

Chapter 5

Unemployment

In 1958, the economist William Phillips noticed a striking correlation: Times of high inflation are times of low unemployment, and vice versa. Over the next decade, the correlation held strong.

The lesson most economists drew was that policymakers face a trade-off: You can have less unemployment, provided you're willing to tolerate (and even engineer) a bit more inflation.

Milton Friedman, almost a lone voice in the wilderness, begged to differ. Not for the first time in his career, it fell to Friedman to remind the world that correlation is not the same as causation.

In December 1967, having just completed his term as president of the American Economic Association, Milton Friedman gave a farewell address that radically reshaped modern macroeconomics by reinterpreting the Phillips correlation. He told, in essence, this story:

Suppose you're a carpenter, currently unemployed because your best job offer is \$500 a week, and you think you'd rather keep searching for something better. Of course if all prices and wages were to double, you'd be offered \$1,000 a week, but you still wouldn't take it, because the *real* value of your job offer is unchanged.

But let's tweak the story a little: Prices double overnight while you're asleep. In the morning, you're awakened by a phone call from an employer offering you \$1,000 a week. You're delighted, because you're *not yet aware* that all prices have risen. You accept the job. After a few days, you visit the grocery store, discover the cruel truth that this week's \$1,000 goes no farther than last week's \$500, and submit your resignation.

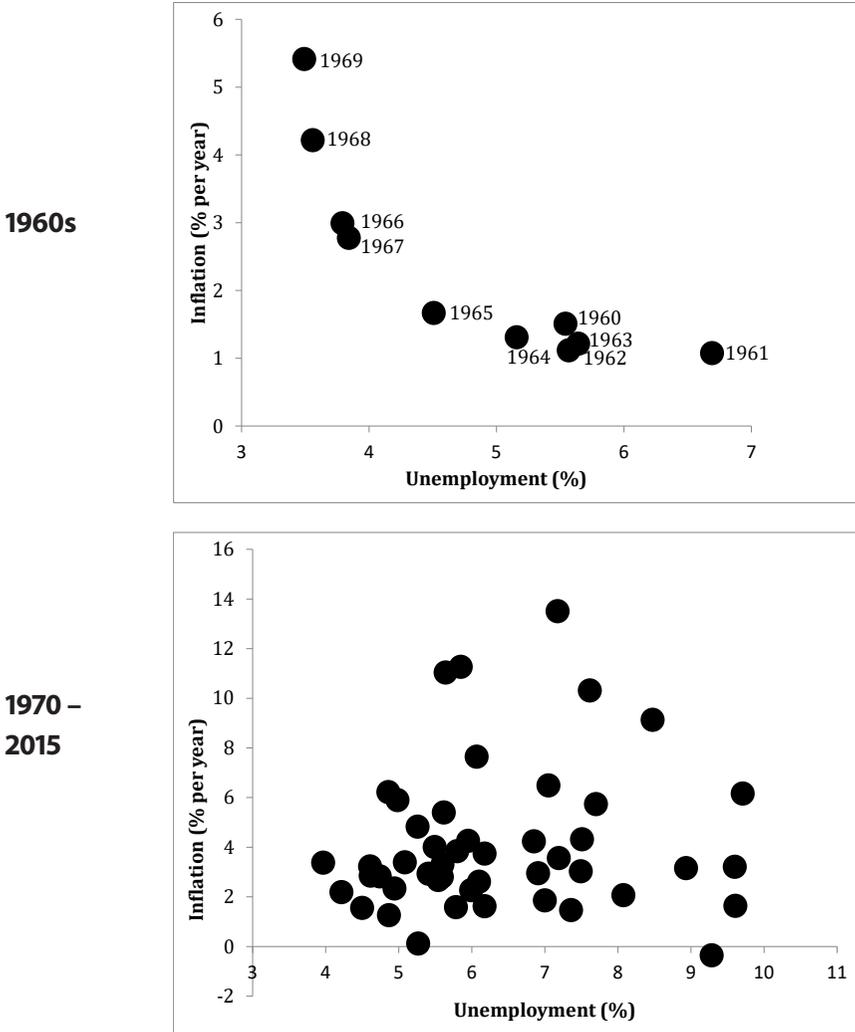
Obviously that story is highly stylized, but it's not too hard to imagine a realistic version in which prices are rising, workers are not fully aware of the changes, and wage offers start to look better than they really are, fooling some people into taking jobs they don't really want, at least until they figure out they've been fooled.

The same story works on the employer's side: You're a bicycle manufacturer, selling bicycles for \$200 each. If all prices and all wages double, you'll go on as before, selling them for \$400 each. Unless, of course, the doubling happens while you sleep, and you are awakened the next morning by the news that the price of bicycles has doubled, leading you to believe that the demand for bicycles must have mushroomed, and in turn leading you to expand your plant and hire more metalworkers, at least for a while. Eventually, of course, you'll realize that your plant expansion was ill-advised and you might not be needing those extra workers very long.

If anything like this story is accurate, the morals are these:

- ♦ *Expected* changes in inflation have no effect on employment.
- ♦ An unexpected increase in inflation can cause a temporary increase in employment—but not a permanent one.
- ♦ When there is a series of unexpected increases in inflation, economists (including economists named Phillips) might notice that these increases are correlated with employment, but might fail to realize that the correlation will survive only as long as the inflation continues to be unexpected.
- ♦ A policymaker who nevertheless wants to use inflation to reduce unemployment has to engineer an inflation that is *higher than expected*. This is hard to accomplish for very long. If prices rise by 10 percent in each of January, February, and March, people are going to expect them to rise by 10 percent in April as well. So if I want to keep unemployment down, I might need to engineer a 12 percent inflation rate in April, and then 14 percent in May—leading people to expect a 16 percent rate in June. Now I've got to unexpectedly go for 18 percent in June, and this way lies madness.
- ♦ In that sense, using inflation to ease unemployment is a lot like using narcotics to ease pain. The more you use today to make yourself feel

Figure 1: inflation and unemployment rates in the United States



The graphs show the inflation and unemployment rates in the United States by year, first for the 1960s and then for the years 1970–2015. (Points in the second graph are not labeled by year, only because there is no room for the labels.) At the end of the 1960s, Milton Friedman and Edmund Phelps essentially stood alone in predicting that the correlation in the left-hand graph would break down. The right-hand graph clearly illustrates the accuracy of that prediction.

good, the more you've got to use tomorrow just to stay on an even keel.

- ♦ Even the temporary reductions in unemployment caused by unexpected inflation are *not good things*. I do you no favour if I reduce unemployment by fooling you into taking a job you wouldn't have wanted without the deception.

Based on a story like this one, Friedman made his famous forecast that any attempt to exploit the Phillips correlation by keeping inflation high for a sustained period would surely fail—contrary to what pretty much everyone else believed at the time.¹⁸ As the 1970s unfolded, with inflation and unemployment both on the rise, Friedman's prediction proved to be spectacularly accurate (see exhibit 1). Before long, essentially all economists had come around to Friedman's view that *expected* inflation is powerless to fight unemployment.

One key lesson that economists and policymakers took to heart was that *it makes no sense* to ask, for example, "What will happen to employment if we increase the money supply this year by 5 percent?" The answer could be anything at all, depending on what people expect. If prices rise by 5 percent when people are expecting 10 percent, they tend to be surprised by how low their wage offers are, and a lot of them turn down jobs as a result. If prices rise by 5 percent when people are expecting 2 percent, you might get a boom in employment.

Instead, the right conclusion is that a coherent monetary policy must be a long-run policy—one that takes into account how each year's changes affects the following years' expectations. Moreover, it's highly desirable for the authorities to *manage* expectations, by making clear commitments to policy rules, and developing a reputation for transparency.

Friedman went on to hypothesize that there is a *natural rate of unemployment* arising from the fact that we live in a changing and uncertain world, where there will always be some people who prefer to be temporarily unemployed in order to search for a better job or go back to school or deal with family emergencies. Any attempt to use inflation to drive unemployment below that natural rate is doomed to fail, at least in the long run, and is probably not

¹⁸ One striking exception was Edmund Phelps, another Nobel-Prize-winner-to-be, who was simultaneously constructing a narrative very similar to Friedman's.

doing anyone any favours even during the brief interval in which it appears to succeed.¹⁹ This *natural rate hypothesis* is now one of the central tenets of macroeconomics.

The implications of the natural rate hypothesis go far beyond monetary theory. In 1976, the US Congress passed the Humphrey-Hawkins Full Employment Bill, authorizing the government to create as many jobs as necessary to keep the unemployment rate below 3 percent. The problem with this is that in order to hire people, the government must pay them. In order to pay them, it must either raise taxes or increase borrowing. Either way, there is less income in private hands. Alice's taxes rise, so she decides not to buy a swimming pool. Bob lends to the government, so he has less to spend on restaurant meals. Carl lends to the government instead of putting money in the bank, which therefore rejects a loan application from Donna, who cancels her business expansion. One way or another, private employment must fall.²⁰

Government hiring is not a recipe for increasing employment; it's a recipe for increasing government employment at the expense of reducing private employment. Trying to legislate the natural rate of unemployment is like trying to legislate the force of gravity. The laws of nature are oblivious to the laws of men.

When Friedman said as much in a *Newsweek* column, Senator Hubert Humphrey, the principal sponsor of the Humphrey-Hawkins legislation, responded that Friedman had misunderstood him; the goal of this legislation was not to substitute government employment for private employment, it was to increase government employment *without* affecting private employment. Humphrey had, in other words, missed the point entirely.

Why, then, do such laws get passed? Here is Friedman's answer: "People hired by government know who is their benefactor. People who lose their jobs or fail to get them because of the government program do not know that that is the source of their problem. The good effects are visible. The bad effects are

¹⁹ The natural rate can change, and will if someone finds a better way to match workers to jobs or if training programs become more effective. Friedman's point is that you can't change the natural rate of unemployment by changing the money supply.

²⁰ In his writings and speeches, Friedman returned often to the theme that the effects of taxation and the effects of government borrowing are pretty much interchangeable. Either way, resources are transferred from the private sector to the public sector, and that's most of what matters.

invisible. The good effects generate votes. The bad effects generate discontent, which is as likely to be directed at private business as at the government. The great political challenge is to overcome this bias, which has been taking us down the slippery slope to ever bigger government and to the destruction of a free society.”

Although the ideas in Friedman’s presidential farewell address were new and in many ways radical, they tended to reinforce many of the policy positions he’d been advocating all along. First, monetary policy should be focused on the long run, because it can do very little good in the short run. (It can, however, do great *harm* in the short run, as it did in the Great Depression, and that of course should be avoided.) Second, there are also powerful limits to what monetary policy can do in the long run—in the long run it can’t affect employment, and for similar reasons, it can’t affect the production of goods and services. Therefore monetary policy should be geared to the one thing it *can* accomplish in the long run—a price level that grows gradually and predictably, so that people can form accurate expectations and make appropriate plans.

This circle of ideas—both the underlying story about the Phillips correlation and its implications for policy—has been immensely influential. Nowadays, monetary authorities around the world see low and predictable inflation as a primary goal, accept that monetary policy cannot affect output and employment in the long run, and see the management of expectations as a critical part of their jobs.

There’s been a bit of evolution in how economists view unemployment. Pretty much everyone now agrees—and this is largely Friedman’s doing—that there is a natural rate of unemployment, and that it’s a fool’s errand to aim for anything lower. But nowadays there’s a bit more concern with *avoiding* policies that might inadvertently push unemployment *above* its natural rate, and this too has had some effect on monetary practice. But the broad themes of monetary theory and monetary policy are instantly recognizable as those that Milton Friedman laid out in 1967, and as a world apart from everything that came before.