

An Empirical Test of Public Choice Theory

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Susannah Camic Tahk, *Public Choice Theory & Earmarked Taxes*, **N.Y.U. Tax L. Rev.** (forthcoming, 2015), available at [SSRN](#).

In 1980, James Q. Wilson, in *The Politics of Regulation*, predicted that laws with diffuse costs and concentrated benefits would be relatively easy to enact, but that laws with concentrated costs and diffuse benefits would be relatively hard to enact and, once enacted, hard to maintain. This hypothesis, one of the pillars of public choice theory, has long been asserted without empirical verification. Indeed, in 1994, Donald Green and Ian Shapiro, in *Pathologies of Rational Choice Theory*, challenged the willingness of theorists to accept such unverified predictions as true: “The discrepancy between the faith that practitioners place in rational choice theory [of which public choice theory is a branch] and its failure to deliver empirically warrants closer inspection of rational choice theorizing as a scientific enterprise.” In *Public Choice Theory & Earmarked Taxes*, [Susannah Camic Tahk](#) provides the first rigorous empirical support for Wilson’s hypothesis.

Her study explores the histories of 1497 state-level earmarked taxes between 1997 and 2005. Earmarked taxes, in general, produce more concentrated benefits than taxes the proceeds of which flow into a state’s general fund. Thus, we would expect earmarked taxes to perform strongly as revenue generators. And, indeed, Tahk finds that the earmarked taxes in her sample raised 58.39% more revenue in 2005 than in 1997—a larger percentage increase than any major federal tax over the same period.

Tahk codes each tax in her sample for concentration of costs on a scale of 0 to 3 – 3 for the most concentrated, 0 for the most diffuse—and for concentration of benefits. Subtracting the benefit score from the cost score produces what she calls a “cost/benefit distribution” score for each tax, ranging from -3 to +3. A tax with a low cost/benefit distribution score—for example, New Hampshire’s tax on business profits earmarked for education—has diffuse costs and concentrated benefits. Public choice theory predicts that such a tax should be relatively easy to enact and maintain. A tax with a high cost/benefit distribution score—for example, Nevada’s tax on specific minerals earmarked for local governments and general debt service—has concentrated costs and diffuse benefits. Public choice theory predicts that such a tax should be relatively hard to enact and maintain.

She then tests the relationship between each tax’s score and its change in revenues between 1997 and 2005, controlling for state GDP, state GDP per capita, and state revenue per capita, and finds a statistically significant inverse relationship between the two. Taxes with diffuse costs and concentrated benefits raised more revenue over time; taxes with concentrated costs and diffuse benefits, less. Bingo! Wilson’s hypothesis confirmed.

It is hard to overstate the importance of this accomplishment. Tahk has identified a body of rules—earmarked state taxes—with respect to which costs and benefits can be easily quantified and winners and losers identified, and developed a method for arranging such rules on a linear scale susceptible to standard statistical analysis. In the third of a century since Wilson first posited his hypothesis, no one else has managed to do this.

Her results provide empirical support for the intuitions many of us have about taxes—most importantly, federal income and payroll taxes. The largest earmarked federal tax—the payroll tax—has been subject to remarkably little tinkering; Tahk’s work suggests that earmarking may explain its durability. Tax expenditures, by contrast, produce concentrated benefits and diffuse costs. Again, her work supports the public choice explanation for their proliferation and persistence.

Much remains to be done. Most importantly, Tahk’s scoring is subjective. Diffusion and concentration are not rigorously defined. Why are education benefits—which affect large numbers of voters—“concentrated,” while business profits—which may actually affect fewer voters—“diffuse”? I can tell a public choice story that supports Tahk’s characterization, but it is more complex than her paper acknowledges. One suspects that replication would produce similar results, but a more tightly defined scoring algorithm would make follow-up studies more compelling.

In the general scheme of things, however, this is a nit. Tahk’s paper is profoundly innovative and deserves a read.

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