

CAPITAL COMMENT

Cap and Trade: A Bad Trade-off for the Economy and Company Earnings

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April 10, 2007

To address global warming concerns many business leaders are calling for the United States to implement a carbon dioxide emissions cap on U.S. industries – or a “cap and trade” system. The U.S. Climate Action Partnership (USCAP) – a coalition of environmental organizations and corporations including major corporate members such as GE, Alcoa, BP, Caterpillar, DuPont, Lehman Brothers, and PG&E – are encouraging the U.S. to impose a broad carbon emissions cap and trade scheme. Despite the publicity surrounding corporations seeking global warming regulations, a Clinton administration study found that a cap and trade regulatory scheme would severely harm the U.S. economy. Paradoxically, corporations lobbying for cap and trade are seeking regulations that will likely jeopardize future earnings.

Under the best scenario the cap and trade will:

- Raise gasoline prices by nearly 53 percent
- Raise energy prices by more than 86 percent
- Reduce economic growth by 1.9 percent, which is \$256 billion of 2006 GDP
- Reduce economic activity across most industries including the construction, manufacturing, transportation and finance industries
- Raise interest rates because higher energy prices will exert upward pressure on overall prices and contribute to inflation

Background

The cap and trade system is billed as a market-based approach to managing carbon dioxide emissions. The Economist magazine has described the theoretical workings of the cap and trade stating that “The basic idea is that power plants and manufacturers will be allowed to emit a certain number of tons of carbon dioxide. If they exceed that amount, they must buy “credits” from companies that pollute less than their allowance.”ⁱ

Despite its current popularity, a cap and trade system creates significant costs while offering few benefits in return. For instance, if fully implemented the Kyoto Protocol will only reduce mean global temperatures by 0.07°C – an imperceptible impact.ⁱⁱ On the cost side, however, implementing the Kyoto Protocol’s cap and trade system would impose a large economic cost. The Federal Energy Information Agency (EIA) looked at the cost of implementing a cap and trade system in the United States in 1998 during the Clinton-Gore Administration, concluding that the costs were substantial.

Federal Energy Information Agency Report

If the U.S. were to commit to the Kyoto Treaty’s goal of reducing carbon dioxide emissions to 7 percent below the 1990 level, several different types of adverse economic impacts would arise. Carbon based energy is a less expensive energy alternative compared to most alternative energy sources.ⁱⁱⁱ Mandating that businesses reduce their

carbon emissions requires these companies to invest in new technologies that reduce the amount of carbon dioxide emissions from current energy sources, or to invest in completely new energy sources (e.g. renewable energy) that emit less carbon dioxide. While this is the ultimate goal from an environmentalist perspective, these investments do not come without a cost. The regulation's costs are born by the companies' owners through lower profits, employees through lower wages, and/or customers through higher prices.

The EIA report found that one of the likely outcomes from imposing a cap and trade system (such as the restrictions mandated by the United Nation's Kyoto Global Warming Treaty) would in fact be higher energy costs.^{iv} According to the report, a cap and trade system that reduces carbon dioxide emissions in the U.S. by 7 percent below the 1990 level – which is the Kyoto' treaty's goal for a cap and trade regime in the U.S. – raises gasoline prices by nearly 53 percent and raises energy prices by more than 86 percent.

The higher energy and regulatory costs are not benign to overall economic growth. One key ingredient for economic growth is growth in productivity – or the ability to create more output with the same amount of inputs. Cap and trade regulations increase the costs to produce the same amount of output, thereby lowering productivity. Simultaneously, the cap and trade regulations are increasing the costs to consumers, causing consumers to spend more money in order to acquire the same amount of goods. Both of these effects negatively impact overall economic growth.

The EIA report found that a cap and trade regulation would reduce total U.S. economic growth significantly; the precise impact depending on the assumptions. When the EIA evaluated the economic impact of a cap and trade regime, the agency assumed that the right to emit carbon dioxide would be auctioned off to the highest bidder, as opposed to being simply given away as many proposals now advocate. The actual economic impact varied depending upon what was done with the money raised from the auction, which was estimated to be between \$128 billion and \$585 billion.

The EIA considers two scenarios regarding the revenues raised: "...first, returning collected revenues to consumers through a personal income tax lump sum rebate and, second, lowering social security tax rates as they apply to both employers and employees. The two policies are meant only to be representative of a set of possible fiscal policies that might accompany an initial carbon mitigation policy."^v

Implementing the cap and trade proposal with a tax offset via a personal income tax rebate was estimated to reduce economic growth by 4.2 percent according to the EIA study, which is \$565 billion of 2006 GDP. Implementing the cap and trade proposal with a payroll tax rebate was estimated to reduce economic growth by 1.9 percent, which is \$256 billion of 2006 GDP. The economic impact was found to be widespread throughout the economy with nearly every industry experiencing significantly reduced economic growth including the construction, manufacturing, transportation and finance industries.

One last effect from the cap and trade regulations is its impact on inflation and the overall financial markets. The EIA found that initially the cap and trade regulations would lead to higher energy prices. Energy costs comprise a large portion of overall economic spending. Consequently, large increases in the cost of energy will have a large impact on inflationary measures such as the Consumer Price Index (CPI) and Producer Price Index (PPI). Higher energy prices would subsequently exert upward pressure on the overall price level.

Inflation erodes away the purchasing power of money in the future. Consequently, sharp increases in the price level raises concerns for banks, bondholders, and other lenders in the economy. In response to the more uncertain inflationary environment, lenders will demand “inflation protection” in the form of higher interest rates. Of course, higher interest rates increase the costs for borrowing making it more expensive for businesses to expand and individuals to purchase houses, cars or other large durable goods. If these pressures are not handled correctly by the Federal Reserve, a difficult task, high and variable inflation, along with higher interest rates, could result. Overall credit and borrowing in the economy would be subsequently compromised, further reducing people’s income and economic activity in the U.S.

From a business perspective, all of these trends are troubling. The initial impact from the regulations raises the cost of doing business. As the costs from the regulations make their way through the economy, growth in overall demand slows. Furthermore, the price level effects could increase the operational costs of businesses through higher interest rates, reduce the demand for products from customers, and increase the possibility that the economy will be threatened by a run-up in inflation.

Summary

In total, the EIA found that a cap and trade system imposes significant costs on the economy. On the benefit side, cap and trade regimes, such as the Kyoto Protocol, offer scant environmental benefits. Accordingly, the cap and trade regime fails the simplest cost-benefit tests, and are difficult to justify from an economic or environmental perspective.

From a business perspective, an economic environment of high-energy prices, low productivity growth, and slow economic growth is not an environment where companies thrive. This economic reality raises serious concerns regarding the policy recommendations of USCAP or other advocates of a carbon dioxide emissions cap and trade regulatory system.

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ⁱ “How an American carbon-trading system should work”. (2007) Economist.com, Jan 22nd.

ⁱⁱ In a paper by the National Center for Atmospheric Research, Wigley examines: “Kyoto Protocol implications for CO₂, temperature and sea level... Three scenarios for post-Kyoto emissions reductions are considered. In all cases, the long-term consequences are small. The limitations specified under the Protocol are interpreted in terms of both CO₂ and CH₄ emissions reductions and a new emissions comparison index, the Forcing Equivalence Index (FEI), is introduced.” See: Wigley T.M.L. (undated) The Kyoto Protocol: CO₂, CH₄ and climate implications. *National Center for Atmospheric Research*.

ⁱⁱⁱ <http://www.eia.doe.gov/fuelrenewable.html>

^{iv} (1998) Impacts of the Kyoto Protocol on U.S. Energy Markets and Economic Activity. *Energy Information Administration* October (SR/OIAF/98-03).

^v Ibid.