To: Executive Director

From: JieQi Yan

Date: May 12th, 2023

RE: Proposed OMB's Circular A-4 Updates: Distributional Effects

---

Distributional Effects

On April 6, 2023, the Office of Management and Budget (OMB) announced a public review draft of Circular A-4, originally designed to provide analyst guidance to regulatory agencies. The main focus of this memo is to outline the updates to the Distributional Effect section. In addition, the reason for expanding distributional analysis, the rationale for priority, the exception to analysis application, and a case example will be discussed below that leads to critique on its justification.

Expanding of Distributional Analysis (AD)

The proposed change expands distributional analysis based on the OMB 2003 version of Cicular A-4, which currently suggests agencies to analyze the distributive implications of regulations. The revised edition extends and details DA and policy effects on various populations. OMB acknowledged "while a regulation may have positive net benefits for society as a whole, it may make some individuals, firms, or other entities better off and some individuals, firms, or other entities worse off," creating winners and losers (OMB, 2023a, p.11). To counteract that, agencies need to weigh the potential impact of the policy on different groups to achieve an equitable distribution of benefits.

The Rationale for Priority

A policy may successfully maximize the social net benefits and compensate those who are worse off

through "... redistribute income from the winners to the losers using a costless, non-distortionary tax and transfer scheme…" (OMB, 2023a, p.11). It is still essential to give priority to DA outcomes. OMB explained that "the benefits and costs of a regulation are ultimately experienced by people. For some regulations, different groups may be impacted differently"(OMB, 2023b, p.61). Since a regulation's goal is to serve people and promote equity through DA, agencies should note that the willingness to pay of a particular group can not be applied to another group without justification. In addition, DA could prevent future compensation instead of solving the distribution problem later.

Exceptions to DA Application

In DA guidelines, OMB noted that the revision "emphasize agency discretion to perform preliminary screening of rules to determine which are most likely to have significant differentiated effects on particular demographic groups and to analyze important distributional effects in those cases" (OMB, 2023a, p.12). OMB states that not all policies will have significant distribution effects requiring DA. In addition, economic DA can be complex and costly that may require scarce resources. Therefore, OMB argues distributional impacts vary among policies and groups, and the revision would provide a list of possible groups (OMB, 2023a, p.12).

Case Example

The unitary weights method assumes equal weights and "does not usually take into account how distributional effects may affect aggregate welfare because of differences in individuals' marginal utility of income" (OMB, 2023a, p.12). Circular A-4 recommends that agencies consider weighting regulations based on their uneven influences on different income ranges. For example, suppose we estimate the aggregate net benefits of a policy for low-, medium-, and high-income. The proposed approach below

would give a more accurate estimate of the policy's aggregate net benefits considering each subgroup's income over the U.S. median income in response to the marginal utility. The variables for Circular A-4 are below (OMB, 2023b, p.65). The table includes the weighted total of subgroup-specific net benefits.

$$W_i = \left(\frac{\overline{\gamma_i}}{\gamma_{med}} \right)^{-\epsilon}$$

W_i – weighted for subgroup
$\overline{\gamma_i}$ – median income for that subgroup
γ_{med} – U.S. median income
$-\epsilon$ – negative elasticity of marginal utility of 1.4

Income group	Net benefits of regulation	Median income for group	weight (Wi)	Weighted sum of the subgroup–specific net benefits
High	-$10B	5 times the U.S. median	0. 1051	-1.051B
Middle	$2B	Equal to the U.S. median	1	2B
Low	$7B	½ of the U.S. median	2.639	18.573B

Justification

When considering weighting by income groups, "a crucial component of this approach is the value of the elasticity of marginal utility" (OMB, 2023a, p.12). The currently determined elasticity of marginal utility (EMU) in Circular A-4 revision is 1.4 based on surveys conducted by OMB. However, OMB was mindful of this and listed other credible EMU methods such as Acland and Greenberg (2022), Layard, Nickell, and Mayraz (2008), Havranek et al. (2015), and more (OMB, 2023a, p.13-15). OMB had considered as much as it could. Whether or not 1.4 is the correct number can only be tested when the agencies begin to use the proposed DA weighting method.

Word count: 667

References

OMB (Office of Management and Budget). 2003. "Circular A-4, Regulatory Analysis". Available at https://www.whitehouse.gov/wpcontent/uploads/legacy_drupal_files/omb/circulars/A4/a-4.pdf.

OMB (Office of Management and Budget). 2023a. "Preamble: Proposed OMB Circular No. A-4, "Regulatory Analysis" Available at: https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4Preamble.pdf.

OMB (Office of Management and Budget). 2023b. "Circular A-4, Regulatory Analysis -- Draft for Public Review". Available at https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4.pdf.

Content					
					Stays on topic and addresses each question thoroughly
					States coherent positions supported by analytically sound arguments
					Makes effective use of references as needed
					Shows a clear and precise understanding of key concepts (economic, policy, and natural science)
					Thesis is compelling and clearly stated. Concluding argument is definitive and well-supported

Writing					
					Grammar, spelling, punctuation and sentence mechanics are well-executed
					Formality, tone and assumed base of knowledge is appropriate for intended audience
					Meets length and formatting requirements
					External sources are appropriate and properly cited in text; full citations are in reference section

excellent — poor