4

JUST ENOUGH INFLATION

> "Are we ruined or in clover?"
> "I don't believe anyone in Germany knows that about himself."
> ERICH MARIA REMARQUE, *The Black Obelisk*

"Just enough"? What kind of a smart-aleck answer is that?

It's not as obvious as it sounds, actually. Now that you're in charge of an economy, you'll doubtless have people telling you that you shouldn't be getting involved in the money-printing business at all. These are people who have been so spooked by episodes of hyperinflation, they have concluded that any degree of inflation is to be avoided—for example, by linking your currency to gold.

That would avoid inflation?

Almost inevitably, although rulers have occasionally debased the currency, diluting the link between money and gold. But as long as the link between currency and gold remained strong and true, you'd get inflation only if there were a sudden glut of gold. Even then, the inflation rate would be tiny. For instance, there was a notorious bout of inflation in the century after Christopher Columbus arrived in the Americas, because gold and silver seized by the conquistadors began to pour across the Atlantic from the New World to Europe. In the sixteenth century, prices in Europe roughly doubled—or equivalently, the value of gold and silver roughly halved. It wasn't the first bout of inflation in history—that may have been when Alexander the Great conquered Persia and spent the Persian emperor's gold—but it's famous. It's also pathetic by twentieth-century standards: the annual inflation rate during the sixteenth century was around 0.7 percent. (There's a handy rule of thumb called the rule of 72—divide 72 by the annual inflation rate and the result is approximately how many years it will take prices to double. In this case, 72 divided by 0.7 gives you prices doubling in a century.) Today, 0.7 percent inflation isn't much: these days central banks aim for 2 percent inflation, or thereabouts. At that rate, prices would double every thirty-five years or so.

Wait a minute. You're telling me that central banks actually want some inflation? Why don't they aim for zero?

Not only do central banks want inflation, but I'm going to argue that they should want even more. To answer your second question, think back to our discussion of the babysitting co-op and sticky prices. Specifically, remember the money illusion—the professor who was infuriated by a pay cut, but didn't mind a below-inflation pay raise, even though they are exactly the same thing. That should tell you that a little bit of inflation can be quite helpful. Imagine a sector of the economy in which productivity is falling, perhaps because foreign competition is reducing the price that companies can get for their products. Wages need to be trimmed or the whole sector is likely to go bust. We know that bosses probably can't get away with cutting nominal wages. If inflation is zero, that means they won't be able to cut real wages either. But if there's some inflation, they can get away with making the necessary cuts to real wages by giving below-inflation raises.

There's another reason to aim for a bit of inflation, one that's arguably even more important: monetary policy is not a precise science. Central banks will sometimes overshoot and sometimes undershoot their targets. If they aim for zero inflation and undershoot, they get deflation—and I want to persuade you that deflation is a much more serious problem than moderate inflation.

Go on, then.

Deflation, as I'm sure you've guessed, is when prices fall year after year after year.

That doesn't sound too bad.

Doesn't it? Imagine borrowing $300,000 to buy a house, and slowly repaying the money on a monthly basis. Normally, with a small amount of inflation, that monthly repayment would gradually come to represent less and less of a burden. Your salary would be rising; the prices of all the other products you bought would be rising; but the monthly repayment would stay the same in nominal terms and in comparison to everything else, it would be shrinking. No problem.

But with deflation, prices begin to drop. Your wages are a price, so they are falling. Of course, the prices of food, clothes and fuel are all falling, too. But your mortgage repayment never changes. It is taking up a larger and larger portion of your monthly salary. Your loss is some saver's gain, of course. But remember that in a recession, what we want is people spending money to stimulate economic activity. An unexpected dose of deflation is going to achieve the exact opposite, because it redistributes money from borrowers to savers, and borrowers are more likely to be spending than savers—they wouldn't be borrowing otherwise. Add in the problem that when lots of people find it hard to pay back their loans, the entire banking system can run into trouble.

That's not the only reason deflation makes it harder to kick-start an economy out of recession. As prices are falling, cash will always buy more tomorrow than it does today—so people will naturally postpone making nonessential purchases for as long as they can, depressing demand further. And as banks are unlikely to be offering generous interest rates—because there aren't many people clamoring to borrow money in a deflationary environment—many savers decide to keep their cash in cookie jars or under mattresses. Once cash is taken out of the banking system, it can't be lent out. The effect of all this? Still less demand and still more deflation, of course.

In a deflationary environment, there are no good options. To the extent that prices are sticky and don't adjust downward, everything is more expensive than it should be, so demand remains depressed; to the extent that prices do adjust downward, this gives everybody the incentive to postpone spending, so demand remains depressed. You're stuck. This is basically what happened in the Great Depression in the 1930s, and it went on for years.

The most straightforward and direct solution is to expand the money supply. Unfortunately, at the time of the Great Depression, many currencies were still backed by gold. This was a problem, because you can print money, but you can't print gold.

So I should just ignore people who tell me to link my monetary system to gold?

Yes.

Eventually, in the Great Depression, one by one, countries dropped off the gold standard—often with great reluctance. As they left the gold standard, they started printing paper money that was nothing more than paper, and their domestic money supplies expanded. Prices began to rise; real wages fell, and therefore companies started to hire workers again. And one by one, in largely the same order as they had left the gold standard, these economies started to recover.

Your central bank can create money from thin air. It's like a superpower.[1] Use it.

But this is absurd—won't printing billions of dollars create hyperinflation?

You don't mean billions, you mean trillions. The U.S. Federal Reserve has created more than $2 trillion of new money since the banking crisis began to develop in 2007, and has been printing money and buying up bonds at the rate of $40 billion a month, sometimes more. A lot of it is money in bank accounts, not actual printed paper money, but "printing money" is the simple way to talk about this.

Now, some excitable stock-picking commentators have been claiming since this kind of money-printing began that it was just a matter of time before the United States turned into Zimbabwe. If hyperinflation didn't strike in 2010, it would strike in 2011. Or in 2012 for sure. And it hasn't.

Not yet, anyway. But why not? Forty billion a month sounds like a lot.

It is a lot—more than $100 of new money for every U.S. resident, every month. But the reason it doesn't turn into hyperinflation is that there's no simple, linear link between the amount of cash in circulation—whether notes, coins or checking account deposits—and the price pressure on an economy. If you print $100 and give it to a starving man, he'll spend it. If on the other hand you give the $100 to a ninety-year-old lady with a decent pension and an anxious disposition, she may simply put it in a cookie jar, just in case she needs it. That $100 is going to do nothing whatsoever to stimulate demand, and it will not increase inflation either. And at the moment, despite enthusiastic money-printing by many of the world's central banks since 2008, a lot of the money is ending up in the equivalent of cookie jars. The money may be helping prop up spending in the economy as a whole, or it may be distorting decisions and storing up trouble for the future. But one thing it is not doing is creating hyperinflation: the inflation rate remains close to the central bankers' targets.

I have occasionally been known to misjudge my beer intake, it's true. Are there any telltale warning signs I should be looking out for that I'm printing too much money?

There are a couple, though—unfortunately—neither is very black-and-white.

The first warning sign is that people start to become quite conscious of inflation when they make decisions. As we've seen, a little bit of inflation is helpful, in part precisely because people don't tend to think very clearly about it—like our economics professor offered a 3 percent pay raise at a time of 6 percent inflation—which makes it easier for some real prices to undergo a downward adjustment when needed. If inflation climbs to, say, 25 percent a year, however, most people will explicitly consider it in their daily affairs, because it is just too costly to ignore it. They will start to write it into contracts, imposing additional costs on doing business—and as they factor expectations of inflation into their thinking, it makes your job of reducing inflation all the harder.

The second warning sign is what some economists call malinvestment. To see what this is, remember that even the keenest proponents of printing money acknowledge that it has limits. Ultimately, any particular economy at a particular time has a finite capacity to produce goods and services. There are only so many factories, only so many hours in the day, and new technology can be introduced only at a certain rate. The idea of printing money is to get the economy functioning at or near its capacity. But if the economy is already at the limits of its capacity to supply, where will that extra money you're printing end up going? Without sensible opportunities in which to invest the new cash, people will start buying investment assets such as dot-com shares, Shanghai condominiums or bonds backed by repackaged subprime mortgages. This malinvestment looks profitable at first, because the prices of the assets rise, but ultimately the bubble bursts and the economy is damaged.

The trouble is that it isn't always obvious when malinvestment is happening. Think of the impact of Alan Greenspan, chairman of the U.S. Federal Reserve from the mid-1980s to the mid-2000s. Greenspan used monetary policy to cut interest rates whenever trouble seemed to be threatening the economy. This fueled a series of bubbles, from the dot-com years, to subprime housing, and finally to the credit bubble that so damaged the world economy. The tricky thing is that inflation was always moderate under Greenspan: as a result, there was no consensus at the time that his monetary policy really was too loose, and even in hindsight it is impossible to be sure.

So you've scared me with deflation, and now you're making me nervous about letting inflation creep too high. I still don't understand why two beers—sorry, 2 percent—is the magic number to aim for. Why not an inflation target of 1 percent, or 4 percent?

This is now an active area of debate. The chief economist of the International Monetary Fund

(IMF), Olivier Blanchard—also a leading academic—floated the idea of a 4 percent inflation target in 2010. A raft of other top academics on both sides of the political spectrum were also making the case for a higher inflation target, from Greg Mankiw (Harvard professor, textbook author, senior adviser to George W. Bush) to Paul Krugman (Princeton professor, Nobel laureate, tormentor of Republicans everywhere).

There is one straightforward reason to suspect that a higher target might be a good idea: it makes deflation less likely, which is sensible because deflation is dangerous and hard to cure.

Other reasons are more of a mixed blessing. Inflation of 4 percent might help prices adjust more sensibly than a 2 percent target—in particular, when real wages need to fall but nominal wages stubbornly stay put, higher inflation will allow real wages to fall more quickly. This is true, but there's a countervailing point: in a world where prices tend to stick awkwardly, higher underlying inflation will create distortions. Imagine, for the sake of argument, a menu that can be reprinted only every three years. With 2 percent underlying inflation, menu prices will be off their initial prices by 6 percent before they can be reprinted; with inflation at 4 percent, that distortion will obviously be twice as large. Whether the inflation target should be higher or lower is a question of balance.

Another double-edged argument for higher inflation is that it makes debts melt away. There's little doubt that in the wake of the financial crisis high debt burdens were causing a problem. An economic goddess who waved her magic wand and forgave a chunk of the debt would have helped the economy to grow again, because the debtors who gained would have been more likely to spend spare cash than the creditors who lost out. A burst of surprise inflation would have achieved much the same as the goddess's magic wand. There are two problems with this argument, though. First, it's hardly fair to make creditors suffer—such as, for example, those saving for pensions—for the convenience of everyone else. And second, it doesn't take much of this sort of thing before future creditors will demand higher interest rates and future borrowers will suffer.

Hmm. Off the fence with you, then—how much inflation is "just enough"?

I think you should raise the inflation target to 3 percent or perhaps even 4 percent. There's a risk in that, of course. Your central bank has worked hard to acquire credibility as a tough-minded inflation fighter, and that credibility is important to all of us. A new inflation target—or even a totally new system, such as NGDP targeting—might upset the economic applecart. The status quo is attractive.

But you're a new broom. Be bold. The costs and benefits of a 4 percent inflation target that I laid out a moment ago—in particular, more price distortions but easier wage adjustment—pretty much balance each other out. When you actually look seriously at the costs of inflation at 4 percent rather than 2 percent, it's not easy to find any major drawbacks of the higher target.

In my view, the clinching argument for a higher inflation target is the one that originally motivated the chief economist of the IMF to take the extraordinary step of proposing such a radical idea. It is that an inflation target of 4 percent might help you avoid a pernicious economic trap.

A trap?

Imagine a recession during which nominal interest rates fall to zero, or near zero. On second thought, don't imagine it, just look around. At the time of writing, this description applies to the United States, the United Kingdom, Japan and the eurozone. If your own economy has escaped, count yourself lucky.

In this not-nearly-hypothetical-enough situation, how can the central bank stimulate the economy further? One thing it cannot do is reduce nominal interest rates: zero is as low as they will go. The reason is obvious. Very few people would put money in a bank, or otherwise lend out money, at an interest rate of minus 1 percent, because cash under the mattress pays a better rate of interest, namely zero. There's a well-regarded rule of thumb for central bankers that specifies how interest rates should be changed in response to inflation and GDP trends; it suggests that nominal interest rates should have been at minus 2 percent during the depths of the crisis. Obviously, they weren't. They couldn't have been. But this means that too many people were saving money, not enough people were spending it, and the economy was slower to recover than it should have been.

Now, if the central bank can't encourage a consumer or investment boom by driving nominal interest rates lower, it could in principle drive real interest rates lower by creating inflation. If inflation is 2 percent, then the lowest possible real interest rate is minus 2 percent—the zero nominal rate less 2 percent inflation. That sounds low but might not be nearly low enough in a serious recession. If inflation is higher, then real interest rates can fall lower. The higher inflation is, the lower "zero" really is. But if the economy is already in a slump, it might be difficult to create inflation, which is why starting from a higher rate of inflation is helpful.

Why? Can't I just print money and create inflation whenever I want?

Printing money creates inflation only if people want to spend the money right away. And perhaps they don't. After all, interest rates are already zero: if people wanted to spend money, they could already borrow it for nothing. Perhaps, instead of spending it, they will be like the anxious ninety-year-old we imagined earlier and stick it in a cookie jar. It's a recession, after all—you never know when that cash might come in handy.

If this caution is holding people back from spending, the central bank could print vast amounts of cash without creating any inflationary pressure at all—a situation called a liquidity trap. It describes what was going on in the early years of the Great Depression. For decades it was regarded as a curiosity. But the liquidity trap is an active area of research once again—and no wonder.

In theory, a sufficiently determined central bank should be able to break out of a liquidity trap by making people expect future inflation. The central bank effectively wants to say, "Once we get out of this liquidity trap, you'd better believe that prices are going to rise and the money in your pocket is going to be worthless." This would help because the fear of future inflation will encourage people to spend money now before its value melts away.

But central banks have been reluctant to make such bold statements. In 2002, faced with hints that deflation was a possibility, Ben Bernanke (then merely a governor at the Federal Reserve) gave a speech announcing that in the unlikely event that deflation took hold, "we can take comfort that the logic of the printing press example must assert itself." Print enough money, in other words, and the deflation will end.

But when Bernanke then took over the top job at the Fed and faced a liquidity trap for real, he hesitated. It's easy to talk of the printing press when everything is hypothetical, less easy when you are the boss. It wasn't until September 2012 that the Federal Reserve released a statement announcing open-ended money-printing and explaining that even after an economic recovery took hold, monetary policy would be "highly accommodative"—in other words, interest rates would be very low. The Federal Reserve finally tried to promise future inflation, but it sounded tame and bureaucratic.

Ben Bernanke's protestations remind me of a soft-hearted parent trying to discipline a naughty child in a public place: "You'd better behave yourself, because when we get home, it will be straight to bed with no supper! No, it really will. This is your last warning! I'm not going to tell you again! I mean it! Not joking!"

And of course the child never takes the soft parent seriously and supper will, in due course, be served. Bernanke's promise of high inflation later is very similar: "You'd better spend some money now because when we get out of this liquidity trap, I'm going to create some inflation. I mean it! I really will! Last warning! Not joking!"

We have to sympathize: it's easy to see why central bankers struggle to make the threat of inflation sound credible—they've devoted their careers to making exactly the opposite promise. The Federal Reserve spent decades—including some very hard years under Paul Volcker—acquiring a reputation for waging a ruthless, unending war against inflation. That reputation is so powerful and so valuable that people naturally wonder whether the Federal Reserve really would encourage inflation once the slump ends. The trouble is that if people don't believe that threat, they won't start spending and the slump will continue. This is why economists such as the IMF's Olivier Blanchard have concluded that central banks should have been aiming for a bit more inflation all along.

What can I do, then, if my economy is stuck in a liquidity trap?

Better not to get into the trap at all—that's why the 4 percent inflation target would have helped a lot. Adopt it and it will help you next time—admittedly, "next time" will hopefully be many decades away. As for today's liquidity trap, perhaps it's time to turn your attention away from the printing presses and toward the policy most firmly associated with John Maynard Keynes: fiscal stimulus.