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Inflation as an obstacle to job creation in South Africa

Abstract

The trade-off between unemployment and inflation, suggested by empirical evidence both overseas and also in South Africa, has important implications for economic policy. If it can be relied upon, it suggests that it is within the power of governments to determine what the consequences of specified policy initiatives will be for either variable, given the direct effect of policy on the other. In recent years, however, the trade-off appears to have undergone a subtle change. While it continues to be evident in the short run, its dependability in the long run has become more suspect. Indeed, in the more industrialised countries, the evidence suggests that it breaks down altogether, indicating an absence of long-run money illusion. An interesting revelation of research in South Africa is that this breakdown has begun to manifest itself here too, so that the advantages of Keynesian-type reflationary policies may be shorter-lived and less than might have been the case in earlier years. The problem of the rise in unemployment in South Africa is particularly serious because of the connection in this country between unemployment and social and political instability. The problem, however, is more than just a cyclical one. In the long run, only growth in the real economy greater than the growth of population will prevent unemployment from becoming overwhelming, and this gives growth a higher ranking in the determination of policy priorities. The article draws attention to the negative correlation that has emerged between growth in production volume and inflation in South Africa and argues that a reduction in inflation here may have become a precondition for improved real economic performance and, hence, job creation itself in the long run. This is a contradiction of a conventional wisdom upon which the formulation of economic policy continues very largely to rest.

Introduction

It was Keynes who provided in his General Theory of Employment Interest and Money (1936) the first theoretical justification for deficit financing, and this was given added rigour by Hansen and Hicks in the formulation of the famous IS-LM model. What the model demonstrated were the circumstances in which the effectiveness of monetary policy might be reduced as an instrument of macro-economic stabilisation, making fiscal policy the prime means for a policy to counteract aggravated recession. Briefly, the Keynesian argument was concerned with circumstances in which a collapse of confidence in the private sector, amongst consumers but more especially amongst corporate investors, necessitated a spending initiative by the government sector in order to check a general decline in the level of economic activity. Where entrepreneurial confidence has collapsed, even extremely low interest rates might not provide a sufficient inducement to invest, and it is changes in investment expenditure which are critical in determining changes in aggregate demand and, hence, in determining the direction of the business cycle. Empirical research has demonstrated the relative stability of consumer spending. What gives investment spending its greater volatility is its dependence on business expectations and these are extremely dependent on delicate psychological factors. In the face of negative expectations about the possibilities of future profits, even negative real interest rates might not be enough to persuade the corporate sector to add to its productive capacity, especially in circumstances where a large proportion of existing capacity is not being utilised. This is the essence of what has come to be known as the liquidity trap.

In the immediate post-war period, Keynesian policies were applied with good effect to ensure that there was no relapse into the problems of chronic unemployment that had characterised the depression and immediate post-depression years. However, success in keeping unemployment low, involved, as time passed, renewed difficulty with inflation. Monetarists had always argued that in circumstances of full employment, this would be the consequence of excessive money creation. After 1945, deficit financing, particularly in the US, but in other major Western industrialised countries also, led to an unprecedented global monetary expansion and this was a major factor explaining a world-wide exponential increase in consumer and producer prices.

Space does not permit here a full explanation of the process that led to the stagflation of the 1970s. Suffice it to observe that it had to do with two factors in the main, namely, the breakdown in the effectiveness of what came to be known as the stop-go policies which had characterised attempts at macro-economic stabilisation in the 1950s and 1960s, and the changes which occurred in the relative fluctuation of unemployment and inflation, both set as they were in a secular upward trend. In the post-war hey-day of Keynesian influence, governments evidenced an unprecedented self-confidence in economic management as the image of the modern industrial state as an all-powerful entity, able to achieve, in economic terms, anything it set itself to achieving, gained credence. It was this view that was shattered by these developments.

Nothing sums up the change in circumstances more poignantly than the following words of former British prime minister, James Callaghan, to the Labour Party conference of September 1976:

"We used to think that you could just spend your way out of a recession, and increase employment, by cutting taxes and boosting government spending. I tell you in all candour that that option no longer exists, and that in so far as it ever did exist, it worked by injecting inflation into the economy. And each time that happened, the average level of unemployment has risen. Higher inflation, followed by higher unemployment. That is the history of the last 20 years."

This is a significant confession from a socialist leader and it is one South African policy makers would do well to heed when considering, in these grave times, what should be done about unemployment here.

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Phillips curve background

The statistical relationship between unemployment and inflation has been well explored in the more advanced industrial countries and while their circumstances are somewhat different from those of South Africa, the studies have provided guidelines for an understanding of the relationship here as well. It needs to be said, however, that there is a difference between statistical correlation and causality, and in the final reckoning, it is causality which is the interest of economic analysis and policy.

The most celebrated of the studies concerned with the statistical and causal links between unemployment and inflation was that conducted by Prof A W Phillips in the United Kingdom covering the period 1861 to 1957. Two of the graphs published in the Phillips paper are included here as *Exhibits I* and *II*. These reveal a definite trade-off between the two variables. The statistical correlation between high rates of inflation and low unemployment, and between low rates of inflation and high unemployment, was given causal explanation in terms of classical demand-supply analysis. Thus, in circumstances in which the demand for labour was high relative to the supply of labour, ie when unemployment was low, it was seen to be reasonable to expect employers to bid money wages up rapidly, each firm in an industry being prepared to offer a little more above prevailing wage rates to attract more labour to itself. However, in converse circumstances, when the demand for labour was low relative to its supply and unemployment was high, it was considered understandable that workers would be reluctant to offer their services at less than prevailing wage rates. This would have explained also the highly non-linear relationship between the rate of change in nominal wage rates and unemployment. It was a simple extension of the argument to compare rates of change in consumer prices and the rate of unemployment, and not unexpectedly the empirical evidence was found to confirm the trade-off.

Exhibit I
Phillips data (UK) 1861–1913

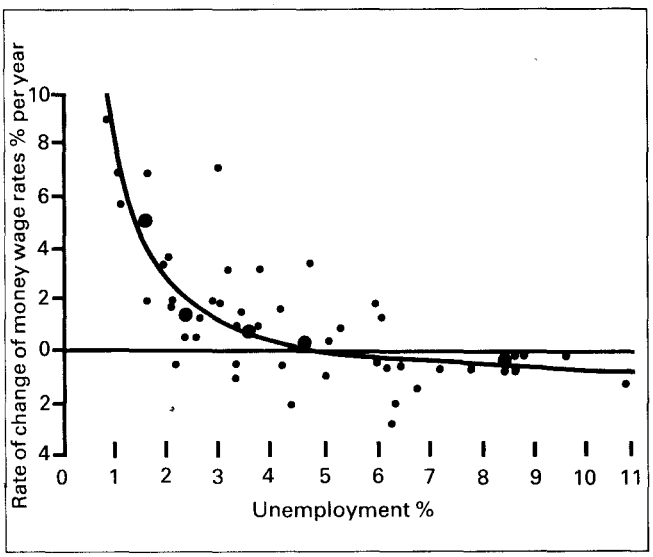
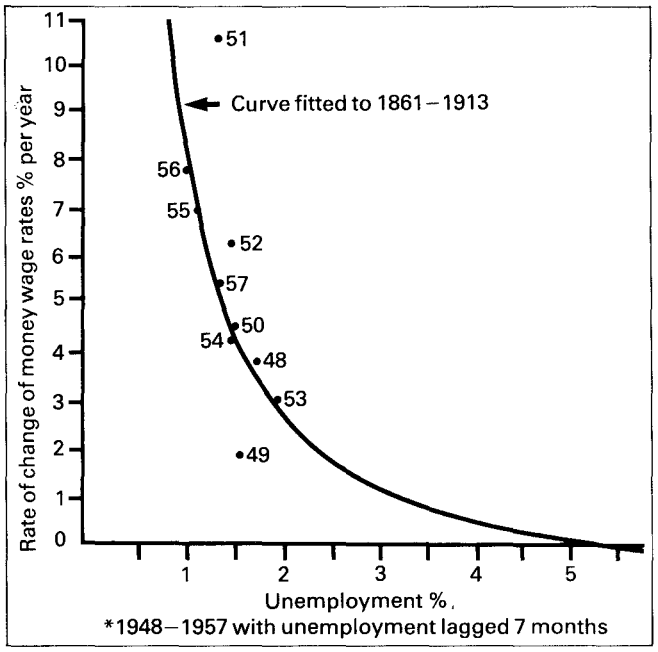


Exhibit II
Phillips data (UK) 1949–1957*



The significance of the trade-off from a macro-economic stabilisation point of view had to do with what it implied for economic policy. Briefly, if the relationship remained consistently true, it meant that the policy, concerned with reducing inflation, could be made effective by measures that would have the result of increasing unemployment. On the other hand, if the goal of policy was to reduce unemployment, measures that involved an increase of inflation could be considered. It remained, merely, for governments to decide what balance between unemployment and inflation best suited them given the prevailing circumstances of the time and their broader political objectives.

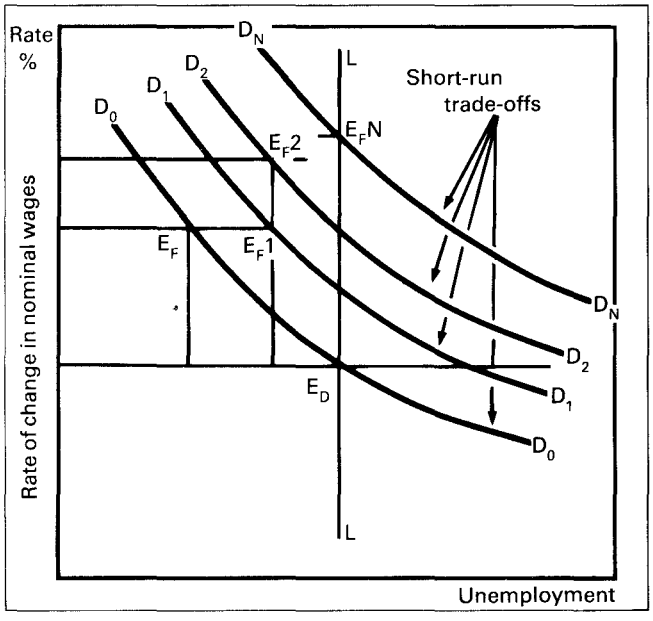
It is a matter of history that very soon after Phillips published his paper, the relationship it revealed between unemployment and inflation, not only in Britain but in the US and elsewhere, began to change. Stop-go economic policies worked while the Phillips curve was intact, but their effectiveness began to decline once the factors which had worked to maintain the trade-off in the unemployment-inflation relationship began to break down. With the breakdown in the Phillips curve in Britain and the US, the attack on the theoretical validity of the trade-off began to be mounted. It was led by no less a personality than Prof Milton Friedman.

Friedman's theoretical criticism of Phillips concerned, basically, the static view of the unemployment-inflation relationship and the confusion between real and nominal wages that it implied. If the comparison is made between inflation and real wages, and it is these Friedman argued which really matter, the relationship no longer exhibits an obvious trade-off. This focuses attention on the matter of expectations for what is "real" in the inflation-adjusted sense of the word, depends on what wage earners as well as employers, expect future inflation to be.

In the General Theory, Keynes had argued that while workers will usually resist a formal reduction in money wages, it is not their practice to withdraw their labour whenever there is a rise in consumer prices that causes their real wages to decline.[1] This had provided the rationale for the Phillips argument but it did not take into account, according to Friedman, the important distinction between *anticipated* nominal and real wages, and *actual* nominal and real wages. Problems arise for employment, and indeed, for everything else in the economic adjustment process, when events or prices, turn out to be different from what was expected. Friedman, therefore, could accept the existence of a short-term trade-off, but the evidence he argued, still pointed to there being no trade-off in the long run.

Exhibit III illustrates what the long-run relationship between unemployment and inflation (measured in terms of the per annum rate of increase in nominal wages) looks like in terms of Friedman's hypothesis. The natural rate level of unemployment (ie that rate determined by structural and frictional forces, and which cannot be reduced by raising aggregate demand) is indicated by the vertical line LL and the equilibrium position in the labour market at zero inflation is indicated by E_O. Any shifting away from this equilibrium position, say to E_F1 where unemployment is now below the natural rate level and nominal wages are rising as a result, will cause an adjustment of expectations and a movement of the short-run curve upwards to a resting place on a short-run curve which reflects an equality between anticipated inflation and the current inflation rate, in this illustration shown by E_F1. However, E_F1 still reflects disequilibrium in the labour market because at it, the unemployment rate remains below the natural rate level, and the result is that the rate of inflation would rise further causing another shift upward in the short-run trade-off. For an inflationary equilibrium to be established, the upward shift in short-run trade-offs would have to continue until the position E_FN was reached. This would be a confirmation of the view that in the long run no money illusion exists. The model indicates that the only way in which unemployment can be kept below its natural rate level is by an ever-accelerating inflation, which always keeps actual inflation ahead of anticipated inflation.[2]

Exhibit III
Short and long-term Phillips curves



At the start of the 1980s, the global prospects for inflation were threatening. Over an extended period of time, the rate of inflation in most industrialised countries had been rising and with the sharp increase in the world price of crude oil in 1979 from nearly $15 a barrel to over $30 a barrel, it seemed certain that inflation would continue to worsen. There was reason to fear, indeed, that if something was not done on the policy front in the US, Western Europe and Japan to check it, inflation internationally would soon reach a level beyond which a breakdown of the world currency system would occur. The fact that such fears proved groundless, at least during the first half of the present decade, is now generally acknowledged but it is still useful to examine what happened, to understand why, and to explore the lessons the experience has had for countries like South Africa.

Dispute between theoreticians continues to rage as to whether the policies adopted by the Reagan and Thatcher governments in the US and Britain, have really provided good examples of monetarism in practice. While they have tended to be viewed as monetarist by political adversaries, purists on both sides of the theoretical debate have tended to argue like Prof Milton Friedman on one side and Prof Nicholas Kaldor on the other, that they have not. Friedman has maintained that control of the money supply has not been achieved, let alone pursued, in accordance with monetarist principles. Kaldor has asserted of the Thatcher policies, that to the extent to which they have worked to reduce inflation, they have done so only through a painful Keynesian-type deflation of the economy. It is beyond the scope of this paper to deal with these conflicting claims. There is truth in each of them and the dispute will probably never really be settled. What, however, is important is that as a result of Reagan and Thatcher, no one really doubts any longer that in circumstances of relative prosperity such as the Western world currently enjoys, the problems of unemployment or of economic disequilibrium more broadly, cannot be solved simply by resorting to the printing press. It might be said that we are all monetarists now if by monetarist is meant that inflation is a monetary phenomenon and regulating the growth in the money supply is important to its control.[3]

Exhibit IV
US unemployment and inflation rates

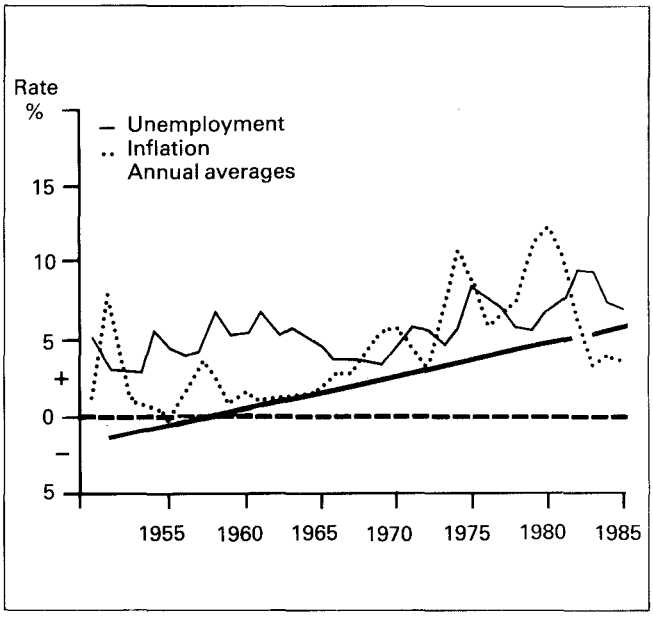


Exhibit IV shows the relationship between unemployment and inflation in chronological perspective since 1950 in the United States. Two factors deserve special attention. The first concerns the rising trend in unemployment between 1953 and 1983 which has been due mainly to the structural shift away from manufacturing production and towards the service sectors of the US economy. (This trend can also be explained in terms of the "natural rate" hypothesis already mentioned above.) The second concerns the secular rise that is likewise evident in inflation. The decline that has occurred since 1983 in both unemployment and inflation in the US, is especially important because it has not been duplicated in other leading industrial countries. However, in the case of Western European states, although unemployment has proved a more intractable problem, inflation has been reduced and real economic growth has improved. *Exhibits V* and *VI* provide, for illustrative purposes, figures for the United States and the United Kingdom only.

Exhibit V
Unemployment, inflation and real GDP growth – US

Annual averages Years	Real GDP growth % per annum	Inflation % per annum*	Unemployment rate %
1950–59	3,3	2,1	4,5
1960–69	4,0	2,8	3,8
1970–79	3,1	7,8	6,2
1980–85	2,6	5,5	8,0
1983–85	4,6	3,9	8,0†

* As measured by year-on-year changes in the CPI.
† Average for 1984 and 1985: 7,3%.

Exhibit VI
Unemployment, inflation and real GDP growth – UK

Annual averages Years	Real GDP growth % per annum	Inflation % per annum*	Unemployment rate %
1950–59	2,8	3,4	1,6
1960–69	2,8	4,0	1,9
1970–79	1,8	13,7	4,1
1980–85	1,9	7,2	11,3
1983–85	2,5	5,5	13,0

*As measured by year-on-year changes in the CPI.

The Phillips curve in South Africa

The trade-off between unemployment and inflation is an underlying assumption of much of the thinking that governs policy formulation in South Africa. It is widely accepted, for example, that effective anti-inflationary policies would cause black unemployment to rise and this is seen as being a threat to the socio-economic stability of the country. On the other hand, as now, inflationary monetary and fiscal policies are seen as having the possibility of at least some beneficial effect for employment. Although inflation is generally acknowledged as being undesirable, by both the Government and the public, it is seen as being less undesirable than unemployment for the reasons stated. It seems to have been overlooked by many that the truth of such wisdom is a truth limited essentially to the short term, and that on a longer run analysis, inflation itself could be a threat to job creation.

The statistical relationship between unemployment and inflation in South Africa since 1960, ie over a time span of twenty-five years, is illustrated by *Exhibits VII* and *VIII.* These show the relationship using both annual percentage changes in money wages in manufacturing and in the All Items Consumer Price Index in a regression analysis. Short-run trade-offs are suggested, but it is also clear that there has been an upward shift in these that is similar to such upward shifts revealed by overseas data. Nobody should be surprised by this. The upward shifting of short-run trade-offs is part of a learning process demonstrated by efficient financial and factor markets, and there is evidence that financial and factor markets in South Africa are efficient, or exhibit important characteristics of efficiency.[4]

Exhibit VII
Changes in nominal wages and unemployment in South Africa

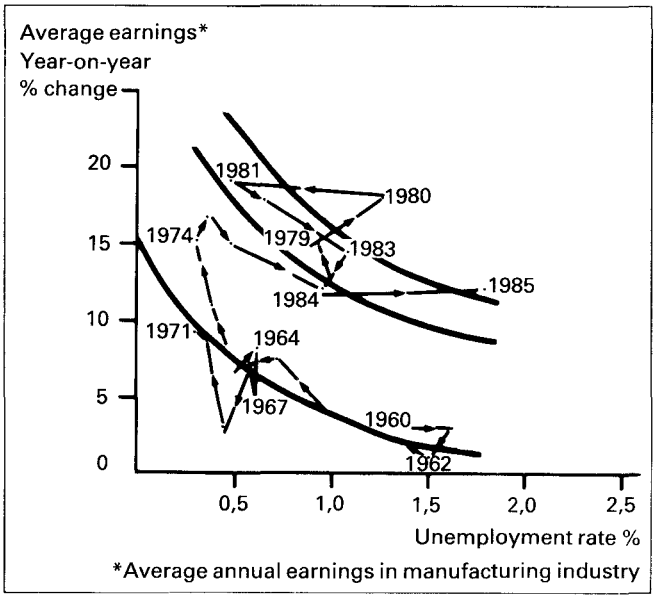
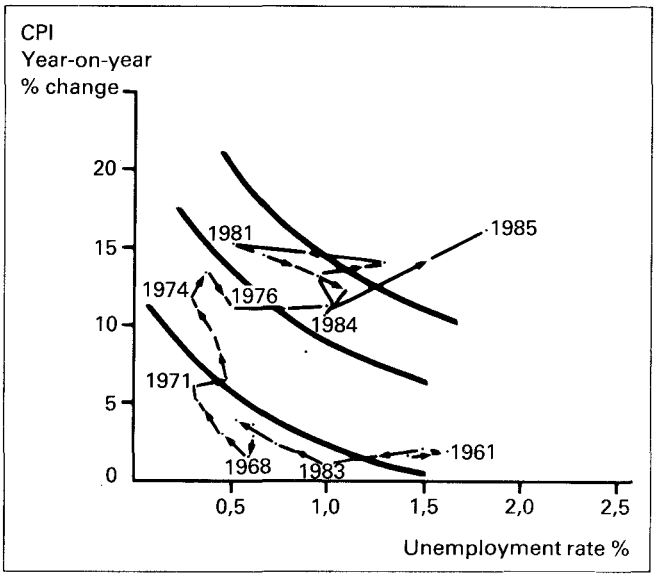


Exhibit VIII
Inflation and unemployment in South Africa



Learning works most importantly through its effect on expectations and the taking of anticipatory action. Thus, a policy change that has been tried before in similar cir-

cumstances, will invoke a different response in free markets from the response originally induced because the second time around, the response will be adjusted to account for the likely consequences of the response itself. If the period of time for a policy initiative to work its way through had previously been six months, it could be shortened to only three months or less, because of such anticipatory effects. In democratic countries, where governments depend on electoral approval, unpopular measures need to be effective quickly. If they are not, they might have to be abandoned before their beneficial consequences have had time to work themselves through and knowledge of this may have its own effect on the process of change. Prior to the Thatcher government in Britain, trades union negotiators in wage disputes had been able to rely on the election cycle to secure demands for pay increases that were in excess of productivity improvements. Mrs Thatcher's special achievement has been to break this pattern in pay settlements. Expectations and anticipation are at the heart of efficiency of the mechanism whereby policy effects are transmitted through the economic system. The more efficient the transmission mechanism, the less the cost in terms of lost employment and a wasting of resources caused by expectational or anticipatory errors.

In a more rigorous investigation of the unemployment-inflation relationship in South Africa but covering the period 1958/9 to 1974/5, ie prior to the major inflationary surge that followed the 1973/4 oil crisis and the final emergence of a floating currency system, Strydom and Steenkamp[5] found evidence of a trade-off which did not disappear in the long run but which became steeper. External influences were found to have been important to a small open economy such as that of South Africa.

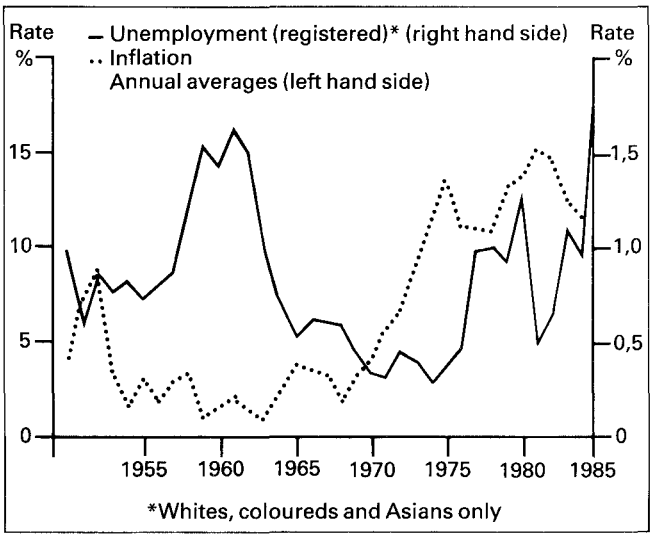
The conclusions that can be drawn from both this study, and that of Strydom and Steenkamp, is that accelerating inflation, and with it expectational factors, cause the Phillips curve in this country as elsewhere to shift so that the trade-off ceases to have dependability. In the short run, the more recent evidence shows, the trade-off is no longer identifiable in the clear way, and in the long run it deteriorates. This must render stabilisation policy based on the trade-off inefficient.

Unemployment, inflation and real GDP growth in South Africa

The causal link between real GDP growth and the growth of employment in any country is direct, but susceptible to change particularly in the face of structural adjustments in the economy. In South Africa, this has been particularly true as the manufacturing sector has increased in relative importance to the agricultural and mining sectors. In more recent years, the growth of the service sector relative to the rest of the economy has added to the tendency for the rate of growth of employment to lag behind the growth of total output. This explains the existence in South Africa also of a secular rise in unemployment although here, in contradistinction with North America and Western Europe, the rise has been given added impetus by a high rate of population increase. In *Exhibit IX,* the relationship between changes in registered unemployment and inflation between 1950 to 1985 are illustrated.

When considering the relationship between unemployment and inflation in South Africa, account has to be taken of special local factors which have a bearing on the Phillips curve trade-off. One of these is the country's high rate of population increase. Another concerns the inadequacy of the official South African unemployment data. In this study, use has been made of registered unemployment figures which concern only the unemployment of whites, coloureds and Asians. Reliable figures for black unemployment are not available and those published tend to vary according to the definition used and the political bias of the researching agency. The official level of black unemployment, determined on the basis of periodic survey, is in the region of 8½%, but unofficial estimates put the figure much higher at between 15% and 25%. Even amongst whites, coloureds and Asians, the official unemployment figures understate the true position because not all unemployed formally register with State labour exchanges. Survey-based estimates of coloured and Asian unemployment suggest that this, currently, is in excess of 5%.

Exhibit IX
SA unemployment and inflation rates



Another reason why the unemployment rate figures may be misleading, concerns the availability of data relating to economically active persons. Because figures concerning the TBVC countries have been excluded from those pertaining to the RSA as these countries have emerged to nominal independence, one is forced to rely entirely on estimates of the numbers of such persons.

However, despite their shortcomings, the registered unemployment data provide an extremely good indicator of changes in the business cycle because they accurately reflect variations in the unemployment of mainly skilled workers. The data, therefore, can be helpful in an analysis such as this for what they show is a marked increase in unemployment over the past six years compared to the equally marked rise in inflation and a decline in growth. This is a classical illustration of the symptoms of stagflation.

The negative correlation between real GDP growth in South Africa and inflation, is illustrated clearly in *Exhibit X.* While this provides no conclusive demonstration of causality, it does draw attention to a fact which deserves very thorough consideration by policy makers. Why, it must be asked, has such a negative correlation existed? What are the factors of a structural nature which have combined here to produce such a discouraging result? Is there, perhaps, a causal connection between the two variables that justifies the assertion made in the title of this paper that inflation itself needs to be viewed as a possible obstacle to job creation? Clearly, job creation is important and not just in terms of the im-

mediate recession. It is important also because in the longer term South Africa confronts a demographic transformation that will end in disaster if growth does not match the increase of population and if, more specifically, it does not provide jobs for the exponential rise in the numbers of people, especially black people, entering the labour market.

Exhibit X
Unemployment, inflation and real GDP growth – SA

Annual averages Years	Real GDP growth % per annum	Inflation % per annum*	Unemployment rate %†
1950–59	4,4	3,5	0,92
1960–69	5,7	2,5	0,91
1970–79	3,4	10,3	0,57
1980–85	1,1	14,8	1,06
1983–85	2,0‡	13,9§	1,29

* As measured by year-on-year changes in CPI.
† The registered unemployment of whites, coloureds and Asians only expressed as a percentage of the estimated economically active populations of such groups.
‡ 1984: 5,0% (reflecting "mini-boom" effects); 1985: −1,0%.
§ 1984: 11,7%; 1985: 16,2%; 1986 (April): 18,6%.

There are a number of factors in South Africa's case which have combined to make inflation here more difficult to control than inflation in the industrialised countries. South Africa's large dependence on gold sales and the heightened volatility of the gold price since the early 1970s have been the most important of these, but attention also needs to be focused on the special and powerful political pressures that exist here for a redistribution of income and wealth across racial lines. Also, the smallness of the economy and its oligopolistic structure have worked to weaken competition as a means of inflation control. A unique feature has been the country's internal political conflict and its effect on the capital account of the balance of payments. Capital flight, particularly since mid-1985, has been an important factor in the collapse of the rand and this has fed back in a perverse way to counterbalance the effect of anti-inflationary policies.

In South Africa, inflation has worked both directly and indirectly to affect unemployment negatively. Its direct impact has been mainly through the encouragement it has given to the introduction of labour-saving methods of production as a means to limiting the major element of cost in manufacturing, and through the mal-investment and wasting of resources that it has also caused. Its indirect effect has been mainly via the balance of payments and the constraint that that has imposed on economic growth generally. Inflationary disequilibrium at any given exchange rate, has contributed to balance of payments disequilibrium through a reduction of the competitiveness and/or profitability of exports, and through the encouragement it has given to imports which exchange rate depreciation has served to counteract.

Conclusion

Between the problems of unemployment and those of the balance of payments, the problems of inflation remain the neglected issue of policy in South Africa. Not in its words but in its actions, the Government has demonstrated that it believes that these types of difficulty can be dealt with separately. This is a fundamental mistake. There will be no permanent solution to the problems of the balance of payments, or the problems of unemployment, if similar urgent attention is not given to reducing the rate of inflation. Indeed, if experience overseas is any guide, it could well be that a reduction of inflation in South Africa is a prerequisite for any satisfactory solution to the problems both of the balance of payments and of unemployment. Capital is fleeing the country not merely because of internal social turbulence. It is fleeing also because fears are compounding that the rand exchange rate is on a precipitous downward slope and can only go lower; and without capital, a required order of growth will not be possible. The historical challenge now facing policy makers is that they recognise this and that they recognise also that the battle against inflation, the underlying reason for the rand's weakness, cannot be quickly won. In South Africa, there are inherent factors which complicate the problem (the volatility of the gold price is one, the pressure for a massive redistribution of income and wealth is another), but ways have to be found to deal with these if the battle against inflation, and hence against rising unemployment also, is not to be lost.

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