

Berkeley economist [Brian Wright](#) has a disquieting [article](#) in the Winter 2014 issues of the *Journal of Economic Perspectives*, which just crossed my desk. *JEP* is published by the American Economic Association and is a great resource for those of us who are interested in economics but aren't professional economists. This article is a case in point.

Wright's methodology is simple, at least in principle. He first creates a model for grain prices based on three factors: (a) annual production and demand, (b) year-to-year storage, and (c) substitution by consumers between grains. The model works really well up through 2004. But after 2004, prices suddenly start to go much higher than the model predicts.

What happened in 2005? Corn ethanol. By 2004, fuel accounted for almost two billions bushels of corn. Currently, biofuels account for about one-third of U.S. corn production other than by-products used for animal feed. The result: more corn is grown, but corn prices are also higher, and so are other grains since they are partial substitutes. Wright also considers but rejects other theories of the price increase.

The urban poor are perhaps the main victims. Something in the neighborhood of 300 million people in the world live on less than \$1 per day. Wright estimates that this group paid \$5 billion or more in extra food costs in 2012 due to biofuels.

This is another reason to be skeptical about corn ethanol, which also has unclear advantages in terms of reducing carbon emissions. (The higher grain costs also lead to clearing of forests in developing countries, releasing a lot of carbon and offsetting the direct benefits of the fuel.) We badly need new technology to allow us to shift to cellulosic biofuels, which are much less prone to these problems.