recession and stagnation. The inflation risk should be less than after 1975. The big difference refers to the vulnerable debt positions of so many less-developed countries. But one necessary condition for successive solution of the depressive and protectionist effects of the debt-service problem is a new, long enough period of expansion of the markets in industrial countries.

Economic growth will, of course, never again attain the record levels of the 1960s. But for the industrial world growth of around the good old 3 per cent on average per annum should be attainable and realistic. How much unemployment and inflation will accompany this rate of growth is anybody's guess. It will very much depend on what happens in the revival process of the various countries, when expectations of future inflation are formed, partly depending on how much of the budget deficits of the government will disappear with the return of economic growth. Also in the respect of stabilization policy we have learned a lot during passed years and should – in leading countries – be able to find good synthesises of Keynesian and monetarist settings.

My attitude as to the end of world stagflation is based on a motto from Confucius: 'It is better to light even a small candle rather than damn the darkness.'

NOTES

1. The expression 'the Swedish model' started to be used at the end of the 1930s. The concept is necessarily vague, having several dimensions and changing over time. It is generally used as an appreciation of the success of Swedish economic policy. A forthcoming article of mine in the *Journal of Economic Literature* gives a fuller explanation.
2. The letters EFO refer to the names of three economists – Edgren, Faxen and Odner – from the Swedish organizations representing labour and employers, who worked out the joint report of the workings of the wage system. The model is also referred to as the 'Scandinavian model' and 'Aukurst model'.
3. *Wage determination in the step quarterly econometric model of Sweden.* Presented at the Eleventh Annual World Meeting of Project Link, Helsinki, August, 1979.
4. The expression $(1 - t_m)/(1 - t_a)$ is the 'conversion rate' and is in this case equal to 0.6 where t_a is the average direct tax rate and t_m is the marginal tax rate. The inverse of this expression equals 1.7 and is the tax–wage multiplier, a concept introduced by me in *Business Cycles and Economic Policy*, London, 1957.

6

The Phyrric Victory – Unemployment, Inflation and Macroeconomic Policy

LARS OSBERG

At the Battle of Asculum in 279 BC, Greek mercenaries under the command of Pyrrhus, King of Epirus, defeated the Roman army, but at a cost in casualities which is supposed to have prompted Pyrruhus to say: 'Another such victory over the Romans and we are undone.' Pyrrhus himself was not among the casualties and survived through several more campaigns. The phrase 'Pyrrhic Victory' has passed into the language as a metaphor for an ill-conceived venture but, as the *Encyclopedia Americana* puts it: 'Although his conquests were temporary and he exhausted the resources of Epirus in his wars, Pyrrhus was considered in antiquity as one of the greatest generals of Hellenistic times.'

The parallel with modern-day macroeconomic policy is too apt to be resisted. The generals of the modern Western economies embarked, in the late 1970s, on a campaign against inflation and, like Pyrrhus, it must be conceded that by 1982 they had won an important victory – inflation was down to single digits in North America, Britain and many nations of Western Europe. However, the casualties from this campaign, in the shape of over 32 million unemployed in the OECD nations, have been far higher than were anticipated and there is little current anticipation for their early recovery. Like Pyrrhus, the decision-makers of this modern economic war will themselves survive but unlike Pyrrhus they are surrounded by a public who will not be satisfied with tales of noble victories in far off lands. The electorate of modern-day economies will want to know: why did we embark on this campaign in the first place? Why were the costs of the war against inflation so grossly underestimated? What are the future consequences of the current 'victory'? What analysis, and what strategy, will save us from similar 'victories' in the future?

This paper will argue that it was a concern with distributional

issues, and not with economic efficiency, that started the war against inflation in the first place. It will argue that the distributional implications, and the aggregate costs, of this war were substantially mis-estimated and that this mis-estimate was, in large measure, due to the reintepretation of labour-market data, and especially of unemployment, which developed as part of the 'new labour economics' of the 1960s and 1970s. Since the perceived costs of unemployment shrank relative to the perceived costs of inflation, it is not surprising that the policy-makers shifted their attention to the control of inflation rather than the alleviation of unemployment. However, the achievement of a low inflation rate, at the cost of a prolonged period of high unemployment, does not simply return the economy to its situation prior to the acceleration of inflation. This period of high unemployment will necessarily alter the institutional structure of the labour market and create problems whose impact will be exacerbated by the other structural changes now being experienced by Western socieities. These issues are treated in the following three sections, while the conclusion discusses the avoidance of further similar 'victory'.

EQUITY ISSUES

In assessing why the decision was made to emphasize anti-inflationary policies in the later 1970s one must assess, to some degree, the motives of economic decision-makers. However, these motives are not open to public inspection and must be imputed from public pronouncements and from the observation of the foreseeable consequences of their decisions. Since one forseeable consequence of high unemployment is to weaken the bargaining power of trade unions and since another forseeable consequence has been increased poverty and lower family incomes within the working class of the OECD nations, one explanation of deflationary policies is to see them as stark evidence of an attempt by national capitalist classes to impose discipline upon their respective proletariats (perhaps because these proletariats had become increasingly demanding, e.g. in 1968 in Europe). Although such analysis may explain the attitudes of some of the economic decision-makers of the OECD nations, to my mind it certainly cannot explain the motives of all decision-makers. Such analysis cannot explain why deflationary policies were able to

gain widespread support, both among the general public (initially) and in academic and professional circles whose self interest was in no reasonable way advanced by deflation. One must admit that many people were convinced *by argument* of the evils of inflation and, in particular, of the inequities of inflation.

Arguments as to distributional equity are central to the discussion of whether one should adopt an anti-inflationary policy stance since it is very hard to argue reasonably for the choice of an anti-inflationary emphasis on pure efficiency grounds. An efficiency criterion would argue that one should compare the aggregate cost of a given degree of anticipated inflation or of a temporary recession to decrease inflation and inflationary expectations, and adopt the alternative which costs less. However, as Tobin (1972: 15) put it: 'According to economic theory, the ultimate social cost of anticipated inflation is the wasteful use of resources to economize holdings of currency and other non-interest bearing means of payment.' Nordhaus's (1973) estimate was that, in the United States, the cost of a 1 per cent increase in the rate of fully anticipated inflation (via the loss of consumer surplus due to the minimization of money balances) was, in 1962, of the order of 30 cents per capita per year – in 1980 dollars (assuming this loss of consumer surplus increased proportionally to family money income 1962–1980) this would amount to a cost to the United States economy of roughly $229 million per 1 per cent of anticipated inflation. By contrast Okun's (1978) estimate of the cost in foregone output of a recession sufficient to shave 1 per cent from the inflation rate was 10 per cent of a year's gross national product (GNP) – some $262 billion in 1980. Gordon's (1982) estimate is lower, some $152 billion, but either estimate of recessionary costs is an order of magnitude greater than the present value of the anticipated benefits of lower inflation. Only with very odd assumptions about the future cost of inflation (for example see Feldstein, 1979) is it possible to conclude that the losses in aggregate output of a given degree of anticipated inflation exceed the losses in foregone output of the recession which would be necessary in order to decrease inflation and inflationary expectations.

But of course the war on inflation was not founded on such comparisons. Rather the inflation fighters saw a given degree of inflation as possibly leading to accelerating inflation and emphasized the redistribution involved in unanticipated changes in the price level and in individual prices. Of course, unanticipated inflation, if it is truly unanticipated, does not change economic

decisions *ex-ante* and cannot produce an *ex-ante* loss in economic efficiency. It is only after the fact of an unanticipated inflation that unanticipated redistribution of social product occurs. Unanticipated changes in the general price level, or accentuated variability in individual prices around anticipated changes in the general price level, impose on all market participants a sort of involuntary lottery. It is the inequities, i.e. the unanticipated redistributions, involved in such a lottery that have provided an indirect argument for an anti-inflation strategy on efficiency grounds. Okun (1981) has argued that the inequities and uncertainties of inflation impair the functioning of an economy which depends heavily on implicit contracts while Laidler and Rowe (1980) contend that confidence in the market economy itself will be undermined by continued inflation. At times these arguments are couched in mystical, if emphatic, language: 'It is surely now beyond dispute that one of the prime requirements for good economic performance over time in a market economy is a money that can be trusted' (Bouey, 1982).

However, it is now also surely 'beyond dispute', if controls are ruled out, that we cannot use deflationary policies to decrease inflation without also causing large-scale and prolonged unemployment. Hence the real issue is the comparison of inequities. We must compare the extent of the inequities involved in unanticipated inflationary redistribution of real output to the extent of the inequities involved when the unemployed are made to pay for the devotion which the rest of society feels for a stable price level. If we perceive the economy as composed of representative persons who may, occasionally, be unemployed as a result of their search behaviour between jobs, we will see the burden of unemployment as being fairly evenly spread throughout society and its inequities as being 'small' in comparison with the inequities of the involuntary lottery of inflation. However, if we perceive the labour market as composed of dissimilar individuals and groups we are more likely to perceive unemployment as partially involuntary, as concentrated in identifiable segments of the labour market, and as creating inequities which may be 'large' relative to the inequities created by inflation.

Analysis of the nature of modern labour markets is thus central both to the relative evaluation which one might place on inflation and on unemployment and it is also central to one's understanding of the causes of both of these phenomena. Unemployment is clearly a phenomenon of the labour market. Price inflation, unless

one appeals to arguments based on ever-expanding mark-ups of prices over unit labour costs, is directly dependent on wage inflation, also a labour-market phenomenon. Why economic decision-makers in the late 1970s chose to emphasize inflation as the primary problem and why they chose the particular strategies which they used in therefore closely linked to their understanding of the functioning of labour markets, and to the evolution of a 'new labour economics' during the 1960s and 1970s.

'THE NEW LABOUR ECONOMICS'

During the early 1960s, labour economics still bore a good deal of the imprint of the work of the institutional writers of the 1950s (e.g. Kerr, 1950; Reynolds 1951). Best-selling texts (e.g. Woods and Ostry, 1962) were somewhat sceptical about the perfection of labour markets and tended to emphasize heavily the institutions of collective bargaining and labour relations, historical trends in labour-force growth and employment and the pattern of inter-occupational and inter-industry wage structure. It was normal to draw distinctions between types of unemployment and to prescribe different sorts of policy interventions to deal with each. Since this was, among other things, the initial period of computer development, there was a great concern with the extent of 'structural' unemployment – 'activist' manpower policies involving retraining programmes, relocation grants and increased subsidies to education were widely supported. 'Frictional' unemployment was briefly described as the unemployment of those who were 'between jobs'. Together with 'seasonal' unemployment it was seen as creating a minimum level of unemployment even at 'full employment' but in general it did not receive a great deal of attention. 'Cyclical' unemployment was seen as arising from insufficient aggregate demand – its prevention was the major focus of macro-economic stabilization policy. Perhaps partly because of lingering memories of the Great Depression, unemployment was, with the minor exception of 'frictional' unemployment, seen as largely involuntary, as concentrated in particular occupations and regions and as having, particularly for the long-term unemployed, extremely bad social implications. It was not uncommon to read such statements as 'unemployment is the worst scourge of a free enterprise system' (Woods and Ostry, 1962: 358).

However, one characteristic of mainstream labour economics during the 1960s and 1970s was a gradual process of 'de-institutionalization'. During the early 1960s the 'human capital revolution' rephrased the historic problem of explaining why workers have different jobs with different skills and receive different rates of pay into the problem of the optimal acquisition and depreciation of human capital over the life cycle. The analysis of qualitative differences in kind and types of skills (and the consequent rigidity and segmentation of the labour market) which had been so important to the institutional tradition fell out of fashion and was replaced by the discussion of differences in the quantity of 'human capital' possessed by individuals. Rather than emphasizing the detailed examination of particular employment relationships, labour economics changed its focus and became much more closely a form of applied microeconomics. Since problems which emphasized individual maximization of exogenously given independent preferences proved far more tractable than problems involving collective action, interdependent utilities or notions of 'fairness', the former sorts of problems received the majority of attention. Increasingly, labour economists left the messy institutional details of wage contours and collective bargaining to specialists in 'industrial relations' and concerned themselves with the testing of models of individual maximizing behaviour using quantitative data from secondary sources.

When Phelp's (1970) *Microeconomic Foundations of Employment and Inflation Theory* appeared, it therefore met a receptive audience. Indeed Phelps volume and the Friedman article of 1968 are landmark references to the study of the 'new unemployment' and the 'new macroeconomics' which influenced much of the 1970s. Viewing unemployment as search behaviour provided a theoretically elegant solution to an old criticism of decentralized market economies (i.e. unemployment). It received empirical support in the new emphasis placed on the large flows into and out of labour-force participation and employment in modern economies and the short duration of both the 'average' spell of unemployment and 'average' spell of employment (1.4 to 2.2 months and 20.8 months respectively in the United States during the early 1970s – Clark and Summers, 1979). When framed in terms of the 'representative man', search models implied that the incidence of unemployment is largely random, hence a decision not to stimulate the economy and to allow unemployment to rise is equitable in the same sense that a lottery where all individuals

have the same chance of losing is equitable. More importantly, however, search models were used to deny the existence of involuntary unemployment and the normative basis for government intervention to prevent unemployment. Throughout the 1970s one could read in the best of economic journals such assertions as 'the unemployed worker at any time can always find some job at once' (Lucas, 1978).

Search theory denied that continued unemployment could be 'involuntary' and, in addition, some versions of implicit contract theory were used to deny the involuntary nature of an initial layoff. It was argued that workers choose firms knowing there is a probability of a future lay-off, which will be cushioned by unemployment insurance. Layoffs were seen as equivalent to occasional leisure, of little consequence since 'the typical worker who is laid off is soon rehired by his original employer' (Feldstein, 1976).

However, although the incidence of unemployment was theorized to be random and its duration short, still the waste of potential output due to unemployment might be seen as justification for stimulative macro-economic policy. To this the new labour economics replied that if one saw individuals as maximizing utility over their lifetimes, subject to the usual assumptions on foresight and capital markets, this would imply that individuals have a personally optimal lifetime total of hours of paid labour supply. Individuals may, however, alter their hours of paid labour supply in any given period, in response to perceived differences in real wages. Stimulative policies were then seen, in the short run, as inducing an increase in labour supply as individuals took advantage of a relatively high current real wage and deferred part of their lifetime consumption of leisure to a later date. In subsequent periods, however, the intertemporal substitution model of labour supply (popularized by Lucas and Rapping, 1970) argues that labour supply will decrease – hence that stimulative policies can only be of transitory benefit. Although stimulative monetary and fiscal policies could increase the supply of labour and reduce the level of unemployment (the two were seen as equivalent) by 'tricking' workers into believing that a rise in money wages was also a rise in real wages, such increases in aggregate output could not continue once the deception was discovered.

By the mid 1970s, if not before, it was no longer possible in mainstream North American literature to claim that the long-run Phillips curve was anything but vertical at the unique 'natural'

rate of unemployment or, more technically, at the unique 'non-accelerating inflation rate of unemployment' (NAIRU). The NAIRU had become the most that macroeconomic policy could aim at, with the penalty attached to a more ambitious unemployment target being seen as ever accelerating inflation, while the benefits of allowing unemployment to exceed the NAIRU were seen as declining inflation and, eventually, declining inflationary expectations. However, in view of the flatness of estimated short-run expectations augmented Phillips curves (when expectations were estimated as lag functions of past wage and price inflation), it was still possible to argue that reducing inflation and inflationary expectations involved such a long and costly period of excess unemployment as to be 'on balance' undesirable. Into this breach stepped the rational expectations (RE) school. If the most rational explanation of inflation was that it was 'always and everywhere a monetary phenomenon', if people based their personal subjective expectations on such a model and if monetary policy was clearly and credibly announced in advance, RE theorists argued that inflationary expectations would adjust forthwith. Aggregate labour supply could then no longer be 'tricked' to a level above or below the NAIRU and some authors celebrated the death of the short run, as well as the long run, Phillips curve.

At this point, serious articles began to appear in reputable journals (e.g. Barro, 1977) in which workers were said to base their labour-supply decisions on the money wage and the rate of increase in the money stock permitted by the central bank authorities – variations in unemployment were 'explained' in terms of unanticipated growth in the money supply. Implicitly these articles discussed a labour market composed of homogenous individuals, without barriers to mobility, without comparisons of relative wages, without institutional constraints on wage and price setting, without collective action – indeed without institutional content of any sort. The long run collapsed into the short run and Keynesian emphasis on aggregate demand gave way to concern with micro-economic impediments to market forces such as the minimum wage. In this brave new world of deinstutionalized economics, primary emphasis was placed on monetary policy, since fiscal policy was seen as only affecting the inflation rate if mounting deficits were monetized and as otherwise having its main impact in an alteration of the share of public and private activities in the aggregate economy. However, the success of anti-inflationary policy was seen as depending crucially on central bankers' 'credibility', in that market participants would only adjust their inflationary expectations if monetary policy makers were demonstrably resolute in adhering to their announced monetary targets. Increases in unemployment following the introduction of a monetary target rule were to be ascribed by the central-bank authorities to stochastic shocks to the macroeconomy or to a lingering disbelief that the central-bank authorities really meant what they said about adhering to fixed monetary targets.*

In summary, by the end of the 1970s there had developed a substantial body of economic analysis of the labour market which denied the involuntary nature of unemployment, which argued that unemployment was not an especially inequitable or painful phenomenon in the modern economy and which held that state action to reduce unemployment could have only temporary, and not permanent, benefits. The idea of a long-run trade off between inflation and unemployment had been denied and there was a substantial body of opinion which argued that the short-run pain of disinflation could be minimized by a 'credible' policy, which implied that central-bank authorities should ignore mounting unemployment and rising bankruptcies rather than respond in a stimulative fashion, as would have been mandated by a Keynesian diagnosis.

Such an account of the 1970s should not obscure the dissenting voices that have been heard throughout this period. Indeed, in recent years, there has been something of a 'reinstitutionalization' of labour economics underway with, among other things, a re-examination of the multiple roles played by unionization and a new emphasis on the nature of long-term employment contracts, both explicit and implicit (e.g. Freeman and Medoff, 1979; Akerlof, 1980). Empirically, hard-core unemployment has been rediscovered, most notably by Clark and Summers in 1979. The persistence of low incomes among older unemployed workers and of employment status among employed workers has been emphasized by authors such as Freeman (1981) and Altonji (1982). Hall (1980) has emphasized that although individuals may hold a number of brief jobs in their first few years after leaving school, thereafter the pattern is for very infrequent job changes and near 'life-time' jobs for a large fraction of the United States labour force.

* In case the reader cannot credit as plausible the idea that economists should have such a view of the world or render such policy advice, he/she should consult Parkin (1982) *Modern Macro-Economics*, particularly chapters 29 and 34.

In this reinstitutionalization of labour economics, new theoretical justifications have been found for the rigid money wages and layoffs determined by seniority which are so characteristic of much blue collar employment. The theory of implicit contracts, in the context of very-long-term, 'lifetime', jobs has emphasized the complexity of interactions between rates of pay, effort, productivity and malfeasances. In macroeconomic models such as Mitchell and Kimbell (1982) the idea of overlapping contracts, with differing dates of renegotiation of wages, has been used to explain the substantial inertia which exists in the rate of wage inflation. Authors such as Solow (1980) and Lipsey (1981) have emphasized also the division of the labour market into non-competing segments, implying that unemployment may be localized and coexist for long periods of time with positive wage inflation in other segments. Macro economists who emphasize this sort of institutional impediment to the operation of market forces and continue to justify an activist government role in macroeconomic policy have often been termed 'Neo-Keynesian' but it may be a while before such viewpoints again have an influence on economic policy. Perhaps because models which explain institutional detail do not have the conceptual unity and elegance of models of human capital acquisition and search behaviour in a life time utility maximizing context, the 'new institutionalism' remains, up to the present, a minority view point within the study of labour economics. Since there are inevitable lags from the development of a 'new' perception of the nature of labour markets, to its inclusion in comprehensive macroeconomic models and to their implementation in economic policy it will likely be some time before the influence of 'new' conceptions on policy is felt.

IMPLICATIONS OF THE CURRENT 'VICTORY'

In the meantime, of course, we will face the problem of dealing with the implications of a macroeconomic policy which was largely based on a 'deinstitutionalized' view of labour markets. To some, the long-run implications of the recent recession appear minimal. It is often taken as being obvious – indeed so obvious that one need not even make it an explicit assumption – that once inflationary expectations are ground out of the system Western economies can simply return to their long-run growth

paths. However, when recent experience has clearly demonstrated to an entire generation of economic decision agents that a rapid acceleration of inflation is possible, inflationary expectations can never really return to what they used to be in the 1960s. We also now know for certain that a restrictive monetary policy affects in the first instance output and not prices and that it creates extremely high rates of unemployment if pursued with sufficient rigour for a sufficiently long period of time. The high aggregate cost of this waste of resources and the inequitable distribution of the burden of unemployment are extremely strong arguments against the macroeconomic policies which produced the current recession, but since they are familiar arguments they will not be repeated here.

The emphasis here is on the impact of historically high unemployment levels on the NAIRU – that is, the impact of unemployment levels which exceed significantly, in extent and duration, the unemployment levels of 'normal' post-war cyclical downturns. Of course, even 'normal'-sized downturns affect disproportionately the unemployment rate of new entrants to the labour market and prevent the formation of human capital in the crucial early years of on-the-job training. The productive skills of unemployed older workers also suffer a sort of 'depreciation' during periods of unemployment and the low rates of capital investment during the recessionary period bequeath to future generations an older and less productive capital stock. These factors can be expected to produce a lower rate of productivity growth in future years, and exacerbate the future short-run trade-off between inflation and unemployment performance. These factors are also predictable within the context of deinstitutionalized labour economics but it is more difficult for such a perspective to deal with the institutional changes within the labour market which are likely to follow a prolonged period of high unemployment.

After all, definitions of the 'natural rate' such as that of Friedman (1968) specified

the level that would be ground out by the Walrasian system of general equilibrium equations, provided there is embedded in them the actual structural characteristics of the labour and commodity markets, including market imperfections, stochastic variability in demand and supplies, the costs of gathering information about job vacancies and labour availabilities, the costs of mobility, and so on.

However, these 'structural characteristics' and 'market imperfections' do not simply come from the sky and they are not immutably fixed. Rather they are the result of economic, political and social forces, forces which are shaped by recent economic history. Recent economic history has, in the past decade, been dominated by a series of 'incredible' events, which have necessarily shaped our current subjective estimates of the probability of future events. By 'incredible' I mean an event which was beyond the previous frame of reference of virtually all economic agents, and to which virtually no economic agents would have ascribed any positive probability. It is, for example, clear that many economic agents had the opportunity in 1977, 1978 and 1979 to choose between borrowing short or borrowing long at roughly equivalent interest rates (in North America, in the region of 10 per cent or the low teens.) Had any significant fraction of borrowers forseen the 1981 rise in interest rates, one would have observed a substantial widening of the differential interest cost of long-term borrowing in 1977–9, given the substantial advantage to be had from not having to refinance debt in 1981/82. It is quite clear that *very* few foresaw that short-term interest rates for prime borrowers would rise to over 20 per cent by late 1981 and fall by over 12 percentage points by early 1983. Many institutional features of capital markets (such as the existence of a market for long-term securities) and many organizations (such as savings and loan institutions in the United States) were previously based on the idea that these levels of interest rates, and this degree of variability of interest rates, were so unlikely as to be effectively impossible. Now that they have been proved to be possible, it is only prudent that economic agents should ensure that they are not similarly exposed in future.

Similarly, high unemployment which penetrates significantly beyond its 'traditional' populations (the young, labour force re-entrants, and permanently marginalized workers) to affect the continued existence of what were previously thought to be 'lifetime jobs' has been for many workers an 'incredible' event. The implications for their future behaviour may perhaps best be introduced by way of analogy. If a torrential downpour of rain fell for many days upon the featureless plain so beloved by economic theorists, all the inhabitants of this plain might suffer some degree of dampness but the harm to any individual would be relatively small. In the real world a prolonged torrential downpour would produce substantial amounts of flooding in low-

lying areas but those individuals who live on hills or who live behind strong dykes would be relatively unaffected by the flooding. However, those without natural or man-made protections would suffer catastrophic losses. One would not expect such an event to teach individuals the lesson that, since no one would have suffered catastrophic loss had they all lived upon a featureless plain, one should destroy all dykes and level all hills. Instead, one would expect that an unexpectedly severe flood would teach the lesson that those who survive unscathed are those who live behind sufficiently tall dykes or on sufficiently high hills.

Similarly, an unemployment rate of, for example, 13 per cent, represents in many ways an object lesson in the personal benefits to an individual which can be derived from labour-market rigidities. Both the 13 per cent who are unemployed *and* the 87 per cent who are employed recognize that some workers will live through the recession almost completely unscathed. To the extent that the central-bank authorities achieve 'credibility' in their pursuit of monetary policy, we must all believe that similarly deflationary policies would be followed again in the future if inflation should again accelerate. Very few people would believe, by now, that inflation *cannot* re-accelerate should Western economies return to a higher rate of economic growth. Therefore, to the extent that we believe that central banks have attained credibility in their fight against inflation, we must also believe there is a significant probability of a return to similarly high unemployment rates in future years. In that case, the problem for an individual is to ensure that he or she will be one of those who is unscathed if there is another recession rather than one of those who are its casualities.

Even though it may be widely recognized that a more flexible labour market would entail a less-painful, short-run trade off between inflation and unemployment for the economy as a whole, this is quite irrelevant to the optimal strategy of the individual worker. The individual worker is interested in maintaining his/her own personal security under possibly deflationary conditions. As Hirschmann (1970) has pointed out, workers do not just have the market option of going elsewhere (exit) if a job situation is less than satisfactory, they also have the option of taking action (voice) to change the situation through collective bargaining, political pressure etc.

Over the years individuals have not simply used the option of 'exit' in the labour market. They have also used the option of

'voice' in order to construct a wide variety of impediments to the free play of market forces. Such labour-market institutions as the seniority system and academic or bureaucratic tenure are supplemented by the protections to local employment which can be achieved through the political mechanism, such as quotas, tariffs, local content rules and regulation. Individuals, naturally, would like to be the beneficiaries *both* of a labour-market shelter for themselves personally *and* of the efficiencies that can be produced by a freely functioning competitive economy. A tenured professor who does consulting work enjoys both employment security and the option of engaging in the market process. The advantages of possessing both security and flexibility are so obvious that attempts to gain 'tenure' are almost universal but the effort expended in the attempt depends heavily upon the strength of the expectation that its protection will be needed. In an economy with a long history of high levels of employment, one can expect job security clauses to be relatively unimportant clauses of collective agreements, one can expect fewer formal or informal guarantees of job maintenance to be made by employers and less attention to be paid by workers to the loss of seniority (and consequent loss of job security) which they incur as a result of voluntary labour-market mobility. However, although guarantees of employment security may receive less attention in a high-employment economy, they will be the focus of collective bargaining in an economy where the resurgence of high levels of unemployment is an ever-present possibility. The management of technological change is also liable to challenge as an undisputed management perogative. There is likely to be even more political pressure to enhance and maintain regulatory constraints and tariff barriers to trade.

Rigidity-increasing behaviour is, however, *not* limited to collective action. When the perceived probability of future unemployment is low, there is little cost to surrendering a guarantee of future employment. In such circumstances, declining relative wages can provide, through increased voluntary attrition, some flexibility even to those employers (such as governments and universities) which have historically provided strong employment guarantees to more senior employees. But when perceptions change, and future unemployment in another career becomes a distinct possibility, how many will voluntarily surrender tenure? Industrial workers will also begin to pay very close attention to the sacrifice of seniority which they incur as the result of a voluntary job movement. Laid-off workers are more likely to wait for recall (rather than look for jobs elsewhere) in the hope of moving up the seniority scale and avoiding future lay-offs. In short, older workers with some seniority will hold on to what they have. By doing so, each will limit the mobility alternatives open to others.

All of this occurs, of course, in the context of extremely rapid technological change, important alterations in the pattern of international trade and payments and substantial shifts in the age structure of the population. During this period, one would have hoped for a less contentious collective bargaining agenda in order to smooth the necessarily rapid pace of introduction of micro electronic and biological technology. One would have hoped, since future decades will see proportionately fewer young workers (who have traditionally been the most mobile) that at least older workers would not become more rigid and less mobile in their employment choices. One would have hoped also that developed Western economies would not attempt to shield their domestic market places from the rapidly changing realities of the international economic order. All these hopes will be frustrated to the extent that individuals are successful in their individually rational attempt to protect themselves from the credible possibility of a future recurrence of high unemployment.

In addition, there is the issue of equity and the legitimacy of the market system. Laidler and Rowe are among those who have argued for the importance of price stability for the 'promotion and preservation of the trust upon which a free economic order depends' (1980: 104). They and others have argued that the efficiences of a market organization of economic life cannot in the long run be had if the inequities of inflation undermine confidence in the market mechanism. But if we reject controls as a method of controlling inflation and prefer to grind inflation out of the economic system with excess capacity and unemployment, one can legitimately wonder if belief in the efficacy of the market mechanism is more quickly eroded by unemployment than by inflation.

The conundrum is that, as the current recession is teaching us, monetary restraint produces lower rates of core inflation only when the collapse of aggregate demand threatens the 'life-time' jobs of the established workers who dominate the wage-bargaining process. However, the actual loss of such jobs can be, for such older workers, a financial disaster – in income loss while unemployed,

in possible loss of pension entitlements or home equity and in lowered wages when re-employed (see Freeman, 1981; 151). Psychologists have also documented the cycle of shock, constructive activity, inactivity/depression and eventual adaptation to unemployed status through which the unemployed normally pass (see Hayes and Nutman 1981). Those who emphasize only the economic aspects of unemployment may choose to see it as an inability to make a market trade at one's desired price, involving the same sort of loss of utility as the inability to sell one's car at one's initial asking price, but unemployment is clearly much more than that. Unemployment affects basic ideas of self-conception and self-esteem and it alters social relationships within the family and with the larger society. Unless it is of short duration, such as a layoff with quick recall or a quickly successful search, or unless it is experienced as part of one's initial 'job-shopping' in the labour market, unemployment is a profoundly important event to an individual – in the current context, to many individuals. Individuals have to find some way of explaining such an event to themselves. Should unemployment remain at relatively high levels, it will become much easier for the unemployed to see themselves as faultless victims of a faulty system rather than underserving deviants in an essentially sound system.

As discussed earlier, however, high rates of unemployment affect the institutional behaviour of both the employed and the unemployed. The vast majority, now as in the Great Depression, remain employed and their attitudes toward the market mechanism will be essential for its survival. A heightened sense of insecurity among the employed, especially if combined with stagnant real incomes, is likely to create intense political strains but whether these strains tend to produce radicalism of the 'right' or of the 'left' is an issue which is far from clear and whose analysis lies far beyond the scope of this essay. I would, however, argue that one can only expect the combination of liberal democracy and a mixed enterprise market economy to remain unscathed by prolonged high unemployment to the extent that the bulk of the population can reasonably expect to remain unscathed by prolonged high unemployment – i.e. to the extent that they can construct for themselves their own personal labour-market shelters. If 'voice' cannot produce an acceptable combination of security and income within one institutional structure, it is likely to be used to produce another.

CONCLUSION

This essay has argued that part of the reason why we have such high unemployment rates in the early 1980s is the economic analysis of unemployment which took place in the 1960s and 1970s. This analysis reinterpreted 'typical' unemployment in terms of voluntary maximizing behaviour in a competitive market context and, although references were sometimes made to 'minority groups and the hard-to-employ', their involuntary unemployment was seen as a distinctly subsidiary and separate issue. Unemployment became viewed as primarily a short-term phenomenon – 'a normal state in the labour market through which most workers pass' (Addison and Siebert, 1980). As a consequence, the prevention of unemployment received much less emphasis as a policy goal – a weighting of policy objectives which would have seemed incredible to a labour economist of the early 1960s.

The 'new' view of unemployment carried the day only partly because of its theoretical elegance and compatibility with standard micro-economic tools. It was also successful partly because the sort of frictional unemployment which it describes so well, and whose existence many generations of economists had admitted, *was* more or less a good description of unemployment in large urban labour markets during periods of very high capacity utilization (as in the US in the late 1960s). Unemployment in depressed regions or during significant contractions of money output presents, however, quite different issues. Unless we recognize these differences in the nature of unemployment we will not recognize that the most appropriate model of unemployment to use will depend on the economic context in which that unemployment occurs. Until we recognize that the mechanism by which wages are set and adjusted differ (e.g. between union and non-union sectors and between 'primary. and 'secondary' workers) we will misestimate the response of wage inflation and unemployment to money-demand contraction.

If these misestimates were only 'academic' issues, one could argue that none of this would matter much, but I would argue that we are now seeing in economic policy some of the costs of the loss of perspective among economists that comes with a refusal to perceive qualitative differences in the labour market and a reluctance to recognize that models of the labour market

which are appropriate in one context are not appropriate in another. The costs of these misperceptions are very serious. As Pyrrhus discovered, many years ago, a misperception of the costs of a battle can turn a successful campaign into a disastrous war, and the longer one persists in the misperception the greater is the disaster.

POSTSCRIPT

During 1983 Britain, the United States, Canada and Germany began to recover from the 1981/82 world recession. Unemployment fell in North America but, at 9 per cent in the United States and 11 per cent in Canada, remained very high by historical standards. In Europe, unemployment rates averaged over 10 per cent and either remained constant or rose slightly. In all countries, medium-term forecasts were extremely pessimistic about the possibility of lowering unemployment appreciably. Despite a continued decline in current inflation, fears of future inflation continued, based in part on the persistence of high United States budget deficits, in part on the responsiveness of commodity prices to increased aggregate demand and in part on fears of renewed union militancy on wages.

What is one to make of a mild recovery with high unemployment and continued worries of inflation? In particular, what lessons has labour learned from the recession? In the deinstitutionalized world of many macro-economic models it is presumed that labour learns only to adjust inflationary expectations and, therefore, will accept lower nominal wage increases. In the real world, however, labour learns about quantity as well as price adjustments, about political as well as economic processes.

Politically, the major lesson of the recession is that governments can be re-elected despite levels of unemployment which even a few years ago would have been considered intolerable. As a result, the credibility of anti-inflationary policies has increased, since a major deterrent to such policies has been fear of electoral defeat. The major economic lesson has been that price deflation *is* possible, although only at the cost of substantial unemployment. These lessons, plus continued apprehensions about a resurgence of inflationary pressures, mean that one must take very seriously the possibility that unemployment will return to levels of 13–15 per cent as the next phase of a 'stop–go' cycle.

During the 'go' phase of the cycle (which the United States, at least, was entering by late 1983) unions have a degree of bargaining power and can 'spend', in a sense, that power on obtaining either higher wages or better job-security clauses. Individuals similarly have more options in good times and can trade off income and security in their job choices. The possibility of a future anti-inflation recession of comparable magitude to the last one increases the incentives for labour to opt for job security, to build stronger, more rigid protections against the chance of future unemployment.

The problem for modern economies is that labour market rigidities are a large part of the reason why contractionary demand policies are so expensive, in lost output, as a way of decreasing inflation. One cannot, however, piously hope for such rigidities to decrease since they represent, in many cases, significant protections against unemployment for the people concerned. Periods of high unemployment send the clear signal that such protections against unemployment are valuable. Each use of contractionary demand policies to decrease inflation therefore tends to increase the labour market rigidities which make such policies so expensive. Should inflationary pressures re-emerge, the next recession will have to be even more severe than the last, if it is to achieve a similar 'victory' over inflation.

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