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Ideology, public goods and welfare valuation: An experiment on allocating government budgets

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ABSTRACT

This study demonstrates how experimental survey methods can be used to assess preferences for budget-constrained combinations of public and publicly provided goods and services. The study shows how to calculate welfare changes based on preferences for increases and decreases in programs within particular budget portfolios, and quantifies the effect of ideology on valuations of public programs. The findings show that respondents, including conservatives, were reluctant to approve of cuts when they were faced with the exact definition of what they needed to give up or how a decrease would affect the provision of services.

1. Introduction

Benefit-cost analysis (BCA) aims to identify resource–allocation options that improve social welfare. BCA compares social benefits and costs to determine whether resources should be allocated to a particular project, policy or intervention. However, BCA is a normative tool, not a description of how political and bureaucratic decision makers actually make decisions. (Boardman et al., 2006). Actual resource–allocation decisions incorporate perceived benefits and costs related to ideology, income distribution, processes, and rent-seeking outcomes (Söderbaum, 2007). Individuals value public services according to how they perceive the benefits to themselves and others (if altruistic), and these valuations are not independent of their ideological perspectives. The voting behavior of the general public incorporates similar concerns (Jackson and King, 1989) not evaluated in conventional BCA accounting. BCA studies that measure the welfare consequences of the provision of nonmarket goods and services could be more useful in helping decision makers identify policy-relevant social-welfare improvements if they identify the role of political ideology plays in estimates of gains and losses. In this study we introduce ideological and process preferences to broaden the conventional definition of social welfare employed in BCA applications, in which estimates of welfare gains and losses are typically based only on preferences for resource–allocation outcomes.

Conventional BCA calculations assign no value to mechanisms that the state uses to generate revenue. However, voters and policy makers care both about the mechanism by which the funds are raised as well as how public funds are spent (Jacoby, 1994; Wlezien, 2004). Taxation is the most common source of public revenues. However, political and bureaucratic

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decision makers face voters' resistance to raising taxes and pressure to reduce taxes. Taxation can have such a negative connotation that people have been found to be more averse to fees if they are called "taxes" than if they are called "payments" (McCaffery and Baron, 2004). Some people might oppose any tax increase no matter what the purpose of the increase is, even if they benefit greatly from the resulting expenditures. In contrast, other people might favor government provision of a service and would support tax increases even for inefficient government expenditures (McCaffery and Baron, 2004). Willingness to reallocate the existing funds government spends among public services may be less sensitive to attitudes towards taxation. If changes in taxes are associated with opinions on the legitimate role of government, the marginal utility of disposable income and public services would depend on political ideology. Valid valuation of publicly-provided goods thus logically should account both for preferences over revenue-generation processes and for preferences for goods and services funded by the resulting revenues.

Values of goods and services not exchanged in competitive markets and the determinants of such values are not directly observable. Experimental approaches based on simulated markets are commonly used to elicit directly the value of public or publicly-provided goods. These methods elicit values by constructing trade-off tasks where the goods of interest and the institutional context are clearly specified (Bergstrom, 1990). The payment mechanism can be actual (as in laboratory or field experiments) or hypothetical (as in contingent-valuation or discrete-choice experiment surveys). While conventional economic theory assumes value to be independent of the payment mechanism, studies have shown that the method of payment can affect value estimates, suggesting that subjects have preferences over both the good or service provided and the means by which it is provided (Johnston et al., 1999; Stevens et al., 1997).

To elicit policy-relevant welfare values, we constructed a controlled discrete-choice experiment using a budget–allocation framework that allows for preferences over funding mechanism (increases or decreases in taxes, or reallocation of existing spending levels) as well as for preferences over competing budget allocations for a set of selected public goods and services. The experiment specified a realistic institutional context where the provision mechanism for a public service could be either expenditure reallocations from other public services or new tax revenues. The experiment offered both increases and decreases in income taxes and particular public services to allow subjects to express preferences over the role of government. The opportunity cost of public dollars was clearly linked to changes in services from other specified government programs so that subjects knew what services they would receive from their tax payments or from reduced expenditures on other services. Welfare-value estimates of willingness to pay (WTP) were obtained from respondents with different ideological perspectives. We expect that respondents with a liberal political perspective will have a higher WTP for increases in public services than those with a conservative perspective, and that they would be WTP more to avoid decreases in public services. On the other hand, we expect being conservative to be negatively correlated with WTP for increases in public services and WTP to avoid decreases in public services. We also tested for substitute and complement relations among public services competing for budget expenditures.

2. Background

Previous studies have investigated subjects' preferences for allocating a fixed level of public spending among multiple public services (Blomquist et al., 2004; Costa-Font and Rovira, 2005). The objective was to measure the relative strength of support for alternative public services using fixed levels of public spending. Although these studies were helpful in understanding public preferences about allocating a fixed budget, public expenditures were not linked to personal budget constraints so a valid welfare measure could not be calculated. Also, in these studies budgeted expenditures were not translated into program outcomes so subjects did not know how changes in public spending would affect the quantity or quality of public services provided. In effect, subjects were asked to spend existing taxes as if they were spending someone else's money for an unknown personal share of the publicly provided goods and services.

Other studies have quantified subjects' willingness to reallocate taxes from existing public services to new public services (Bergstrom et al., 2004; Nunes and Travisi, 2009; Swallow and McGonagle, 2006). Under the assumed tax-reallocation mechanism, total taxes were held constant, but were reallocated from one or more public services to another.

Some studies identified different sources of funds to provide the new publicly provided service, such as all other public services (Bergstrom et al., 2004), or the existing public services in proportion to their current share of the public budget (Swallow and McGonagle, 2006). The problem with this approach, however, is that although these studies described the exact changes in the programs that received the reallocated public dollars, the decreases in the public services from which the funds for the new service were obtained were not clearly identified.

Previous budget–allocation studies also have focused only on increases in funding for particular publicly provided services; they have not investigated how preferences for funding cuts differ from increases. Evidence from endowment effect studies show that individuals perceive more value from things they already own. We expect that cuts in publicly provided services will be susceptible to the endowment effect and that preferences for reducing public services will be different than preferences for increases in these services, even when there is no change in total taxes. A now standard result is that people are more averse to bearing losses than to obtaining gains (Kahneman et al., 1991; Tversky and Kahneman, 1991), and the difference cannot be explained by diminishing marginal utility of income. While standard economic theory assumes constant marginal utility for changes in spending that are small relative to total income, findings on loss aversion in different settings and for a variety of goods lead us to expect that the measured marginal utility of income from tax increases will be

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