# FISCAL POLICY AND THE FUTURE OF THE EURO

## Laurence J. Kotlikoff

The United States and most of the euro-member countries are effectively bankrupt. Resolving these bankruptcies is going to be extremely painful and is likely to spell the end of the European Monetary Union.

### The Fiscal Gap

This problem can be understood from the perspective of any government's intertemporal budget constraint, which requires that

$$T = S + D + \Delta M.$$

In this equation, T stands for the present value of the government's current and future tax and other receipts. S stands for the present value of the government's current and future spending on goods and services and transfer payments. D stands for the government's net debt (its financial liabilities minus its financial assets). And  $\Delta M$  refers to the present value of the money that the government prints to help pay its bills.

When T falls far short of S plus D, governments routinely raise  $\Delta M$  to cover the difference. If the difference is large, the amount of additional money created will be substantial, leading to inflation and, indeed, potentially hyperinflation.

The European Central Bank effectively determines the size of  $\Delta M$  and, thereby, limits the amount of inflation a country can experience. This, at least, is what everyone hopes will be the case. The reality, however, is that the fiscal gap (S+D-T) is so large in most member countries that printing money appears to be the only solution.

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Unfortunately, we do not have up-to-date figures on the fiscal gap in the current and perspective euro-member countries. But from previous work, we know that the fiscal gaps in almost all of these countries, measured as a share of GDP, are much larger than in the United States. That would not tell us much if the U.S. fiscal gap were modest. It's not. Indeed, it's enormous, totaling \$45 trillion, which is roughly 4 times GDP and 12 times official debt. Imagine everyone in our country working for 4 years and handing over every penny earned to pay this bill, and you'll grasp its size.

This \$45 trillion figure is not my calculation. Nor is it some other academic's calculation. Instead, it was produced by economists and budget analysts at the U.S. Treasury. The study was ordered in 2002 by then Treasury Secretary Paul O'Neil and was slated to appear in the President's budget, released in February 2003. O'Neil instructed his team, led by Jagadeesh Gokhale, then Federal Reserve Senior Economic Advisor and now Senior Fellow at the Cato Institute, and Kent Smetters, then Deputy Assistant Secretary for Economic Policy at the Treasury, and now Associate Professor of Economics at the University of Pennsylvania, to calculate the country's fiscal gap. When O'Neil was fired, the study was censored. And when Gokhale and Smetters left the Treasury and published the study on their own, the Treasury and the White House publicly lied and claimed they had never heard of the study.

Unfortunately, we cannot ascribe the \$45 trillion calculation to overly pessimistic assumptions. On the contrary, the assumptions are optimistic with respect to future longevity as well as growth in federal health expenditures, discretionary spending, and labor productivity.

## Closing the Gap

One way to come to grips with \$45 trillion of red ink is to ask what it would take to pay it off. Gokhale and Smetters (2003) also posed this question in their study. Their answer is given in Table 1, which details alternative immediate and permanent policies that would generate either \$45 trillion in additional revenues or \$45 trillion in reduced expenditures.

The menu lists the following options. We could, starting today, raise federal income taxes (individual and corporate) by 69 percent. Or we could, starting today, raise payroll taxes by 95 percent. Or we could immediately and permanently cut federal discretionary spending by 106 percent. Or we could immediately and permanently cut Social Security and Medicare benefits by 45 percent.

TABLE 1
THE MENU OF PAIN

Policy	Percentage Change
Increase federal income taxes Increase payroll taxes Cut federal purchases Cut Social Security and Medicare	69 95 106 45

Source: Gokhale and Smetters (2003).

Another option is to go for a combination of smaller portions of each of these varieties of castor oil. For example, we could simultaneously raise income taxes by 17 percent, raise payroll taxes by 24 percent, cut federal purchases by 26 percent, and cut Social Security and Medicare benefits by 11 percent.

Taking any one or any combination of these medicines will be brutal. But continuing to ignore the problem will simply let more generations, particularly older ones off the hook, and dump an even bigger problem in our kids' laps. Gokhale and Smetters point this out. Their "Menu of Delayed Pain" (Table 2) indicates the alternative immediate and permanent fiscal adjustments that would be needed starting in 2008 if nothing were done before then.

TABLE 2
THE MENU OF DELAYED PAIN

	Percentage Change if Policy Enacted	Percentage Change if Policy Enacted
Policy	in 2003	in 2008
Increase federal income taxes Increase payroll taxes Cut federal purchases Cut Social Security and Medicare	69 95 106 45	74 103 115 47

Source: Gokhale and Smetters (2003).

Delay has a significant cost. Waiting 5 years, for example, to raise federal income taxes means having to raise them by 74 percent rather than 69 percent. The reason delay matters is that the \$45 trillion of red ink, like our credit card bills and any other liability we fail to pay,

accumulates at the rate of interest. The real interest rate used by Gokhale and Smetters in their study was 3.6 percent.

### The Inevitability of Inflation

The fact that any single option or any combination of options in the menu of pain would be incredibly hard to swallow means one and only one thing. The United States is going to be printing money like crazy over the next few decades to try to "pay" its bills.

Resorting to the printing press is the time-honored opiate of governments, which, like our own and most of the euro-member countries, embark on fiscal suicide. If we could take a time machine to 300 A.D., we could visit hundreds of mints located throughout the Roman Empire all hard at work minting denarii for Emperor Diocletian. The denarii were Roman coins made partly of silver. In the year 300, it took 50,000 denarii to buy a pound of gold. Six years later, after the minting of a lot more denarii, each with less and less silver, it took 100,000 of these pieces of metal to purchase a pound of gold. By 324, it took 300,000. And by 350 it took 2,120,000,000! The denarius was de nada.

Unfortunately, printing money will generate relatively little fiscal traction for the United States as well as euro-member countries. The reason is that most of the spending in those countries is explicitly or implicitly indexed to inflation. So when  $\Delta M$  rises, so does S.

The fact that inflationary finance will be tough sledding in the United States and the euro-member countries raises the potential for hyperinflation as these regions print more and more money only to find themselves with higher and higher bills.

## Exiting the Eurozone

In the case of the euro-member countries with relatively small fiscal gaps, any sign of inflation may lead them to jump ship and leave the monetary union. After all, they joined the union to enjoy price stability. If price stability is out the window, why stick with the euro?

For euro-member countries with the largest fiscal gaps, sticking with the euro may also prove difficult because they will want to print money at a much faster clip than the rest of the members.

But regardless of who exits first, the bottom line is that the euro, like the dollar, is a sinking ship. And once the financial markets wake up to the inevitability of high inflation in Europe and the United States, they will start pulling the plug on these ships by setting very high long-term interest rates. This will give the Federal Reserve and

the ECB the perfect excuse to start printing money in order to lower rates, and we will be off to the races.

#### References

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