



Harvard Kennedy School Energy Policy Seminar Series, Fall 2013

## The Double Dividend--Can A Carbon Price Be Good for the U.S. Economy?

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“The costs of pollution control can be reduced to zero,” argued Dale Jorgenson, Samuel W. Morris University Professor, at the Energy Policy Seminar on Monday, December 2.

Jorgenson spoke about the research in his new book, *Double Dividend: Environmental Taxes and Fiscal Reform in the United States*. The book, Jorgenson explained, takes an opposite approach to the typical arguments for environmental regulation and/or environmental taxes, which generally focus on the cash value of the negative environmental externalities that could be avoided (health benefits from reduced air pollution, the social cost of carbon, and so on). Instead, Jorgenson’s analysis makes the case that a properly-structured environmental tax could benefit the economy even without considering the value of resulting environmental benefits.

Jorgenson explained how he used his Intertemporal General Equilibrium Model of the U.S. economy to analyze the economic impacts of a range of possible carbon tax scenarios in which increased revenue from carbon taxes was recycled through cuts to other kinds of taxes.

What Jorgenson’s model finds is that it’s possible to increase household welfare through environmental taxes—but it all depends on what you do with the tax revenues. The clear winner in Jorgenson’s analysis is the scenario in which funds raised through environmental taxes are used to allow for cuts in rates of taxes on capital (corporate income taxes, capital gains taxes, etc.). When the tax burden is shifted from capital spending to carbon emissions, Jorgenson’s model projected increases in household wealth for U.S. households across all income categories. This is the “double dividend”—“the simultaneous achievement of environmental and economic objectives.”



The “double dividend,” Jorgenson noted, does come with a cost—there is a loss of “equity” in the system, in that households with more capital are likely to benefit the most from the reduction in taxes on capital (though all households should benefit to some degree.) The “double dividend” is a free lunch for everyone—but it’s one in which some will eat better than others. In Jorgenson’s model, more egalitarian methods of distributing environmental tax revenues, such as using environmental tax revenues to reduce labor tax rates, or setting up a “cap and dividend” system, in which revenues were distributed directly back to U.S. households as lump sum payments, failed the “double dividend” test, significantly reducing average welfare for most U.S. households.

The “double dividend,” then, Jorgenson emphasized, is not a prescription for policy makers, but a call for them to make informed value judgments. Are the double dividend’s benefits—economic and environmental--worth an increase in economic inequality? How should the political debate over pollution control change when it is possible to choose a policy under which pollution control is good for the economy?

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