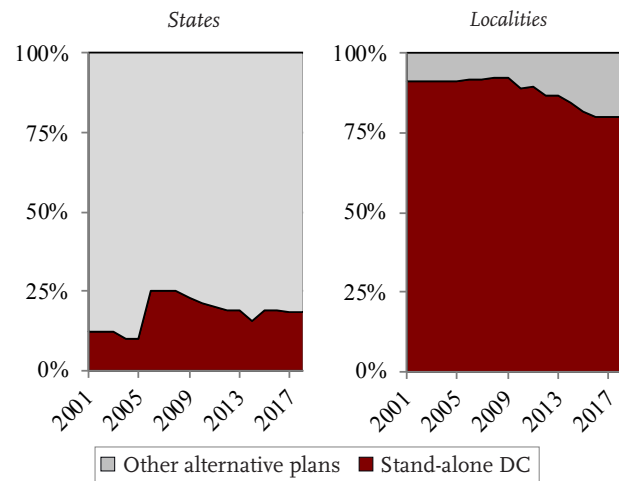


Notes: San Diego introduced a mandatory DC plan in 2012, but it was later ruled unconstitutional. Connecticut is not highlighted because its state-level DC plan covers higher education employees only.

Sources: Various plan CAFRs, and authors' analysis.

Second, tracking the type of alternative plans shows that those offered by localities are much more likely to be stand-alone DCs than those offered by states (see Figure 3). As of 2018, of the 40 alternative plans offered in 34 localities, 32 plans were stand-alone DC plans while 8 were hybrid or CB plans. In comparison, among the 22 alternative plans offered in 18 states, 4 plans were stand-alone DC plans while 18 were hybrids or CB plans.

FIGURE 3. SHARE OF ALTERNATIVE PLANS BY TYPE, 2001-2018



Note: "Other alternative plans" are hybrid or CB plans. Both charts end in 2018, excluding Pennsylvania's SERS and PSERS reforms in 2019, and San Diego's official re-opening of its DB plan due to court action.

Sources: Various plan CAFRs, and authors' analysis.

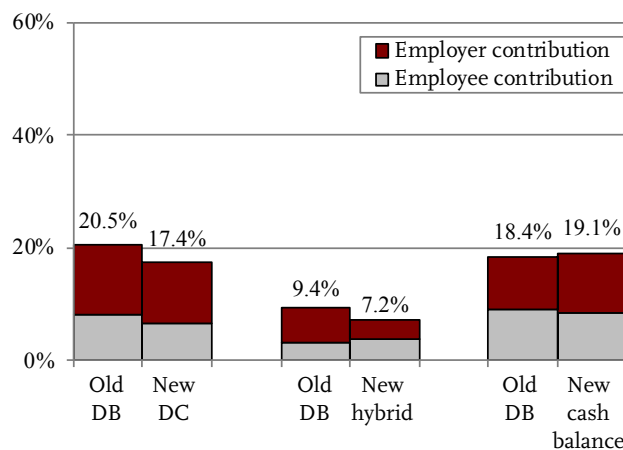
## IMPACT OF SHIFT TO NEW PLANS

Since 2009, a total of 13 alternative plans have replaced stand-alone DB plans at the local level. Of those 13 plans, seven were stand-alone DCs, three were hybrids, and three were CBs. Cost reduction has often been touted as a key reason for the shift away from stand-alone DBs. Indeed, a basic comparison shows that employer contribution rates for the 13 new plans are significantly lower than contribution rates for the old DBs. However, the cost reduction from this shift is lower than this comparison suggests because the alternative plans were introduced for new hires only (due to legal protections for public employee benefits).<sup>7</sup> More than two-thirds of employers' DB contributions go to fund pension benefits promised for *past* service in government – which are unaffected by the shift to a new plan – and less than one-third is for current service (normal cost).

Comparing the retirement benefits earned under the new plans to those earned under the prior DBs requires considering both the retirement contributions made for current service *and* the investment

returns applied to those contributions. A comparison of current-service contributions shows that – except for the new CB plans – the contribution rates for the new alternative plans are somewhat lower than the prior DB rates (see Figure 4).<sup>8</sup>

FIGURE 4. AVERAGE RETIREMENT CONTRIBUTIONS FOR CURRENT SERVICE, AS PERCENTAGE OF PAY, BY PLAN TYPE

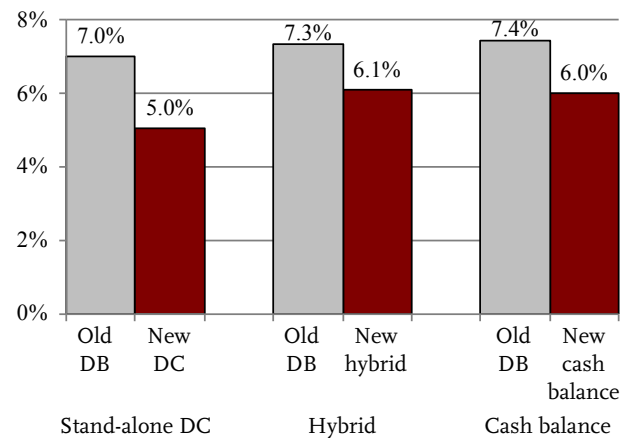


Note: See endnote 9.

Sources: Authors' calculations from various plan actuarial valuations (AVs) and CAFRs.

However, under the traditional DB plan, participants are effectively promised the plan's actuarially assumed return (usually 7.0 to 7.5 percent) on their normal cost contributions.<sup>10</sup> Under any DC arrangement (stand-alone or hybrid), workers will receive whatever investment returns the market provides on their contributions. Under the CB plans introduced, participants are generally credited an interest rate below the actuarially assumed return of the prior DB plan (see Figure 5).<sup>11</sup> So, even if contributions for current service are close to the levels of the prior DBs, retirement benefits are likely to have been reduced under the alternative plans.

FIGURE 5. AVERAGE NOMINAL RETURNS CREDITED TO RETIREMENT CONTRIBUTIONS, BY PLAN TYPE



Note: New DC returns are estimates based on the annualized returns from 1999-2019 for a portfolio allocated 70 percent to the Wilshire 5000 Index and 30 percent to the Barclay's Aggregate Bond Index (with annual rebalancing).<sup>12</sup> Sources: Authors' calculations from various plan AVs and financial reports, the Wilshire 5000, and Barclay's Aggregate Bond Index.

## CONCLUSION

Past research has analyzed the shift away from stand-alone DB plans at the state level. The states that shifted were more likely to introduce mandatory hybrids and/or CB plans – rather than stand-alone DC plans – after the financial crisis as compared to before.

This *brief* finds that activity at the local level is similar to states in volume and geography, but not in the types of plans introduced – states tend to offer CBs and hybrids while localities choose stand-alone DCs. While local government contributions to the new DC plans are lower than those made to the prior DBs, the impact on government costs will be incremental because most of their DB contributions go to fund pension benefits promised for *past* service and are unaffected by the shift to a new plan. And employees covered under the new alternative plans – whether stand-alone DC, hybrid, or CB – are at risk of receiving lower benefits than under the prior DBs, particularly if investment returns fall short of the DB plans' actuarially assumed return.

## ENDNOTES

- 1 Munnell, Aubry, and Cafarelli (2014).
- 2 U.S. Department of Labor (2020) defines a cash balance plan as “a defined benefit plan that defines the benefit in terms that are more characteristic of a defined contribution plan. In other words, a cash balance plan defines the promised benefit in terms of a stated account balance.”
- 3 School districts were excluded from the sample because most teachers are in state-administered plans.
- 4 To be classified as moving away from a traditional stand-alone DB, employees must be required to enter a plan with an alternative design.
- 5 See the Appendix for a detailed list of the 34 local governments in the sample that offer an alternative plan design. While these 34 localities represent 19 percent of the 180 local governments, they make up only 12 percent of all the employees in the sample.
- 6 In 1996, Michigan replaced its stand-alone DB plan for state employees with a stand-alone DC plan. In 2003, Nebraska replaced two stand-alone DC plans – one for state employees and another for county workers – with CB plans.
- 7 Munnell and Quinby (2012).
- 8 The analysis focuses only on the mandatory contributions to DC plans. Most of the DC plans have mandatory employee and/or employer contributions. Some provide an additional employer match to voluntary employee contributions. Among the new DC plans, the average period for employees to fully vest in employer contributions is about six years. For comparison, the average period to vest in retirement benefits among the prior stand-alone DB plans was about eight years.
- 9 The data in Figure 4 report contribution rates for the localities that shifted away from stand-alone DB plans. The Old DB percentages represent contribution rates for the stand-alone DB plans that existed prior to the new alternative plans. Contributions to the new DC plans – and the DC-component of the New Hybrid plans – include only the mandatory portions of employee and employer contributions.
- 10 In practice, the normal cost is reverse-engineered by the plan actuary by discounting future promised benefits by the actuarially assumed long-term return on assets.
- 11 While the interest rate for most CB plans is below the assumed return of a typical DB plan, some CB plans do share investment upside with employees by crediting their notional accounts with a portion of the actual investment return that exceeds a threshold set by the plan.
- 12 Old DB returns are the plans’ actuarially assumed investment returns. New Hybrid returns are the average of the estimated returns for the New DC and the assumed returns of the Old DB, weighted by proportions of DC and DB contributions. New CB returns are those credited by the plans.

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# APPENDIX

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## APPENDIX: LIST OF LOCAL PLANS WITH AN ALTERNATIVE DESIGN

### *Arkansas*

Springdale: DC, 1999

### *California*

San Diego: DC, 2012

(Attempted, thrown out in court in 2019)

### *Colorado – Statewide optional DC and hybrid*

Fort Collins: DC, 1999

Lakewood: DC

### *District of Columbia – Mandatory DC, 1996*

### *Florida – Statewide optional DC*

Fort Lauderdale: DC, 2008

Jacksonville: DC, all systems, 2017

Orlando: DC, 1998

### *Georgia – Statewide mandatory hybrid*

Cobb County: Hybrid, 2010

Fulton County: DC, 1999

Gwinnett County: DC, 2007

### *Kansas – Statewide mandatory cash balance*

Wichita: DC, 1994

### *Maryland*

Baltimore: Hybrid, 2014

Gaithersburg: DC

Montgomery County: DC, 1994

### *Michigan – Statewide mandatory DC*

Ann Arbor: Hybrid, 2017

Genesee County: DC, 2017

Macomb County: DC, 2016

Oakland County: DC, 1994

Sterling Heights: DC, 1997

Wayne County: Hybrid, 2001

### *Nebraska – Statewide mandatory cash balance*

Bellevue: DC, all plans (general, police, fire), 2011

Grand Island: DC, all plans (general, police, fire), 1984

Lancaster County: DC

Lincoln: DC

Omaha: Cash Balance, 2015

### *North Dakota – Statewide optional DC*

Minot: DC, 2014

### *Oklahoma – Mandatory DC, 2015*

Lawton: DC, 2017

Norman: DC, 1991

Oklahoma County: DC, 1991

### *Tennessee – Statewide mandatory hybrid*

Knox County: DC

Knoxville: Hybrid, 2012

Memphis: Hybrid-Cash Balance, 2016

### *Virginia – Statewide mandatory hybrid*

Richmond: DC, 2006



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