Willingness-to-Pay: A Welfarist Reassessment

Despite enduring criticism, the Willingness to Pay (WTP) criterion continues to exert substantial influence on policymaking, especially through the vehicle of cost-benefit analysis.

In this Article, I use a welfarist framework to evaluate WTP-based policymaking and the critiques of WTP-based policymaking. A welfarist cares about individual preferences or utilities – and how they are aggregated into a social welfare function – not about individuals’ WTP. But since we cannot directly observe preferences or utilities, we use WTP as a proxy for utility. Much of the criticism levied against the WTP criterion can be understood as saying that WTP is a bad proxy for utility – that WTP contains limited information about preferences.

The main goal of this Article is to explore the conditions under which WTP can serve as a good proxy for utility. A major criticism of WTP is that wealth effects prevent WTP from serving as a good proxy for utility. I formalize this critique and extend it. In particular, I analyze the effects of the distribution of wealth in society on the informational content of WTP. The basic claim is that WTP contains more information about preferences, and thus serves as a better proxy for utility, when the distribution of wealth is more equal. Conversely, in a society with great wealth disparities, there is a greater risk that WTP will be a poor proxy for utility. I develop a methodology for quantifying the informational content of WTP. This methodology requires the specification of a functional relationship between wealth and utility, which captures the decreasing marginal utility from money. The power of this methodology is demonstrated using a particular functional relationship that is borrowed from other applications in the economic literature and supported by data.

The informational content of WTP depends on how WTP is measured and applied. First, I distinguish between two types of policies: (i) policies that are *not*paid for by the individuals who are affected by the policy, but rather by general funding sources (like tax revenues); and (ii) policies that are paid for by the individuals who are affected by the policy (e.g., a regulation that mandates certain car safety features and results in higher car prices). Second, I distinguish between two types of WTP measures: (i) individualized WTP that measures the benefit from a policy by eliciting the WTP of the individuals who are affected by the policy; and (ii) uniform, average WTP that measures a universal benefit, such as a reduction in mortality risk, by eliciting and aggregating the WTP of all individuals; this aggregate WTP measure (the VSL) is then used whenever a policy affects mortality risk, even if the specific policy does not affect most of the people from whom WTP was elicited. When the cost of the policy is *not* borne by the affected individuals, individualized WTP has low informational content and increases wealth disparity. Uniform, average WTP has higher informational content and reduces wealth disparity, at least in the case of universal benefits. Therefore, when possible, a uniform, average WTP should be preferred in this scenario. When the cost of the policy is borne by the affected individuals, individualized WTP has high informational content but increases wealth disparity. Uniform, average WTP has lower informational content and indeterminate distributional implications. Here, the choice between individualized WTP and uniform, average WTP is more difficult. The analysis provides further justification for the common use of uniform, average WTP measures, but only when the cost of the policy is *not* borne by the affected individuals.

I briefly consider two extensions. The first involves time. I present a dynamic extension of the relationship between the informational content of WTP and the wealth distribution. Since WTP is affected by wealth, the initial wealth distribution will affect the policies that a WTP-based analysis prescribes. But these chosen policies will then change the distribution of wealth, which will then change WTP and thus lead to further policy change. This further policy change will again affect the distribution of wealth. Etc. Through this dynamic, inequality can increase over time. In addition, the dynamic extension forces us to rethink the WTP for the initial policy. Since the initial policy will affect, through the evolving wealth distribution, many future policies, the stakes are higher and thus WTP for the initial policy will be higher. Indeed, individuals would borrow against future wealth to increase WTP and secure their favored initial policy. The second extension emphasizes the effect of forward-looking rationality on the WTP measure. Consider the standard WTP question: “how much are you willing to pay for Policy X?” For a rational individual, this question would elicit a response that is sensitive to changes in the wealth distribution brought about by the policy – in the short-term and in the long-term (incorporating the dynamic extension). A myopic individual, on the other hand, will consider only the immediate effects of the policy, ignoring its implications for the wealth distribution and for future policy debates. Therefore, the question of rationality raises additional concerns about WTP-based policymaking.