

Lawmakers Must Weigh Strengths and Weaknesses of Cap and Trade Economic Modeling

Macroeconomic Analysis More Conclusive Than Input/Output Models in Measuring Policy Impact on U.S. Economy and Jobs

(Washington, DC, November 10, 2009) – Given the extremely weak state of the U.S. economic recovery and an unemployment rate of 10.2 percent last month, lawmakers must take a very cautious and measured approach to reducing U.S. greenhouse gas emissions, urged Margo Thorning, Senior Vice President and Chief Economist for the American Council for Capital Formation. Testifying today before the Senate Finance Committee, Thorning noted that numerous government agencies, think tanks and academic organizations have employed a broad array of economic modeling to address the likely impacts of bills such as the “American Clean Energy and Security Act” (H.R. 2454) or the “The Clean Energy Jobs and American Power Act” (S.1733) on U.S economy, job growth and competitiveness. Before enacting any new climate policy, lawmakers must compare the strengths and weakness of the economic different models used. In addition, they need to evaluate the reasonableness of the assumptions used in the models on the availability of new technologies, offsets, banking and other parameters of the modeling process.

“Most experts conclude that macroeconomic models are better at predicting the impact of cap and trade legislation to reduce GHGs than are Input/Output models,” Thorning noted. “Macroeconomic models are dynamic and capture interactive effects between the energy and other sectors of the economy. They also capture international trade effects by accounting for an economy’s relationship with other economies.”

A macroeconomic analysis by the American Council for Capital Formation and the National Association of Manufacturers of H.R. 2454 using a version of DOE: EIA’s National Energy Modeling System showed that the bill would reduce total U.S. employment (net of new jobs created in green industries) by 80,000 jobs in the high cost case in 2020 and by between 1,790,000 to 2,440,000 jobs in 2030. Manufacturing is hard hit; it absorbs between 59 to 66 percent of the job losses over the 2012-2030 period. GDP declines by as much as 0.2 to 0.4 percent in 2020 and by up to 2.4 percent relative to the baseline forecast in 2030.

Thorning stressed that in modeling the economic effects of climate policy changes, the key assumptions are the projections for economic growth under the baseline forecast as well as factors like how quickly new technology can be deployed for nuclear electric generating capacity, for carbon capture and store for coal and natural gas electric generation and for alternative energy sources such as biomass, wind and solar power. Other key assumptions involve the cost of new construction for electric generating capacity and the amount of offsets and banking allowed.

Alternatively, Thorning pointed to two recent analyses using static input/output models state that bills such as Waxman/Markey would have a net positive impact on U.S. employment. For example, the Center for American Progress/Political Economy Research Center report claims that there would have been be a net gain of 1,700,000 jobs in 2008 if policies like Waxman Markey had been in place.

But the CAP/PERI report identifies some of the problems with its own analysis. The report states, “there are certainly weaknesses with our use of the input-output model. The most important are that it is a static model, a linear model, and a model that does not take into account structural changes in the economy.....Our model also assumes that a given amount of spending will have a proportionate effect on employment no matter how much the level of spending changes, either up or down. For example, the impact of spending \$1 billion on an energy efficiency project will be exactly 1,000 times greater than spending only \$1 million on the exact same project.” In the case of many input/output models, their

analysis is incapable of reflecting real-world changes in prices, human and physical resource constraints, productivity, saving and investment, and productivity.

“Lawmakers should be praised for their goals of reducing greenhouse gases, but a close look at reliable macroeconomic modeling concludes that under this legislation the U.S. will suffer significant economic pain with virtually no environmental gain,” Thorning concluded. “To be effective, policies to reduce global GHG emission growth must include both developed and developing countries. Enhancement of technology development and transfer are likely to be more widely accepted by the developing countries that must be brought to the global table on climate change solutions.”

Founded in 1973, The American Council for Capital Formation (www.accf.org) is a nonprofit, nonpartisan economic policy organization dedicated to the advocacy of tax, energy, environmental and regulatory policies that encourage saving and investment.