

## RESEARCH SUMMARY

## Improving Cost–Benefit Analysis by Correctly Accounting for Capital’s Opportunity Cost

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For more than 40 years, the federal government has conducted cost–benefit analysis on the effects of regulations in an effort to ensure that they do more good than harm. However, consistent underestimation of the *opportunity cost of capital* (how invested resources would appreciate in value over time) has made it too easy for regulations to pass a cost–benefit test. In “Rehabilitating the Opportunity Cost of Capital in Cost–Benefit Analysis,” James Broughel examines the limitations of the two main approaches to calculating this opportunity cost and outlines an alternative way forward.

### The Social Opportunity Cost Approach vs. the Social Time Preference Approach

- *The social opportunity cost* (SOC) approach uses a social discount rate to account for the opportunity cost of capital.
- The SOC approach’s administrative simplicity is its primary advantage. But it depends on unrealistic assumptions, such as that benefits are “just like cash” (an assumption hard to justify for most health or environmental regulations) and that all agents in the economy have the same private rate of time preference that equates with a “social rate of time preference” (which reflects the degree to which society prefers present over future consumption).
- *The social time preference* (STP) approach accounts for the opportunity cost of capital by using a shadow price, which converts the market value of a capital asset into the value of the stream of future consumption that the capital asset generates.
- The STP method makes sense in theory, but in practice, adherents of the STP approach argue unconvincingly that the opportunity cost of capital can be ignored (for example, because they assert with weak evidence that government projects displace very little investment or induce as much investment as they displace).

### Properly Accounting for the Opportunity Cost of Capital

The practical result of this state of affairs is that, regardless of whether the SOC or the STP approach is used, the opportunity cost of capital is not addressed satisfactorily in a cost–benefit analysis. As the Biden administration updates federal guidelines related to regulatory analysis, it should strive to correct these deficiencies. First, the administration should encourage federal agencies to finally account for the opportunity cost of capital correctly by using a shadow price. Second, updated guidelines should distinguish between concepts such as the opportunity cost of capital and the social rate time preference, which are routinely conflated by analysts. Finally, the policy implications of a full accounting of the opportunity cost of capital should be explained, especially if the Biden

administration recommends the adoption of lower social time preference–based discount rates. An implication of such a recommendation would be that future compounding returns to capital assets should receive much more weight in analysis than they presently do.