

A Decision-theoretic Approach for Alternative Measures of Wealth Inequality

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Decory Edwards¹

The inequality literature is notable in its ability to bring together four distinct concepts: (i) measures of inequality, (ii) social welfare functions, (iii) mean values, and (iv) models of choice under uncertainty, as noted by ?. This interplay between statistical and theoretical analysis has been commonly applied in the context of inequality in the distribution of *income*. It is well-known that income and wealth inequality are markedly distinct phenomena. This distinction becomes more pronounced when one makes racial considerations regarding inequality. Notably, as recent as 2019, it has been reported that “the median white household held \$188,200 in wealth – 7.8 times that of the typical Black household”. This paper provides a theoretical foundation for wealth inequality that incorporates the first three of the four distinct concepts. The ranking over wealth distributions will be established through the use of a *choice under objective-subjective uncertainty* model to achieve a ranking over the defined wealth distributions. From there, the “social welfare approach” to proposing inequality measures as seen in ? is applied in this context, with the future goal of comparing an alternative measure to the *black-white median wealth gap* in the U.S.

¹Edwards: Department of Economics, Johns Hopkins University, dedwar65@jhu.edu,