

PERSPECTIVE

## **A New Premium on Discount Rates**

BY JUSTIN MARLOWE



oments after his inauguration, President Biden signed a document titled, "Memorandum on Modernizing Regulatory Review." It's as technocratic, inconspicuous, and inside-the-beltway as the title suggests. But it could reshape the way we think about the costs and benefits of state and local government.

This memorandum set in motion a review of how the federal government evaluates the impact of proposed regulations. That review has several components, including a careful look at how to better incorporate perspectives from those who are affected by regulation but haven't traditionally had a voice in policymaking. But the component that could affect state and local finance the most is a rethinking of discount rates.

As a quick refresher, recall that a discount rate is a number used to adjust

future benefits to today's terms. For instance, imagine that a friend owes you \$1,000. They offer to pay you back the full \$1,000 in three years or pay you \$500 today. They're also quite unreliable, so there's a good chance the future payment will be less than \$1,000. You need to build that uncertainty into your decision.

We quantify that intuition through a discount rate. Discount rates are higher when a future outcome is less certain, when an outcome is simply more valuable to us today than in the future, and when we expect higher inflation, among other reasons. Discount rates and interest rates go hand in hand.

A borrower who is less creditworthy will pay a higher interest rate for a loan precisely because the lender applies a higher discount rate to the repayment of that loan. This same thinking also applies to costs. In that case, a higher

discount rate means future spending feels "less costly" in today's dollars.

Discount rates are everywhere in the federal government. Today approximately \$50 billion of annual federal spending on certain state and local infrastructure projects, especially in areas like mass transit systems and levees, is subject to formal benefit-cost analysis. Federal agencies also conduct benefit-cost analysis of many proposed regulations. The Office of Management and Budget and the Congressional Budget Office use discount rates in their long-term projections of future federal revenues and spending. In all these cases, policymakers' views on whether a proposed project, regulation, or budget appropriation will generate more benefits than costs are tied to the discount rate in play.

Discount rates are hard-wired into state and local government finance, too. Perhaps the most visible, and often controversial, application is in calculating liabilities for state and local government defined benefit pensions. Pension plan sponsors use a rate based on long-term investment returns to express the cost of future retiree benefits in today's dollars. A small decrease in that discount rate can increase those liabilities by millions or billions. Several state departments of transportation use benefit-cost analysis to evaluate different procurement options for the same project. We also see benefit-cost analysis at work in state and local budget shops, internal audit programs, tax incentive evaluations, and many other areas. Perhaps no other single, wonky number is quite as consequential.

For decades, federal agencies have relied on two basic discount rates. One is a 3 percent rate, used to evaluate proposed regulations. It follows from the idea that proposed regulations lead to higher prices, and that causes us to consume fewer goods and services over time. What's that consumption worth? About as much as investing the

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same amount of money in risk-free U.S. Treasury bonds. When the federal guidelines were last updated in 2003, the average yield on US Treasuries was 3 percent. The 7 percent rate applies to the benefits of federal government investments in infrastructure projects. That investment displaces privatesector investment, the logic suggests, so the benefits of that regulation should exceed the return on investment of private capital. Those guidelines were last updated in 1992, and back then those returns averaged 7 percent.

In April 2023 the administration took the next step toward some major changes when it released a draft set of revisions to the two main documents, OMB Circular A-4 and OMB Circular A-94, that apply to these issues. In short, those revisions call for replacing the 3 percent rate with a 1.7 percent rate based on more recent trends in U.S. Treasury yields, and the 7 percent rate with a to-be-determined lower rate. These changes are only proposals, but assuming they're adopted, they'll have three big implications.

First, and practically speaking, higher discount rates will mean more valuable future benefits and more "costly" costs today. If a taxpayer today expects to receive \$100,000 in benefits from a new local government project over 20 years, the present value of those benefits at a 3 percent discount rate is \$55,000, and at a 7 percent discount rate it's a bit more than \$25,000. At discount rates of 1.7 and 4.5 percent, those present values are \$71,300 and \$41,400, respectively. Those are qualitative shifts.

Second, with this proposal the federal government acknowledges that interest rates and returns on investment for private capital have both trended lower over time. Critics of state and local pensions have long argued those plans employ unrealistically high discount rates of 7 to 8 percent. Proponents say those rates properly reflect longterm market trends, even though markets as of late have defied those trends. With this proposal the federal government has come down clearly in favor of the opponents. They'll almost certainly seize on this point.

And third, this proposal solidifies that climate change has forever changed the relationship between current and future benefits. Imagine, for instance, that a city government proposes to spend millions today to decarbonize all its public buildings. Most of the benefits of that investment will be "discounted away" at a discount rate of 7 percent over several decades. And yet, many believe that without decarbonization, climate change will destroy, in just a few decades, the markets from which that 7 percent discount rate was derived. These proposed changes give federal agencies the option to explore even lower discount rates on climate adaptation projects for precisely that reason. This opens the door for state and local governments to do the same.

The federal government is about to put an even larger premium on discount rates. State and local finance professionals should prepare in earnest. 🖪

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