

EMPLOYMENT VS. INFLATION
Recent Thoughts on an Old Problem

Remarks

by

Bruce K. MacLaury
President
Federal Reserve Bank of Minneapolis

at a
meeting of the

South Dakota Social Science Association

Continuing Education Building
University of South Dakota
Vermillion, South Dakota

April 14, 1972

There's hardly a subject that has caused more soul-searching in recent years than the question of how to achieve low unemployment without unleashing the forces of inflation. Indeed, the problem has taken on a new sense of urgency - and some element of despair - over the last couple of years when it seemed that we had succeeded in achieving the worst of both worlds - high unemployment and strong inflation, for which was coined the descriptive word "stagflation." But if we don't seem much closer to finding our way out of this swamp - and I'm not sure we should be totally pessimistic on that score - at least we do seem to have made considerable progress in surveying the lay of the land.

As one piece of evidence to support this view, let me recall to you that during the discussions of the so-called full-employment bill in the immediate post-war years, people tended to associate the phrase "full employment" with an unemployment rate of zero. Perhaps this was excusable, given the vivid memories of the unemployment rates of the depression years. But very early on, it became clear that the government could reasonably commit itself only to a goal of "high" employment, not "full" employment, or the consequences in terms of inflationary pressures would be intolerable. Moreover, without being able to quantify the concept very precisely, it was evident that any economy had to operate with some transitional or frictional unemployment if it was to have any labor mobility at all. Thus, despite the difficulty in specifying what level of frictional

unemployment seemed unavoidable, a consensus formed fairly quickly around the number of four percent, which later came to be designated the interim unemployment target for government policy.

Although it was quickly recognized that there was a role for government programs designed to aid disadvantaged workers through training and job assistance, the emphasis was clearly placed on appropriate levels of aggregate demand, achieved, hopefully, through the judicious use of fiscal and monetary policies. And indeed, that emphasis was, and is, quite appropriate. But questions are now being raised - also quite appropriately - about the degree of reliance we can place on aggregative tools to achieve acceptable levels of unemployment, for reasons I'll come back to.

Despite the changing views on the joint problems of inflation and unemployment, and our growing sophistication in defining the problem of reconciling them, we have not succeeded in defusing this issue that remains loaded with political dynamite. No politician - nor anyone else, for that matter - likes to have to choose between two undesirable alternatives. There is a perfectly natural tendency to search for ways of having our cake and eating it too, and to the extent that such ways can be found, we will all be better off. But few would deny that in the final analysis a trade-off between inflation and unemployment must be faced.

One analytical device for summarizing that trade-off

was set forth in a now-famous article by Professor A. W. Phillips back in 1958. In his study of the relation between unemployment and changes in money wages in the United Kingdom over nearly a century from 1861 to 1957, he found a high degree of consistency between unemployment rates and wage changes indicating that at low rates of unemployment, wages were observed to rise more rapidly, and vice versa. The line drawn through the points relating these two magnitudes, became known as the Phillips curve, of which we have heard so much of late.

Although Phillips' original formulation portrayed the links between wage rate changes and unemployment, it didn't take much of a transposition to relate, by essentially the same device, the degree of tightness in the labor market and changes in prices (rather than wages). Thus the curve depicted directly the trade-off between unemployment and inflation. Small wonder that this analytical device was quickly lifted from the dusty pages of a learned journal to become the plaything of the financial, if not popular, press. It seemed to shed light on one of the touchiest and thorniest policy problems around.

Yet no sooner was the article out than it began to attract critical attention in academic circles. Among the questions that were raised was that of linkage and causation. Should different rates of wage increases be related directly to pressures in the labor market? Or was there an intermediate step that traced the apparent link through higher profits in an expanding demand situation, which in turn induced unionized labor to raise its

demands? And even if we accept a simple and straight-forward interpretation of a stable link over short-run periods, can one expect that relationship to remain the same over longer periods of time? It's true that Phillips' own work traced the two variables over nearly a century. But it stands to reason that if there were fairly regular business cycles over this period, the shape of the curve might well be different than in the absence of such cycles. In a cycle-prone economy, for example, one would expect wage demands to be bunched during regular swings toward full employment, and hence give the appearance of a "steeper" trade-off than in an economy with less pronounced cyclical fluctuations.

Reinforcing doubts as to whether the Phillips curve accurately portrays the trade-off between unemployment and inflation over the longer pull are questions that have been raised from a couple of different quarters. On one side are the adherents of the monetarist school who argue that workers will see through the veil of the "money illusion" of inflation more or less quickly, and adjust their wage demands in such a way that the actual rate of unemployment will not long deviate from a level that might be called a natural rate consistent with the structure of the economy. In this view of the world, there is no long-run trade-off and the "curve" is simply a vertical line.

Without necessarily buying the monetarist approach, one can still wonder about an interpretation of the Phillips

curve that implied that in the real world one could sustain for any length of time trade-off positions located toward either extreme of the curve. In other words, it doesn't seem plausible to assume that one could operate an economy at very low levels of unemployment and correspondingly high levels of wage increases or inflation without risking cumulative disintegration, or controls - even though such a position might be sustainable for a short time. In effect, this argument says that once the economy is operating very far from the middle range of values of the Phillips curve, the trade-off is not between unemployment and inflation, but rather between one level of unemployment now, and a different level somewhat later in time.

Apart from these conceptual questions that were being raised about the validity of the trade-off depicted by the Phillips curve, our own recent experience in the real world with the persistence of inflation at a time when unemployment rates were rising to levels previously associated with slowing price changes caused many people to take a closer look at the supposedly stable relationship. The "stagflation" to which I referred earlier didn't fit into the neat framework of the smooth curve, unless, of course, the curve itself had shifted. And as more attention was focused on this possibility, it seemed to accord with the observed facts - and then the question became, why had the curve shifted.

For awhile it was possible to argue that the shift was a temporary phenomenon. After all, wasn't it reasonable to assume that after such a long period of rising prices in the United States

from 1966 to 1969 - rising prices that had become institutionalized in labor contracts and other arrangements - it would take a correspondingly long time for the cycle to unwind. And during this unwinding process, we would observe higher than normal rates of unemployment associated with a given rate of price increase. Indeed, I myself found this kind of explanation plausible, and comfortable as well, since it implied that once we had purged ourselves of the Vietnam war-induced inflation, we could expect to return to business as usual along the old familiar Phillips curve. But alas, that doesn't seem to be the case.

The case for a more permanent adverse shift in the Phillips curve was set forth in a brilliant article by George Perry in 1970 entitled "Changing Labor Markets and Inflation". In substance, he argued that because of changes in the composition of the labor force over the past fifteen years, there is a greater degree of "tightness" in the labor market today (and hence a greater tendency for wage rates to rise) for any given level of unemployment as measured in the official figures.

All of us had been aware that it wasn't very helpful to look only at the overall average unemployment rate, since the rates for the component parts varied so widely. For example, we knew that the rate for male heads of households remained well below the national average, and that at the opposite extreme, the rate for teenagers was three times the overall average. But what had escaped the attention of most of us was that the proportion of women and teenagers in the labor force had been

increasing over time, with the result that the degree of tightness in the labor market represented by a four percent rate of unemployment in the mid-1950's today would begin to bind at a higher overall unemployment rate. And not only was this change related to the higher proportion of characteristically higher unemployment groups in the labor force, but even more importantly to the increase in the unemployment rates associated with these particular groups.

To be specific, it was not just that there is a higher proportion of young people in the labor force today than fifteen years ago, but that the characteristic unemployment rate for young people had increased as well. In effect, as Perry argued, the labor input offered in the market by these various groups was not identical and interchangeable; two teenagers could not necessarily provide substitute labor inputs for one male head of household. To the extent that there is a mismatch between the kinds of labor inputs coming into the market and the kinds of labor demanded - and this mismatch grows over time - we again have a factor that can account for higher rates of observed unemployment associated with a given degree of tightness in the labor market. Nor is this just a theoretical exercise, since there seems to be some evidence that the structure of labor market demands has not adjusted to take account of the different forms of labor inputs being offered, despite considerable substitution among various labor force groupings.

Putting these various changes together, plus one or

two I haven't mentioned, Perry determined that the current trade-off curve had worsened from that we faced in the mid-1950's such that with an unemployment rate today of four percent (as officially measured) we could expect inflation to run at about 1.7 percentage points higher than fifteen years ago. Or, to put the same thing in different terms, we would have to permit the measured unemployment rate to remain at five percent today to achieve the same degree of price stability (c. 3%) that was associated with a four percent rate in the mid-1950's.

What kind of changes are we talking about? For one thing, the proportion of females in the labor force rose from 32% in 1956 to 38% in 1971. During the same period, the proportion of teenagers rose from 6.5% to 8.8%. Moreover, whereas teenagers accounted for 17% of the unemployed in 1956, they accounted for 25% last year.

Now in citing these last numbers, there has to be some caution in interpretation. For one thing, a person counts as unemployed in these calculations whether he is seeking full-time or part-time work. And a much higher proportion of teenagers are in the latter group. Moreover, the reasons for unemployment vary considerably in the different age-sex groups. For example, in 1971, over 80 percent of the teenagers who were reported as unemployed were so because they either were voluntarily leaving their last job, or were entering or re-entering the labor force. In contrast, only a third of the proportionately much smaller number of unemployed males could be explained by these circumstances - the majority had in fact lost their last job.

Two other facts help to bring home the importance of the changed composition of the labor force in interpreting today's unemployment figures. First, it is estimated that the degree of tightness in the labor market in 1968 and 1969 substantially exceeded that of the Korean war period, even though the officially measured unemployment rates were higher. In other words, we should have been less surprised at the speed with which wages rose during this period had we been using an appropriate measure of adjusted unemployment. Second, if we apply the unemployment rates that characterized the various age-sex groups in the labor force in 1956 to those same groups today, we would have had an average unemployment rate in 1971 of 4.5 percent rather than the 5.9 percent as it was actually measured.

But if we are smarter about what the numbers mean, and why the trade-off between inflation and unemployment seems to have worsened, what are we supposed to do about it. One thing I don't think we can do is wash our hands of the problem, and console ourselves with the thought that only the numbers have changed and people are no worse off. Just because we now know that part of the reason for higher unemployment rates is the larger proportion of teenagers in the labor force doesn't mean that teenagers are any less unemployed; in fact, the opposite. It may be that as a matter of social priorities we should be more concerned about the unemployed head of household than about the unemployed teenager, but the changes in the numbers we've been talking about doesn't tell us that.

What the changes do tell us, though, is that we can't rely on stimulative aggregate demand to move us back to four percent unemployment (as it is conventionally measured) and expect to maintain the degree of price stability previously associated with that number. It isn't a mirage - the trade-off really has worsened, and we may as well face up to that fact and see what we can do about it.

Indeed it may have worsened more than is indicated by the analysis I've just outlined, or at least in a somewhat different way. Suppose that labor productivity is growing less rapidly today than it was a decade or two ago, not because of a change in the labor force composition (although that might have a bearing) but because of the observed shift in the composition of output, with increased weight on services (where productivity is thought to grow relatively slowly) at the expense of manufacturing and agriculture (where productivity increased relatively rapidly). If this is in fact the case, then a given level of unemployment today would not only be associated with a more rapid rate of increase in money wages than previously, but with a still more rapid increase in the price level, since lower productivity increases would absorb less of the difference between wage increases and price increases.

If we can't ignore the problem of a worsened trade-off between unemployment and inflation in hopes that it will go away, and at the same time can't rely on the traditional tools of fiscal and monetary policy to be of much assistance in helping us out of this dilemma, where can we turn? One obvious place, of course,

is to increased emphasis on manpower programs designed to train and retrain those members of the labor force not otherwise able to compete successfully for jobs.

And in fact, the federal government has been devoting substantially more resources to just such sorts of programs. The total of budget outlays for federal manpower programs is scheduled to double, from \$2.5 billion to \$5 billion, between 1970 and 1973. Much of this increase, however is aimed at providing temporary assistance during the current period of high unemployment through the so-called Public Employment program which temporarily subsidizes most of the cost of adding new employees to state and local government payrolls. However desirable this kind of program may be in helping to deal with present circumstances, it is not designed to deal with the structural changes that are the focus of our discussion here. In fact, one could argue that by encouraging further additions to the payrolls of state and local governments, already one of the fastest growing sectors of employment and one with the least promise in terms of productivity gains, the program may be providing temporary relief at the cost of some longer-run worsening of the employment/inflation trade-off.

Another portion of the increase in manpower program outlays is designed to improve the chances for returning veterans to find employment, and in this case there may be a closer relationship between the needs of the moment - which are undeniable - and efforts to deal with the longer-run structural problems. Some 1.3 million Vietnam era veterans have entered the labor force during the past two years, and they face competition from other

young workers whose unemployment rate, as we've already indicated, has been in the neighborhood of 15%. Although it is very hard to measure the effectiveness of the various manpower programs, there's no denying that efforts to create a better match between the jobs available and the skills of the unemployed makes a great deal of sense, not only from a humanitarian point of view, but in terms of improving the trade-off between unemployment and inflation.

I won't pursue the obvious point that any improvements we can make in the efficacy of the federal/state employment services work toward this same end. The computerized job banks that have been set up in many urban centers are a step in this direction. But while we can do more along these lines of tailoring the labor force to the needs of employers, we can't overlook the need to encourage employers to find ways of utilizing more effectively the supply of labor available. I have in mind those efforts that are already underway to break down the barriers of discrimination against minority groups and against women as employees. Similarly, promoting the hiring of the handicapped, and adjusting work schedules where possible to utilize part-time employees who are attending school or attending to their families are important avenues to be explored. Again, we have tended to think of such efforts primarily in humanitarian terms, but by assisting in the more efficient matching of supply to demand in the labor force, we can't help but improve the Phillips curve trade-off in the process.

In a very different way, public policy stepped in to try to improve the trade-off last summer by the institution of the price/wage freeze and phase two. The logic for this inter-

ference with market forces was that while running the economy with sufficient slack (i.e. unemployment) for a sufficiently long period, could eventually have been expected to bring price increases under control, this was a very costly way of achieving the desired result. There is much debate as to whether the Administration's price/wage policies are in fact working. I, for one, happen to think that despite their obvious shortcomings, the current wage and price restraints have permitted a more expansionary fiscal and monetary policy than would have been prudent otherwise, and hence have contributed to a speedier recovery. The much tougher question is whether an incomes policy of some sort as a permanent fixture on the economic landscape can have any significant impact in improving the trade-off between unemployment and inflation, and here I'm much more skeptical. Educational efforts to preach the gospel that wage increases in excess of productivity gains lead to inflation are hard to knock, but they are also not likely to be very helpful in controlling inflation.

Another sort of policy implication that I read from the growing problem of high unemployment among the young is the need to look closely at the minimum wage law. A number of people have pointed out the inconsistency in continually raising the minimum wage, thereby pricing low productivity workers out of the market, and at the same time bemoaning the high levels of unemployment among teenagers. I'm aware that this is not a simple question, but it does seem to me that a differentially lower minimum wage for young workers would be in their own interests. Along the

same lines, it seems to me more desirable to have the government subsidize the employment of low productivity workers generally, rather than have to provide for these same people through unemployment assistance or welfare. Such subsidies are already being given to some extent through the so-called JOBS program.

I recognize that as soon as one calls for new subsidies, the question immediately arises as to how to administer them so that the funds are targeted where the need is greatest. As in so many other areas, there is no easy answer. So long as the subsidies are available only for a relatively short training period, the program can to some extent be considered self-limiting, since the question of who constitutes a low productivity worker need not be faced directly over any protracted period. Beyond this, my own instinct tells me that we ought to rely more heavily on provision of income supplements to workers through some form of minimum annual income than on direct payments to employers.

Yet another whole area to explore in an effort to improve the trade-off is that of fostering more rapid advances in labor productivity. As I indicated earlier, a faster rate of productivity advance will to some extent compensate for a worsened trade-off between unemployment and wages. Other people have compiled catalogs of things we might do to try to improve productivity, and I won't repeat them here. But one thought that should get more attention is the need for improved delivery systems for local government services. Population shifts and changed

technology have left many local governments far behind, to the cost of remaining taxpayers. A rationalization of local government services and jurisdictions is long overdue.

None of these approaches is going to relieve us of the problem of the Phillips curve trade-off, or of the deterioration of that trade-off. Collectively, however, they should help to make the resolution of that dilemma somewhat easier.