

Monetary Policy and Unemployment

Olivier Blanchard*

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I was asked for my thoughts on monetary policy and unemployment. I shall build on the themes developed at this conference, and do my best to be provocative.

1. Monetary policy can have large and long lasting effects on real interest rates, and by implication, on activity.

What I mean here is really large, and really long lasting, a decade or more. This conclusion is at odds with much of both the recent empirical work and the recent theoretical work on the topic:

The large empirical literature based on structural VARs suggests that the effect of an innovation in money on activity peaks after a year or so, and is largely gone within two or three years.

The large theoretical literature based on an equation for inflation derived from Taylor-Calvo foundations gives roughly the same results. A change in money growth has its maximum effect on activity after a year or so, and the effect is again largely gone within two or three years.

Neither literature is totally convincing.

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The type of money shocks whose effects are traced by VAR impulse responses are deviations from normal monetary behavior, and thus (even if identification is convincingly achieved and these are truly deviations, rather than noise) are likely to have different effects from the non deviation part of policy.

The Taylor-Calvo inflation equations have many merits. They capture something essential, namely the staggering of price and wage decisions. They can be derived from micro foundations. They provide a simple and elegant characterization of the relation between inflation and activity. But, as we all know, they do not fit the data. There is much more inertia in the behavior of inflation than these equations imply.

And, taking a step back, I see the evidence on the relation between monetary policy and real interest rates as speaking very strongly, and very differently. Think of the evolution of ex-ante real interest rates (use your favorite measure of inflation expectations to do that; my point is robust to all plausible variations) over the last thirty years in OECD countries:

For most of the 1970s, ex-ante real rates were very low in most countries. This was due—as a matter of accounting, not in a causal sense—to a large increase in inflation, and a less than one-for-one increase in nominal interest rates. Who can doubt that the evolution of real rates was due to monetary policy? That, faced with an increase in inflation triggered by supply side shocks, central banks were too slow and too reluctant to increase nominal interest rates, leading to low or even negative real interest rates for a good part of the decade. There may be other interpretations, arguing that the evolution of real interest rates was the result of shifts in investment or saving, and had nothing to do with monetary policy. I have not seen a plausible account along those lines.

For most of the 1980s, ex-ante real rates were high in most countries. This was due, again as a matter of accounting, to a large increase in nominal

interest rates, together with a decrease in the rate of inflation. Again, who can doubt that this evolution was primarily due to monetary policy? In every country, one can trace the sharp increase in interest rates to an explicit change in monetary policy, be it the change under Margaret Thatcher in the UK in the late 1970s, the Paul Volcker disinflation in the United States in the early 1980s, the competitive disinflation strategy in France a few years later. The case can also be made a contrario; The experience of Germany, with a much more stable monetary policy, and little change in real interest rates, either in the 1970s or the 1980s, reinforces the argument.

Again, there may be plausible non monetary accounts for these high real rates (Here, for the sake of internal consistency, I must mention one, that I explored in a paper with Larry Summers in the mid 1980s, in the face of the joint increase in interest rates and stock prices: An increase in anticipated profitability, increasing present values and putting pressure on long real rates. I still believe that this was a relevant factor. But I also believe that much of the evolution of real interest rates in the United States during the decade had to do with monetary policy.)

If we accept those two facts, we must reach the conclusion that, while money is eventually neutral, and the Fisher hypothesis holds in the long run, it takes a long time to get there. (This was indeed Milton Friedman's view). But if we accept the fact that monetary policy can affect the real interest rate for a decade and perhaps more, then, we must accept, as a matter of logic, that it can affect activity, be it output or unemployment, for a roughly equal time (Maybe one can think of models where the real rate returns to the natural real rate slowly, but output returns to its natural level faster. The models we use imply that the two should return to their natural level at roughly the same speed)

In short, monetary policy is potentially much more powerful (although we may not want to use that power) than is often assumed in current debates.

2. Monetary policy affects both the actual and the natural rate of unemployment.

The first part of the proposition is obviously not controversial. But, studying the evolution of European unemployment, I have become convinced that the second part is also true, that monetary policy can and does affect the natural rate of unemployment:

Again for the sake of internal consistency, let me start with a channel I explored, again with Larry Summers, in the late 1980s, namely hysteresis. There, we argued that anything that increased the actual rate of unemployment for sufficiently long—such as, for example, a sustained increase in real interest rates induced by monetary policy—was likely to lead to an increase in the natural rate. Our original explanation, that the goal of those employed was simply to keep their jobs, not create jobs for the unemployed, was too crude. It ignored the pressure that unemployment puts on wages, even when bargaining is only between employed workers and firms. But, even if full hysteresis (a unit root) is unlikely, one can think of many channels, from the unemployed given up search, to the unemployed losing skills, to endogenous changes in labor market institutions, which imply that sustained high unemployment will lead to an increase the natural rate itself. Sadly, I must admit, I still do not have a good sense today of how important this channel really is.

A much more conventional channel for the effects on real rates on the natural rate is through capital accumulation. Real interest rates affect the cost of capital; the cost of capital affect capital accumulation; the capital stock affects the demand for labor; the demand for labor affects unemployment. For all this to be of relevance for monetary policy, monetary policy must be able to affect real interest rates for a long period of time. But this is the point I just argued earlier was also true.

I believe that this mechanism plays an important role in accounting for

the history of unemployment in Europe over the thirty years. Low real interest rates in the 1970s probably partly mitigated the increase in labor costs on profit, limiting the decline in capital accumulation, and thus limiting the increase in the natural rate of unemployment in the 1970s. High real interest rates in the 1980s (and then again, as a result of the German monetary policy response to German reunification, in the early 1990s) had the reverse effect of leading to a larger increase in the natural rate of unemployment during that period. And the decrease in real interest rates since the mid-1990s is probably contributing to the slow decline in unemployment in Europe.

Are there other mechanisms at work? The real business cycle has focused on effects of the real interest rate on labor supply. Ned Phelps has focused on the effects of the real interest rate on the markup of firms. My sense is that interest rate induced movements in the markup may be of relevance, but the capital accumulation channel strikes me as more obvious, and probably more important.

A detour here on an exotic but perhaps important labor supply channel. I have been struck in the recent past by the (so far anecdotal) evidence on the effects of stock market movements on retirement decisions. In an economy in which most people have defined contribution plans, and in which there is no mandatory retirement age (both conditions are necessary, and are satisfied in the United States), a decrease in the stock market appears to lead many older workers to continue working, so as to maintain their desired level of consumption in retirement. The recent stock market decline has not been due to high interest rates. But the logic would be the same if it had. It may well be that we have moved to an economy in which increases in the interest rate lead to a fall in asset prices, and, in response, an increase in the participation rate of older workers.

A last point here, on the relation between unemployment and inflation.

The implication of the argument above is that a sustained increase in real interest rates leads first to an increase in the actual unemployment rate (the usual aggregate demand effect) and later, as capital accumulation decreases, to an increase in the natural rate itself. If we think of the pressure on inflation as depending on the difference between the actual and the natural unemployment rates, then, as the natural rate increases, the pressure on inflation from a given unemployment rate will decrease over time. In other words, sustained tight money may have less and less of an effect on inflation over time (the same argument applies if hysteresis, i.e. some effect of the actual rate on the natural rate, is at work.)

3. The ECB failing is in its words, not in its deeds. But words matter very much.

ECB bashing is a popular sport, especially on this side of the ocean. I am not sure it is justified.

The ECB, like many other central banks, has adopted inflation targeting (the other pillar, *M3*, is mostly for show). Inflation has remained for most of the period above the ECB target, so it is no surprise that the ECB has not embarked on the same kind of drastic interest rate cuts as the Fed over the past few years.

There is however an irony to the use of inflation targeting. To non-economists—that is, to most economic agents, from consumers to firms—inflation targeting as the exclusive goal of central bank policy sounds heartless: How can the central bank put no weight on output stabilization?

In fact, as we (economists) know, inflation targeting is actually an activist policy, a commitment by the central bank to keep output close to its natural level, and so unemployment close to the natural rate: If inflation is kept close to the target, expected inflation will be close to inflation, and so, by the definition of the natural rate—that unemployment rate such that

actual and expected inflation are the same—unemployment will be close to the natural rate.

The problem of the ECB is not therefore with the policy it has followed. But it is with the way it has sold it to the public. Its public relations has been dismal.

It has not explained what inflation targeting actually did, how it was as much of a commitment to help Euro economies get out of a recession, as to fight inflation. Worse than that, it has been ambiguous about the symmetry of the target, and thus about its commitment to decrease interest rates if inflation became low. (Compare the rhetoric of the ECB to the careful explanations given by the central bank in the UK. The policies are much more similar than the words.)

The issue is that not only policy, but also public relations matter very much: They shape expectations, which in turn determine spending, and output. Today, in Europe, the private sector feels that it is very much on its own. It is not sure, if the slump continues, the ECB will help. It is not sure, given the constraints imposed by the Stability and Growth Pact, that fiscal policy can help. I suspect this explains, in part, the pessimism which permeates Europe at this point, and in turn contributes to the current slump. The contrast with US policy could not be stronger.

4. Europe could easily fall in the liquidity trap

I worry very much about the liquidity trap. Ten years ago, we thought of this as an exotic case. Japan has shown it could happen.

Japanese economic policy bashing is also a popular sport, and it strikes me also as largely unwarranted. Japanese policy was not that crazy for most of the 1990s. Interest rates were decreased, in retrospect a bit too slowly. Expansionary fiscal policy was used, admittedly with ebbs and flows, but who would not be scared about running such large deficits for so long?

The hope was that, with a turnaround in the economy, asset prices would recover, and balance sheets of banks would improve. These hopes did not pan out, but how many of the current critics predicted this outcome in the early 1990s? (A major question is why this fiscal cum money expansion insufficient to avoid getting to the trap. I do not know the answer.)

I am also unconvinced by a number of recent papers that argue that, under existing policies, this is unlikely to happen elsewhere. I think the same set of events could well happen again. Economies which try to aim for very low inflation (0 to 2%), and put sharp constraints on fiscal policy, are playing with fire.

Let me sketch a scenario on which I put positive probability. The current account of the United States is very large. It is absorbing about 30% of non US world net saving, and this will not last forever. When foreign capital flows slow down and they will, the current account will have to decrease, the dollar will have to depreciate. And the only currency it can really depreciate against is the Euro. My sense is that macroeconomic policy in the Euro zone is not ready to react to a major appreciation of the Euro. The room on monetary policy is small, the room under current Pact rules on fiscal policy equally limited. The risk of going to the two limits and still being in a recession with deflation strikes me as substantial.

What is there to do? The usual and unsatisfactory response: Europe should not have gotten there in the first place. I believe that a 2% inflation target, and the associated 4 or 5% nominal interest rate are too low, leaving too little room to decrease interest rates if needed. The second answer is: Beware of analogies. Analogies are only pseudo-logic, and pseudo-logic can be dangerous. A really dangerous analogy is “Keep your powder dry”. Central banks should do precisely the opposite: Try by all means to avoid getting into the trap. When close to it, do more rather than less. The third is: Think harder about to use fiscal policy. This takes me to my last point.

5. We need to rethink fiscal policy and redesign automatic stabilizers.

Discussions of fiscal policy suffer from schizophrenia:

We all seem happy to accept variations in the budget due to automatic stabilizers. The argument for allowing the automatic stabilizers to operate is indeed a convincing one. They allow for countercyclical fiscal policy, but avoid the dangers of discretionary fiscal policy. Because of their automatic nature, they are more likely to avoid the perverse effects—the negative fiscal multipliers—that appear to characterize some discretionary fiscal expansions.

What automatic stabilizers a country has however, and how strong they are, is entirely based on past decisions that typically gave no weight to output stabilization. A country with a more progressive income tax structure has stronger stabilizers. Was this intended? Almost surely not.

Clearly, if we like automatic stabilizers, we should not be blindly accepting what history left us, but thinking hard instead about to design the tax/transfer system so as to achieve the optimal degree of optimal automatic stabilization (an argument made recently by Martin Feldstein, that I strongly second.) Our profession is nearly silent on this issue, and I believe we can do much better.

Many of the things that monetary policy does could be done by fiscal policy. This will be most useful if the economy is in a liquidity trap, but may be useful even away from it.

This is not to say fiscal policy can do everything monetary policy can do. Suppose, for example, that you want to decrease the cost of capital. This can be done through expansionary monetary policy. It can also be done through fiscal policy and interest rate subsidies. The problem however is that the cost to the budget is likely to be enormous. Suppose you want to decrease the cost of borrowing on mortgages by 1%. You can do this through

expansionary monetary policy, and a decrease in the appropriate long real rate. While the effect will be initially on flows, refinancing, if sufficiently attractive, will eventually lead to an effect on the whole stock. Or you can do it through a 1% tax subsidy for existing mortgages. Mortgages outstanding in the United States at this point are around 6 trillion dollars, so the subsidy will be equal to roughly 60 billion dollars. This is a very large number, and if this is to be a balanced budget, requires a large increase in taxes elsewhere. Much better to leave this to monetary policy (The size of the transfers between borrowers and lenders are exactly of the same magnitude under monetary policy. But they are stealthy, and do not explicit involve the budget).

There are however fiscal policy instruments which can have a strong effect on spending at a much lower cost to the budget. Conceptually, they are those that lead firms or consumers to shift spending over time, and work through intertemporal substitution. The best known example here is that of the investment tax credit. Starting from an example from Sweden, John Taylor wrote a beautiful Brookings paper twenty years ago, showing how such a cyclical investment tax credit could be put in place and used to smooth fluctuations. We should explore it again, together with other cyclical tax credits, on consumer durables for example. In the new monetary policy environment, choosing automatic stabilizers optimally, and having a fiscal policy that responds quickly and strongly to movements in activity is a high priority.