Could Cap and Trade Cause Another Market Meltdown?

Rachel Morris, June 8, 2009

The same Wall Street players that upended the economy are clamoring to open up a massive market to swap, chop, and bundle carbon derivatives. Sound familiar?

You’ve heard of credit default swaps and subprime mortgages. Are carbon default swaps and subprime offsets next? If the Waxman-Markey climate bill is signed into law, it will generate, almost as an afterthought, a new market for carbon derivatives. That market will be vast, complicated, and dauntingly difficult to monitor. And if Washington doesn’t get the rules right, it will be vulnerable to speculation and manipulation by the very same players who brought us the financial meltdown.

Cap and trade would create what Commodity Futures Trading commissioner Bart Chilton anticipates as a $2 trillion market, “the biggest of any [commodities] derivatives product in the next five years.” That derivatives market will be based on two main instruments. First, there are the carbon allowance permits that form the nuts and bolts of any cap-and-trade scheme. Under cap and trade, the government would issue permits that allow companies to emit a certain amount of greenhouse gases. Companies that emit too much can buy allowances from companies that produce less than their limit. Then there are carbon offsets, which allow companies to emit greenhouse gases in excess of a federally mandated cap if they invest in a project that cuts emissions somewhere else—usually in developing countries. Polluters can pay Brazilian villagers to not cut down trees, for instance, or Filipino farmers to trap methane in pig manure.

In addition to trading the allowances and offsets themselves, participants in carbon markets can also deal in their derivatives—such as futures contracts to deliver a certain number of allowances at an agreed price and time. These instruments will be traded not only by polluters that need to buy credits to comply with environmental regulations, but also by financial services firms. In fact, a study (PDF) by Duke University's Nicholas Institute for Environmental Policy Solutions anticipates that if the United States passes a cap-and-trade law, the derivatives trade will probably exceed the market for the allowances themselves. "We are on the verge of creating a new trillion-dollar market in financial assets that will be securitized, derivatized, and speculated by Wall Street like the mortgage-backed securities market," says Robert Shapiro, a former undersecretary of commerce in the Clinton administration and a cofounder of the US Climate Task Force.

Banks like JPMorgan Chase, Morgan Stanley, and Goldman Sachs already have active carbon trading desks that deal in instruments connected to Europe's cap-and-trade system and voluntary markets here. But business will explode if a cap-and-trade system becomes law. So it's no surprise that the financial industry has taken an intense interest in the fine print of the Waxman-Markey bill. According to data compiled by the Center for Public Integrity, the financial services industry has 130 lobbyists working on climate issues, compared to almost none in 2003. They represent companies like Goldman Sachs, JPMorgan Chase, and AIG (before it was shamed into temporarily halting its lobbying activities last fall). The industry "wants lawmakers to create a brand-new revenue stream for its bottom line, and cap and trade would do it," says Tyson Slocum of Public Citizen, who is a member of a Commodity Futures Trading Commission (CFTC) advisory committee considering how carbon trading should be regulated.

Among environmental groups, there is, understandably, less focus on the finer points of financial regulation. "The derivatives side is not something that a person who comes to the table worried about carbon emissions has on their agenda," says Michael Greenberger, a derivatives expert at the University of Maryland who has also served in the CFTC and the Justice Department. "Those people—and they're fighting a good battle—opened the door."
Already, the industry has achieved its main objective: The Waxman-Markey bill would create a big, convoluted market for carbon derivatives. Experts from the Congressional Budget Office have said that the most stable and effective form of cap and trade would involve a system in which the government periodically sets prices in much the same way that the Fed determines interest rates. That would prevent volatility, which would in turn remove the temptation to gamble on big price swings. In other words, it would provide far less opportunity for wheeling and dealing—and profits. Rep. Jim McDermott (D-Wash.) offered a proposal for a managed-price cap-and-trade scheme, but failed to gain any traction. Meanwhile, industry groups like the International Swaps and Derivatives Association pushed for a system in which a "broad suite" of financial products can be traded, and that's what Waxman-Markey delivers.

In an especially audacious move, the industry also argued that cap and trade should allow the very same types of unregulated instruments that helped spread risk throughout the financial system like a cancer, contributing to the economic meltdown. In particular, it lobbied for "over the counter" carbon derivatives—deals conducted directly between two parties with no one monitoring the risk. (Perhaps the most notorious form of OTC derivative is the credit default swap, which crippled AIG when it issued too many high-risk swaps while lacking the money to cover them.)

On this front, however, Wall Street was less successful. The day before the bill passed out of committee, Rep. Bart Stupak (D-Mich.) inserted language requiring all allowance derivatives to be either traded on an exchange or cleared by an organization registered with the CFTC. This would provide a paper trail for regulators, although the reporting requirements for clearinghouses are less stringent than those for public exchanges. Stupak also added limits to prevent speculators from cornering too much of the market. Still, the bill leaves many vital specifics to the White House, directing the president to form a task force to determine precisely how to avoid "fraud, market manipulation and excess speculation." Andy Stevenson, finance adviser at the National Resources Defense Council, says, "I would feel comfortable if much more of it were explicit." He applauds the bill's "spirit" but cautions that "the details are important."

The lobbying battle is not over. Chilton, the CFTC commissioner, praised Stupak's 11th-hour amendment, but expressed concern that it could be removed in the legislative process ahead. The bill, after all, has yet to pass through several more House committees—before the Senate weighs in. That gives the financial sector a few more bites at the apple. At the same time, Wall Street is marshaling its forces against Treasury Secretary Timothy Geithner's proposal to move most derivatives trading onto public exchanges, which would also cover carbon derivatives. "There are so many issues, so many jurisdictional obstacles out there, I'm just worried it's not going to get done," Chilton says. "I don't want people's good intentions to be all we get. I'm worried that people will start clustering and positioning, and the reforms these markets require aren't going to be enacted."

Even a well-designed regulatory system may not be able to prevent gamblers from contorting prices and discouraging the investments in green energy that are the entire purpose of cap and trade. After all, one lesson to be drawn from the economic crisis is that complexity is like catnip to the unscrupulous, and the carbon regime that would be created by cap and trade is nothing if not complex.

Perhaps the biggest uncertainty hinges on how offset derivatives—such as a contract to buy offset credits at a future date for a determined price—will be monitored. This too would be left to the White House task force to figure out. It will be a tough task because the quality of offset projects is notoriously difficult to verify. Sen. Jeff Bingaman (D-N.M.) has described them as "fraught with opportunity for game playing, which will be fully exploited, I'm sure."

In 2008, the Government Accountability Office examined the use of offsets in Europe's Emissions Trading Scheme, which theoretically has a rigorous process to certify that offsets are "additional"—that is, that they cause emissions cuts that wouldn't have occurred if the project hadn't been implemented. But even though projects must be reviewed by both national officials and an external independent monitor to qualify, the GAO found that it was "nearly impossible" to ensure that offsets really were additional. It concluded that offsets present "a significant regulatory challenge" and should probably be viewed as a temporary measure at best. "In practice [offsets] have proved impossibly difficult to successfully implement without fraud," writes Michael Wara, a carbon trading lawyer and coauthor of a Stanford University study that found that one- to two-thirds of offsets authorized by the Kyoto Protocol's Clean Development Mechanism didn't represent true emissions cuts. "Even in the presence of a tough regulatory system...that is working hard to get things right...lots of counterfeit carbon currency is making it into the system."
Michelle Chan, the investment program manager for Friends of the Earth, believes that if offset derivatives aren’t properly regulated, they could become “subprime carbon”—futures contracts that promise emissions reductions but fail to deliver and then collapse in value. Already, she points out, some banks are bundling credits from multiple offset projects and splitting them into tranches to sell to investors. This kind of activity is “hauntingly close” to mortgage-backed securities, Chan told the House ways and means committee in March, arguing that it has the potential to spread risk throughout the financial system. At a CFTC hearing earlier this year, Skip Hovarth, president of the Natural Gas Supply Association, questioned whether the agency had the tools and the manpower to keep track of such an incredibly complex market, adding, "If this market fails, and all the derivatives and all the markets that attach to it that grow over time fail, it will make this last recession look like nothing.

Again, Europe’s experience offers a glimpse of the difficulties of tethering an environmental goal to the whims of the financial system. In the early years of Europe’s cap-and-trade system, speculators flocked to trade carbon. Prices seesawed wildly, and analysts warned of a “carbon bubble.” Regulators made adjustments to stabilize the market—but then the financial crisis hit and carbon prices crashed. This January, an executive from the French energy giant EDF warned that carbon trading was in danger of becoming “a new type of subprime tool which will be diverted from what is its initial purpose: to encourage real investment in real low-carbon technology.”

During the negotiations over cap and trade, little airtime has been given to the idea that perhaps carbon is fundamentally different from other purely commercial markets that weren’t conjured into existence to save the planet. After all, the allowances are an artificial commodity—according to the logic of cap and trade, the government will issue fewer permits each year to encourage polluters to cut their emissions. “The supply is dwindling and will tail off—arguably it’s much less clear that you need a derivatives market,” says Greenberger, the derivatives expert. “You could try to control speculation, which is what Stupak wants to do—but even in a regulated market there are speculators, many of them. Or you could say, ‘This is unlike any other market, and no regulation is perfect. So why take even the risk of speculation or malpractice that could distort the price—let’s just not have derivatives.’ I think it’s a subject worthy of serious debate.” Thanks to the persistent lobbying of the financial sector, however, that doesn’t seem to be a debate that will happen anytime soon.