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WHAT ECONOMISTS DO

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Economists have an image of practicality and worldliness not shared by physicists and poets. Some economists have earned this image. Others –myself and many of my colleagues here at Chicago– have not. I'm not sure whether you will take this as a confession or a boast, but we are basically story-tellers, creators of make-believe economic systems. Rather than try to explain what this story-telling activity is about and why I think it is a useful –even an essential– activity, I thought I would just tell you a story and let you make of it what you like.

My story has a point: I want to understand the connection between changes in the money supply and economic depressions. One way to demonstrate that I understand this connection –I think the only really convincing way– would be for me to engineer a depression in the United States by manipulating the U.S. money supply. I think I know how to do this, though I'm not absolutely sure, but a real virtue of the democratic system is that we do not look kindly on people who want to use our lives as a laboratory. So I will try to make my depression somewhere else.

The location I have in mind is an old-fashioned amusement park –roller coasters, fun house, hot dogs, the works. I am thinking of Kennywood Park in Pittsburgh, where I lived when my children were at the optimal age as amusement park companions– a beautiful, turn-of-the-century place on a bluff overlooking the Monongahela River. If you have not seen this particular park, substitute one with

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which you are familiar, as I want you to try to visualize how the experiment I am going to describe would actually work in practice.

Kennywood Park is a useful location for my purposes because it is an entirely independent monetary system. One *cannot* spend U.S. dollars inside the park. At the gate, visitors use U.S. dollars to purchase tickets and then enter the park and spend the tickets. Rides inside are priced at so many tickets per ride. Ride operators collect these tickets, and at the end of each day they are cashed in for dollars, like chips in a casino.

For obvious reasons, business in park fluctuates: Sundays are big days, July 4 is even bigger. On most concessions –I imagine each ride in the park to be independently operated– there is some flexibility: an extra person can be called in to help take tickets or to speed people getting on and off the ride, on short-notice if the day is unexpectedly big or with advanced notice if it is predictable. If business is disappointingly slow, an operator will let some of his help leave early. So "GNP" in the park (total tickets spent) and employment (the number of man hours worked) will fluctuate from one day to the next due to fluctuations in demand. Do we want to call a slow day –a Monday or a Tuesday, say– a depression? Surely not. By an economic depression we mean something that ought not to happen, something pathological, not normal seasonal or daily ups and downs.

This, I imagine, is how the park works. (I say "imagine" because I am just making most of this up as I go along.) Technically, Kennywood Park is a fixed exchange rate system, since its central bank –the cashier's office at the gate– stands ready to exchange local currency –tickets– for foreign currency –US dollars– at a fixed rate.

In this economy, there is an obvious sense in which the number of tickets in circulation is economically irrelevant. No-one –customer or concessioner– really cares about the number of tickets per ride except insofar as these prices reflect U.S. dollars per ride. If the number of tickets per U.S. dollar were doubled from 10 to 20, and if the prices of all rides were doubled in terms of tickets –6 tickets per roller coaster ride instead of 3– and if everyone understood that these changes had occurred, it just would not make any important difference. Such a doubling of the money supply and of prices would amount to a 100 percent inflation in terms of local currency, but so what?

Yet I want to show you that changes in the quantity of money –in the number of tickets in circulation– have the capacity to induce depressions or booms in this economy (just as I think they do in reality). To do so, I want to imagine subjecting Kennywood Park to an entirely operational experiment. Think of renting the park

from its owners for one Sunday, for suitable compensation, and taking over the functions of the cashier's office. Neither the operators of concessions nor the customers are to be informed of this. Then, with no advance warning to anyone inside the park, and no communication to them as to what is going on, the cashiers are instructed for this one day to give 8 tickets per dollar instead of 10. What will happen?

We can imagine a variety of reactions. Some customers, discouraged or angry, will turn around and go home. Others, coming to the park with a dollar budget fixed by Mom, will just buy 80 percent of the tickets they would have bought otherwise. Still others will shell out 20 percent more dollars and behave as they would have in the absence of this change in "exchange rates." I would have to know much more than I do about Kennywood Park patrons to judge how many would fall into each of these categories, but it is pretty clear that no one will be induced to take *more* tickets than if the experiment had not taken place, many will buy fewer, and thus that the total number of tickets in circulation –the "money supply" of this amusement park economy– will take a drop below what it otherwise would have been on this Sunday.

Now how does all of this look from the point of view of the operator of a ride or the guy selling hot dogs? Again, there will be a variety of reactions. In general, most operators will notice that the park seems kind of empty, for a Sunday, and that customers don't seem to be spending like they usually do. More time is being spent on 'freebies', the river view or a walk through the gardens. Many operators take this personally. Those who were worried that their ride was becoming passé get additional confirmation. Those who thought they were just starting to become popular, and had had thoughts of adding some capacity, begin to wonder if they had perhaps become over-optimistic. On many concessions, the extra employees hired to deal with the expected Sunday crowd are sent home early. A gloomy, "depressed" mood settles in.

What I have done, in short, is to engineer a depression in the park. The reduction in the quantity of money has led to a reduction in real output and employment. And this depression is indeed a kind of pathology. Customers are arriving at the park, eager to spend and enjoy themselves. Concessioners are ready and waiting to serve them. By introducing a glitch into the park's monetary system, we have prevented (not physically, but just as effectively) buyers and sellers from getting together to consummate mutually advantageous trades.

That is the end of my story. Rather than offer you some of my opinions about the nature and causes of depressions in the United States, I simply made a depression and let you watch it unfold. I hope you found it convincing on its own terms –that

what I said would happen in the park as the result of my manipulations would in fact happen. If so, then you will agree that by increasing the number of tickets per dollar we could as easily have engineered a boom in the park. But we could not, clearly, engineer a boom Sunday after Sunday by this method. Our experiment worked only because our manipulations caught everyone by surprise. We could have avoided the depression by leaving things alone, but we could not use monetary manipulation to engineer a permanently higher level of prosperity in the park. The clarity with which these effects can be seen is the key advantage of operating in simplified, fictional worlds.

The disadvantage, it must be conceded, is that we are not really interested in understanding and preventing depressions in hypothetical amusement parks. We are interested in our own, vastly more complicated society. To apply the knowledge we have gained about depressions in Kennywood Park, we must be willing to argue by analogy from what we know about one situation to what we would like to know about another, quite different situation. And, as we all know, the analogy that one person finds persuasive, his neighbor may well find ridiculous.

Well, that is why honest people can disagree. I don't know what one can do about it, except keep trying to tell better and better stories, to provide the raw material for better and more instructive analogies. How else can we free ourselves from the limits of historical experience so as to discover ways in which our society can operate better than it has in the past?

In any case, that is what economists do. We are storytellers, operating much of the time in worlds of make believe. We do not find that the realm of imagination and ideas is an alternative to, or a retreat from, practical reality. On the contrary, it is the only way we have found to think seriously about reality.

In a way, there is nothing more to this method than maintaining the conviction (which I know you have after four years at Chicago) that imagination and ideas matter. I hope you can do this in the years that follow. It is fun and interesting and, really, there is no practical alternative.