## In agriculture and for many generic pharmaceutical drugs, price levels have more to do with the number of firms involved than the cost of production

A reader of our previous column wrote and asked: "how does a generic drug manufacturer end up with monopoly-type pricing power?"

Here is our understanding of how it happens.

When a new drug is developed, the discoverer files for a patent that gives them a monopoly on the production of that drug for a fixed number of years. At that point in time, they can charge as much as the market will bear which is far more than it costs to manufacture and sell the drug. They are making what economists call monopoly profits. The drug company justifies those monopoly profits by arguing that they need those profits to incentive them to conduct the research needed to find the next new "wonder drug."

When the patent ends then other drug manufacturers can produce the product as a generic-equivalent drug. First there are usually a couple of companies that have been watching and waiting for the drug to come off patent so they can manufacture it and get a share of the excess profits. Over time, as you get to 8 or 10 generic manufacturers of a given drug, the excess profits disappear, and you have a competitive market that gives the consumer the lowest sustainable price and the manufacturers a reasonable profit.

For the sake of argument let's suppose that we are manufacturer A and we are producing 10 different generic drugs each with 8 or 10 other producers, not all the same for the different drugs.

At some point in time, we are going to look at the profitability of each of the drugs we are producing and when we punch the numbers, we may discover that if we eliminate the least profitable drug and reinvest the freed up resources on one of the other drugs, we can improve our company's yearend profitability for its stockholders.

Now, our competitors see what we are doing, and they do the same thing and soon each drug has 7 or 8 other producers and prices creep up a little. This worked out so well that over time we and our competitors repeat the pattern and soon each drug has only 6 or 7 different competitors and then 5 or 6. At no time have we talked to our competitors and illegally colluded to fix prices, but when we get down to 5 or fewer manufacturers for a given generic, the manufacturers' pricing power begins to increase. At some point as the number of manufacturers decreases their power to set the price as high as the market will bear increases.

Because neither the patient nor the doctor knows the price when the prescription is written there is no market pressure for them reduce their prices. In this way some generics can become as expensive—or even more expensive—as if they were still protected by a patent.

Like generic drug manufacturers, most farmers produce a generic product like corn, wheat, chickens, cattle and on the list goes. But unlike generic drug manufacturers, the numbers are quite different. Currently it is estimated that there are about 600 million family farms in the world of which about 2 million are in the US.

With numbers like that, unless they produce a niche product like caviar or a federal Marketing Order and Agreement which helps "producers and handlers work together to solve marketing problems that they cannot solve individually by (1) maintaining the high quality of produce that is on the market; (2) standardizing packages and containers; (3) regulating the flow of product to market; (4) establishing reserve programs for storable commodities; and (5)

authorizing production research, marketing research and development, and advertising" (<a href="https://tinyurl.com/bdhvr3ew">https://tinyurl.com/bdhvr3ew</a>), farmers have little chance of having any level of pricing power over the products they produce.

A crop failure due to various weather events may drive the price up for a couple of months or years, but it is not long before the price is heading to a point below the full cost of production where it remains for long periods of time.

There is however significant pricing power within the agricultural sector. It exists on both the input and output sides of agriculture.

On the input side of agriculture, farmers have a limited number of choices for the products they use whether it is tillage equipment, seeds, or farm chemicals. For any given item, say a particular herbicide, there are a limited number of producers who all have pricing power. If there were just one firm, we would say that the firm has monopoly pricing power. When there are a limited number of major firms, say 5 or fewer, like the generic drug manufacturers, they begin to have pricing power. They are what economists call a monopsony—a few firms that have pricing power for one or more products needed by their clients.

The same thing is happening on the output side of agriculture where in each sector, meats, grains, oilseeds a small number of firms dominate the processing and wholesaling of farmers' production. Economists call this oligopsony power—a few firms have pricing power for one or more products sold by their clients.

President Biden, in Executive Order 14036, said, "Consolidation in the agricultural industry is making it too hard for small family farms to survive. Farmers are squeezed between concentrated market power in the agricultural input industries—seed, fertilizer, feed, and equipment suppliers—and concentrated market power in the channels for selling agricultural products. As a result, farmers' share of the value of their agricultural products has decreased, and poultry farmers, hog farmers, cattle ranchers, and other agricultural workers struggle to retain autonomy and to make sustainable returns."

It is ironic that just over 100 years ago Congress passed the Packers & Stockyards Act, 1921 "to assure fair competition and fair trade practices, to safeguard farmers and ranchers...to protect consumers...and to protect members of the livestock, meat, and poultry industries from unfair, deceptive, unjustly discriminatory and monopolistic practices...."

Concentrated market power and how to manage it will continue to be a critical issue for farmers and consumers for the foreseeable future.

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