

Ferguson: Energy Matters

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The Inertia of Money

Isaac Newton's laws of motion describe the fact that a force is required to change the momentum of an object in either magnitude or direction. In everyday language, we say that objects have 'inertia' that keeps them moving in the same direction unless something powerful slows them down or turns them in a different direction. Newton was talking about objects with mass, but, as it turns out, he could have been talking about money.

The movement of money has every bit as much inertia as the movement of a cannonball, maybe more.

Consider, for example, the money associated with energy. This money flows from people who use energy to the industries that provide it, make the machines that use it, sell insurance against accidents caused by energy use... Trillions of dollars flow annually from consumers to energy-related industries.

Needless to say, the recipients of all this money are loath to have it move in any other direction. If at all possible, those on the receiving end of all this money would like nothing better than to have *more* of it flowing to them. Fortunately for them, the inertia of money works to keep the money flowing in their direction.

The inertia of money is the single biggest obstacle to doing something about global warming.

To change the disastrous trajectory Earth's climate is traveling; the trillions of dollars flowing to the current energy-related industries are going to have to move in a different direction. The people who mine the coal, drill the wells, sell the automobiles, and pump the gasoline are going to have to get less money in the future, and someone else is going to have to receive more.

The inertia of money guarantees that this change will happen slowly, if at all.

Earth's climate has inertia as well. The thermal inertia of oceans and ice sheets ensures that temperatures will increase gradually. But even the climate is changing more rapidly than the direction in which energy money is flowing.

Nor can we expect politicians to redirect the flow of money, the mother's milk of politics. The current occupants in the White House were installed to *prevent* forces from arising that could decrease the amount of money flowing to the energy industries, for example. True, they had to cut the corn ethanol industry in on the deal, but despite

this concession more money is flowing to the energy industries than ever before.

Nowhere is the inertia of money more apparent here in California than in the electricity industry. In a burst of enthusiasm, the state decided in 1996 to try to steer some of the money flowing to electric utilities in other directions as part of the 'deregulation' experiment. The utilities were not simply abandoned, of course, but were given billions of dollars to play within the new competitive world. When that was exhausted, the utilities were in bankruptcy, or close to it, and the experiment was called off. Ten years later, electricity money is once again flowing steadily to the utilities. Even a unanimous decision by the California Legislature was unable to overcome the inertia of \$30 billion or so flowing annually to utilities.

The pundits who claim that limiting climate change will be easy are ignoring the fact that money has inertia, and lots of money has lots of inertia.

I have made a New Year's resolution to not read any more pronouncements by Al Gore, Bill McKibben, or the other gurus claiming to have the answer to climate change unless they tell me how they plan to overcome the inertia of the money flowing to current energy industries.

I know we can build solar power plants, have more efficient cars and light bulbs, and so on. What I don't know is what force on Earth is powerful enough to steer the staggering amounts of money now flowing to the current recipients in a different direction.

As long as money continues to flow in the same direction, climate change will continue in the same direction as well. I don't know if there's a law of economics about the inertia of money comparable to Newton's laws of motion, but there should be. It's a fact of life.

Discovery of a new force to overcome the inertia of energy money would make this a happy new year indeed, but I'm not holding my breath.

Historical note: On January 2, 2008, crude oil contracts traded for the first time at a price above \$100 per barrel on the New York Mercantile Exchange.

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