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A Countercyclical Training Programme for Canada Programme de formation anticyclique au Canada

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Article abstract

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A Countercyclical Training Programme for Canada?

Keith Newton

The author examines the current interest in the potential role of manpower policy as a stabilizing instrument and, more specifically, the contribution of one component: adult training programmes.

The proliferation of programmes, of widely differing characteristics and orientation, in various industriadized countries, which have come to be subsumed under the general heading of « manpower policy », have attracted considerable attention in recent years by holding out the promise of being able to make a contribution to the attainment of various macroeconomic goals. In this paper we attempt to examine the current interest in the potential role of manpower policy as a stabilizing instrument. More specifically, the contribution of one component of manpower policy — adult training programmes — is the focus of attention.

An attempt is made to divine the amount of interest in this orientation of training programmes in other countries, and particularly in Canada, by resorting to current research findings and public pronouncements by authorities and decision-makers in the manpower field. The theoretical arguments are examined and some attention is paid to the specific question of the appropriate *type* of training for countercyclical purposes — that is, on-the-job or institutional.

Finally, the question of training as a countercyclical policy is placed in the perspective of the complex web of interrelationships between the set of economic goals and policy instruments, and the need to consider

opportunity costs, particularly of alternative programmes, is emphasized.

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- I. In this section we look very briefly at the salient theoretical considerations which lie behind the discussion of manpower policy in general, and training programmes in particular, as countercyclical weapons.
- (a) The theoretical underpinnings of the case of manpower policy's role in combatting inflation and unemployment are to be found in the extensions and applications of the well-known Phillips curve 1. The concept of a trade-off between national economic goals of price stability and full employment, and the notion of shifting the « trade-off curve » toward the origin through the use of manpower policies, have enjoyed wide currency and will not be elaborated here 2.

A somewhat less well-known theoretical construct which is highly complementary to the trade-off curve analysis is the unemployment-job vacancies map. The curves labelled C in Figure 1 represent the relationship between vacancies and unemployment in the course of the business cycle. That is, movements along a C-curve are cyclical movements. Shifts of the C-curve itself would indicate frictional and/or structural changes in the labour market — changes in the market's « degree of maladjustment » ³.

A few points should be noted with respect to the diagram ⁴ First, it can be seen that it permits the decomposition of a change in un-

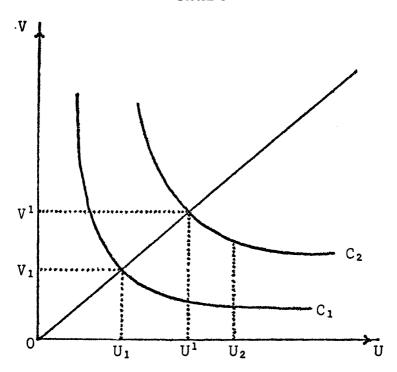
¹ A.W. Phillips, «The Relation Between Unemployment and the Rate of Change in Money Wage Rates in the U.K., 1862-1957 »' *Economica*, Aldwych, November 1958, no. 25, pp. 283-299.

² Elegant expressions of this idea are to be found in R. G. LIPSEY, «Structural and Deficient Demand Unemployment Reconsidered», in Arthur M. Ross (ed.), Employment Policy and the Labour Market, Berkeley, University of California Press, 1965; and E. D. KALACHEK, «The Composition of Unemployment and Public Policy», in Robert and Margaret Gordon (eds.), Prosperity and Unemployment, New York, Wiley, 1966. A very straightforward exposition is in J.W.L. WINDER, «Structural Unemployment», in Arthur Kruger and Noah Meltz (eds.), The Canadian Labour Market, Toronto, Centre for Industrial Relations. University of Toronto, 1968.

³ This is the expression used in the article by J.C.R. Dow and L. A. Dicks-Mireaux, the seminal work on this relationship: «The Excess Demand for Labour: A Study of Canadians in Great Britain, 1946-56», Oxford Economic Papers, London, February 1958.

⁴ This particular depiction of the (U, V) relationship appears in J. MINCER, « Comment », in NBER Conference Report, *The Measurement and Interpretation of Job Vacancies*, New York, Columbia University Press, 1966, pp. 120-127.





employment (say from U_1 to U_2) into a frictional/structural change (U_1U_1) and a cyclical change (U^1U_2) . Second, a fixed C-curve expresses cyclical movements in the same way as a Phillips curve: upward movements on each are inflationary, downward movements deflationary. Third, the advantage of the (U, V) map over the Phillips curve analysis « is the clear inference . . . that in search of a policy optimum, we are not restricted to the grim "trade-off" between unemployment and inflation. . . . Movements toward the origin can be accomplished by means of labour market policies which increase information, mobility (geographic and otherwise), skill adjustments, and the like. Theoretically, unemployment may be reduced without inflation in the course of such policies > 5.

Moving from the role of manpower policy in general to training in particular, it is probably fair to say that, in Canada at least, training

⁵ MINCER, op. cit., p. 125.

has been traditionally oriented mainly toward the objective of growth ⁶. Its possible contributions to the achievement of other national goals were, of course, recognized, but were not emphasized at first. More recently the federal authorities have pointed out the impact of training as a redistributional instrument ⁷. Furthermore, the notion of a countercyclical role for training is receiving increasing emphasis.

(b) A very simple analytical basis for the role of training in combatting inflation and unemployment is to be found in the work of Barbara Berman and (later) of Melville Ulmer 8. We shall sketch this briefly before turning to an examination of the evidence of interest in countercyclical training policy in Canada and abroad.

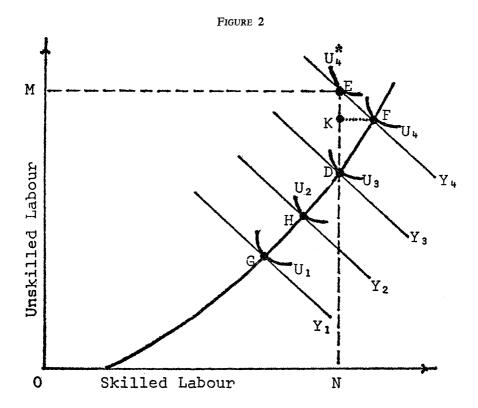
Assume there are two types of labour in the economy — skilled and unskilled — which are fixed in supply so that the size and skill composition of the labour force are represented in the diagram by a point such as E.

ON and OM are the economy's endowments of skilled and unskilled labour, respectively, and OMEN contains the feasible combinations of the two types of labour. The isoquants U_1 show the various combinations which can produce the given amount and composition of output that would be demanded at various levels of national income, Y_1 . The slope

⁶ Thus, for example, « The general» aim of Canadian manpower policy is to encourage the effective allocation of manpower resources and the development of the labour force supply and characteristics compatible with the maximum susbtainable rate of growth in real per capita income », and, « The federal programme is that government's expression, in the training area, of its responsibility for employment conditions and long-run economic growth », in « The Canadian Adult Training and Retraining Programme », prepared for OECD by Planning and Evaluation Branch, Programme Development Service, D.M.I., Government of Canada, Ottawa, July 1968, pp. 1 and 2 respectively.

^{7 «} The O.T.A. programme thus provides an escape from poverty not only in intent, but also in practice. Earnings increased by 20% for the average client and this figure may well be higher for the poor clients. Increased employment stability may also well be a benefit that the poor get from such training. » Appendix « K » of Brief to the Special Senate Committee on Poverty, submitted by the Department of Manpower and Immigration, Government of Canada, 1969, p. 376.

⁸ B. R. Berman, « Alternative Measures of Structural Unemployment », in Ross (ed), op. cit., pp. 256-268. Melville J. Ulmer employs essentially the same analysis in *The Welfare State U.S.A.*, Boston, Houghton Mifflin, 1969, pp. 193-196, published four years later, without, however, referring to Berman's work.



of the straight isocost lines indicates the relative costs of skilled and unskilled labour (invariant as depicted here).

Given the fixed (short-run) supplies of skilled and unskilled labour, the « employment expansion path », of the economy, as aggregate demand is stimulated, is depicted in the diagram by the upward-sloping curve through G, H, D, F. Note that at point D, with national income level Y_3 , the available supply of skilled labour is exhausted, though ED units of unskilled labour remain unemployed. Attempts to stimulate the economy toward national income level Y_4 encounter an inflationary shortage of skilled labour. National income level Y_4 would suffice to employ all unskilled as well as skilled workers at prevailing wage rates if the composition of aggregate demand at Y_4 were such as to require skilled and unskilled labour in the proportions prevailing at point E.

Ulmer, and Berman in particular, suggest the possibility of overcoming the inflationary bottleneck through retraining of unemployed unskilled workers, thus shifting the « skill endowment point » E southeast along the isocost line to a full employment point at F⁹.

That is, from point D, at national income level Y₃, the retraining of EK unskilled workers enables the economy to achieve a non-inflationary expansion to point F, with national income level Y₄. An additional DK unretrained unskilled labour units are hired as well as KF retrained, newly skilled workers.

- II. In this section we examine the evidence of interest in counter-cyclical training policies, both abroad and in Canada.
- (a) A recent release of the Organization for Economic Co-operation and Development announced that its Manpower and Social Affairs Committee is currently studying the actual and potential role of occupational training systems for adults in countries' efforts to achieve and sustain full employment without inflation ¹⁰. A preliminary report of this body suggests that modern economic policy has three central objectives full employment, stable prices, and growth of productivity and asserts that one of the most important elements in a selective manpower policy for reconciling these goals is a programme for the training of adult workers.

The first country study ¹¹ by the Committee suggests some success for Sweden's increasingly close integration of aggregative fiscal and monetary policies on the one hand, and selective manpower measures on the other. Apparently, the Swedish government found it necessary to apply fiscal and monetary restraints to combat severe inflationary problems ¹² in 1965. Employment was reduced by about 2 per cent in 1965-67 but reflation was resisted on the grounds that structural differences in the incidence of unemployment might merely sharpen remaining shortages. Policies of selective employment creation and retraining were therefore

⁹ Ulmer, op. cit., has also suggested a public employment programme designed to alter the economy's employment requirements so as to transform the isoquant U_{4} into U_{7}^{*} , thus achieving a non-inflationary full-employment equilibrium at E.

¹⁰ OECD Manpower and Social Affairs Committee, «Adult Training as an instrument of Active Manpower Policy» (Note by the Secretariat), Paris, May 15, 1970.

¹¹ The Committee is apparently planning similar studies for other countries: the next will concern the United Kingdom.

¹² These, combined with external developments, led to balance-of-payments difficulties.

used. Training was rapidly increased from 0.6 per cent to about 1 per cent of the labour force during 1966-68, thanks partly to some excess capacity in courses during the previous period and to experience in organizing new courses at short notice.

The impact of these selective measures upon the unemployment rate is somewhat uncertain. No specific research on this question has been undertaken and, as the report points out, an answer to such a question requires knowledge of what the alternative policy would have been ¹³. In fact, unemployment seems to have risen from 1.2 per cent in 1965 to 2.3 per cent in 1968 and February 1969, with the training programme continuing to grow through this period ¹⁴. However, it seems that the employment trend was reversed in 1968, carrying total employment above previous peak levels, and the report, moreover, draws the optimistic conclusion that « without this programme the unemployment figures would have been much higher, because the alternative policy in the form of general fiscal-monetary relaxation would have had to be much more cautious, in view of the risk this would have meant to the country's international competitiveness » ¹⁵.

(b) In the United States, evidence of interest in a countercyclical role for manpower policy in general is apparent in the 1970 Manpower Report of the President. This report contends that one of the most distinctive developments in economics over the past thirty years has been the evolving recognition of the importance and effectiveness of stabilization policy. It goes on to assert that manpower programmes are potentially one of the most rewarding contributory measures for such policy, since they work directly to increase output and employment while reducing pressure on costs and prices. The selectivity of such measures is noted, too: while they affect large numbers of people, « they can be tailored to the specific and diverse needs of various individuals, groups, and communities ». The view of selective manpower measures as bearing an augmentative relationship to traditional policies is somewhat reminiscent of the Swedish case: « By taking over some of the burden of achieving the nation's economic goals, manpower programs can make it easier to apply fiscal and monetary tools in a more moderate manner, less likely to contribute to economic instability. » 16

¹³ OECD Manpower and Social Affairs Committee, op. cit., p. 14.

¹⁴ Ibid., p. 14.

¹⁵ Ibid., p. 14.

¹⁶ Manpower Report of the President 1970, prepared by U.S. Department of Labor, Washington, U.S. Government Printing Office, 1970, pp. 7-8.

Turning now to the role of training in particular, reference has already been made to the proposals of Melville Ulmer, the objective of which is « to salvage the best of the two extreme positions so that full employment — true full employment — can be maintained without inflation » 17. Ulmer's « plan for stability » is neither revolutionary in its theoretical foundations, nor novel in the manpower instruments it recommends 18. It does, however, ascribe an important role to training in the maintenance of stability, and for this reason we afford it a few brief comments here. To promote full employment, Ulmer suggests that within two weeks of applying for unemployment insurance, all jobless workers would be required to register with the « National Service Administration » (NASAD) — an agency to coordinate all the former (separate) activities pertaining to welfare, unemployment, and poverty. NASAD's nation-wide job-information network, aided by a system of grants and loans, would facilitate matching and mobility in placing as many unemployed as possible. The remaining unemployed would be assigned to one of three possible programmes: (a) subsidized on-the-job training in private industry, (b) subsidized on-the-job training in state and local government, (c) a work-training/basic education project run by NASAD itself. As trainees became qualified, the nation-wide placement service would take over and graduates would move on to permanent positions.

It is Ulmer's contention that, apart from the employment effect of such a programme, « the raising of the potential productivity of NASAD registrants through training and education would permit the employment of many of them at prevailing wages, and with no necessary pressure on the price level. In fact, their addition to the supply of competent workers would tend to dampen pressure on wages and prices » ¹⁹.

¹⁷ Ulmer, op. cit., p. 131.

¹⁸ Ulmer's basic theoretical construct appears to be what he refers to as the « social menu curve » [see P. A. Samuelson and R. M. Solow, « Our Menu of Policy Choices », in A. M. Okun (ed.), The Battle Against Unemployment, New York, Norton, 1965], basically a Phillips curve with the axes reversed. His basic manpower measures consist of public employment, training, and placement programmes. Any novelty in his work seems to consist of (i) the attempt to direct the argument to a popular audience, (ii) the co-ordination of existing programmes bearing on unemployment, welfare, and poverty by a single agency called the « National Service Administration », and (iii) a system of refundable tax surcharges to permit flexible fiscal policy: Ulmer, op. cit., pp. 129-166.

¹⁹ Ulmer, op. cit., pp. 137-138.

The hard-core residue of unemployed, not placed in jobs by the processes described above, would be employed by NASAD in a wide range of public services to meet social needs. In order to avoid inflation, the expenses of hiring the unemployed, and all other NASAD costs, would be met, not by deficit spending, but by an « appropriate increase in taxes > 20.

(c) In Canada, too, there appears to be considerable interest in the potential of countercyclical training policy. Reports from the Department of Manpower and Immigration, research being conducted there, statements by manpower officials, and academic research, all lend weight to this contention and will now be described.

A report prepared for OECD by the Department of Manpower and Immigration in 1968 maintains that cyclical variation of training is an integral part of federal training policy. It points out that the agreements under which the federal government purchases training from the provinces provide for both a « standard » number of days of training in a given year (the federal government guarantees that the amount purchased in any year will not be less than 90 per cent of the previous year's purchases) plus a « supplementary » volume of training. The latter provision is designed to provide cyclical flexibility ²¹.

Table 1 of this report shows, in fact, that for the period 1962-68, there was no cyclical variation in the programme. This seems to have been due to a swamping of whatever cyclical impact might have been apparent by the rapid secular increase of the training programme. This situation was expected to continue for some time, since the federal authorities sought to expand the programme to a more adequate general level before permitting a cyclical pattern to dominate the trend ²².

²⁰ Ulmer, op. cit., p. 142. The tax increase would be moderate, however, because some of NASAD's funds would come from offsetting savings, including «the costs of the numerous, uncoordinated 'antipoverty' programs presently in operation, which NASAD would replace, and a significant reduction in unemployment benefits, public assistance, etc., which would no longer be needed in such large amounts ».

^{21 «} The Canadian Adult Training and Retraining Program », prepared for OECD by Planning and Evaluation Branch, Program Development Service, Department of Manpower and Immigration, Government of Canada, Ottawa, July 1968, p. 8.

²² Department of Manpower and Immigration, op. cit., p. 7.

More recent pronouncements by the Assistant Deputy Minister of the Department of Manpower and Immigration attest to that department's belief that adult training can be an effective instrument for cyclical stabilization. « In general, during periods of economic buoyancy when private investment generates a high demand for labour and skills of all kinds, the flow of unemployed and underemployed workers will slacken, and government investment in adult training can be more selective. By the same token, when private investment falters and jobs are few and men are idle, it is sound policy to direct a fair proportion of the increase in government expenditures to adult training which both absorbs an increased flow of the unemployed and raises their productive capabilities for the next period of economic expansion ». ²³ Dr. Dymond's statements were reiterated this spring at the Industrial Relations Research Association:

«In recent years, we are beginning to increase our emphasis on manpower policy as a selective instrument of economic stabilization policy; to assist in improving the trade-off between inflation and unemployment in periods of inflationary pressure and to assist in absorbing surplus labour in productive activities such as training in periods of recession. $\gg 24$

More recently still, a paper presented at the meetings of the Canadian Economics Association argued that the Phillips curve is not eternal verity, that unemployment and inflation may be fought on separate fronts, and that programmes of employment creation and training are the selective measures required for this purpose. ²⁵ One of Dr. Bellan's major points is that if an initial addition to effective demand — and all the further additions to which it gives rise through the multiplier effect — were channelled entirely toward unemployed factors of production, there need be no inflationary consequences. ²⁶

Most of the paper is concerned with an analysis of the system of linkages by which an increase in employment may affect the price level.

²³ W. R. DYMOND, « Manpower Policy in Canada as a Selective Instrument of Economic Policy», paper presented to the Economics Department, University of Massachusetts, Amherst, Mass., February 18, 1970, p. 11.

²⁴ W. R. DYMOND, «The Canadian Experience», in Session III of «Manpower Policies: Lessons for the U.S. from Foreign Experience», I.R.R.A. Proceedings, 1970 Spring Meeting, pp. 544-545.

²⁵ R. C. Bellan, «Employment Assurance and Inflation», paper presented at C.E.A. Meeting, University of Manitoba, June 1970.

²⁶ *Ibid.*, p. 5. The argument seems reasonable almost to the point of triteness: the «if», however, is a big one, and is never told exactly how undesirable spillovers would be avoided.

Unfortunately, however, there is no specific discussion of exactly how selective manpower measures would be directed solely at unemployed factors. The paper calls for «shrewdly designed» government policy weapons which would not be «fired in broadsides but... aimed carefully at specific targets», ²⁷ but fails to describe these weapons in any detail or explain how they would work. It concludes rather weakly by reasserting that fiscal and monetary measures to create employment must be oriented completely toward the unemployed, with no undesirable fall-out of funds which might cause inflationary pressure in the already employed sectors of the economy. Two strategies are suggested for this purpose. First, training programmes would be instituted to teach the unemployed the skills needed for new jobs generated by expansionist policies. Secondly, the government would « arrange the existence of jobs which unemployed workers can handle as they are, with their present skills and despite all their present inadequacies». ²⁸

It should be pointed out that not all comments on the efficacy of training as a countercyclical device are as sanguine as some which we have reviewed so far. Thus, a summary of the proceedings of a Federal-Provincial meeting of officials on the Canada Manpower Training Programme contains a very brief comment on a paper entitled « Seasonal and Cyclical Training Patterns », as follows: « It was accepted that due to the long-term aspects of training, training cannot be manipulated with the ease required to use it as a contracyclical device >. 29 Nevertheless, the Department of Manpower and Immigration continues to manifest an interest in this subject and, under the auspices of that department, Professor Paul Sultan has been undertaking a comprehensive research report on the use of training and retraining as a contra-cyclical device. Sultan apparently sees the « case for » in terms of the growing inefficacy of more traditional regulatory devices and takes the view that, in addition to reducing unemployment in the recession, training may, by stimulating increased productivity, help to curtail inflationary pressure in the recovery phase. The « case against » consists in essence of a combination of predictive and

²⁷ BELLAN, op. cit., p. 16.

²⁸ Bellan, op. cit., p. 16. The words have a reasonable, and familiar, ring — but, alas, there is no real analysis of how the suggested policy would attain the stated objectives.

²⁹ « Proceedings of Federal-Provincial Meeting of Officials on Canada Manpower Training Program », Ontario Region, May 14-15, 1970, Toronto, Ontario; Summary of Discussion (prepared by Manpower Information and Analysis Branch, Program Development Service, Department of Manpower and Immigration, June 4, 1970, p. 4.

administrative difficulties. A successful stabilization policy depends to a large extent upon the timeliness of its implementation. This, in turn, requires foresight — advance knowledge of economic events — and, simultaneously a flexible programme structure. Sultan argues the existence of a trade-off between foresight and flexibility: the more flexible the programme, the less need is there for foresight. He suggests, however, that the development of a matrix of lead economic indicators, together with closer co-operation between manpower and fiscal authorities, might reduce somewhat the need for greater programme flexibility. 30

We may conclude this section by observing that although there does, indeed, seem to be a great deal of interest in a countercyclical role for training, there appear to be very few items of comprehensive research on the subject, in this or other countries at the present time. Indeed, there is a paucity of data on which empirical work could be based. The argument, at the moment, is somewhat less than conclusive.

In the section which follows we examine in more detail the arguments concerning the way in which countercyclical training policy may be expected to work.

III. According to the OECD study mentioned earlier, a counter-cyclical adult ³¹ training system would work in two ways. First, by adjustments in the occupational mix of courses and in their geographical location, they should follow the incessant sectoral and local (i.e. structural) changes in the economy's demand for different skills. This, presumably, would help to prevent the simultaneous occurrence of unemployment in some areas, industries, and/or occupations and bottlenecks, with their attendant inflationary pressures, in others. Secondly, variations in the number of persons occupied by training (totally, and in particular areas) should as far as possible counterbalance variations in aggregate employment and thus help otherwise unemployed persons to utilize their involuntary leisure usefully. ³² Such an expansion of adult training during a slack

³⁰ A preliminary report on this research was presented by Dr. Sultan at a faculty-graduate student seminar of the Department of Economics and Commerce, Simon Fraser University, in the fall semester, 1969.

^{31 «} The programmes in question have to be directed particularly to adults for 2 reasons: both because adults make up the greatest part of the unemployed whose involuntary leisure should be more productively used in this way and because a restructuring of the labour force can be achieved in a shorter period of time by training (retraining) for new specialization those who already have some training and work experience », OECD, op. cit., p. 39.

³² Ibid., p. 5.

period would increase the available number of workers with skills in short supply and thus help to pave the way for the subsequent period of expansion.

In addition to the basic countercyclical use of training just described, OECD appears to place emphasis upon a number of what might be called « complementary » uses of the device, of a more specific nature, that may be as it were « dovetailed » into the general countercyclical framework. Thus, for example, in countries where special efforts are being made to develop new economic activities in labour-surplus areas, adult training may help generate the skills for new or expanding industries. Secondly, since in most countries adults have received an education inferior to that of the younger generation, adult training may achieve a better balance between younger and older workers with respect to their competitiveness in the labour market. Third, spells of unemployment due to seasonal, as well as cyclical, layoffs can be fruitfully utilized to provide additional skills, given the existence of a viable adult training system. Fourth, unemployed workers with low skills can be given short training programmes to equip them for entry-level jobs in industry, while similar short programmes could help to orient persons from declining primary activities, such as agriculture and forestry, to industrial work. Finally, at higher skill levels, specific training directed to the particular needs of industry may be given to adults leaving technical institutions, to improve their employability during slack periods. 33

It is argued that training programmes to combat unemployment, particularly in the context of a policy of restraint, are superior to the typical alternative — that is, public works — because the indirect demand-creating effects (the « spillovers ») of the latter are much larger and not so easy to direct to labour surplus areas.

The efficacy of training as an antidote to inflation is somewhat less than perfectly established — a point to which we shall return later. For the moment, suffice it to say that the conventional wisdom suggests a supporting role for adult training programmes. Once inflationary pressures have become broadly apparent, a training programme alone cannot be expected to contribute a great deal to reducing the upward drift in wages and prices in bottleneck areas — even if all efforts are concentrated upon the occupations in short supply. Rather, training's anti-inflation role is to make an overall anti-inflationary demand-management possible and

³³ OECD, op. cit., pp. 7-8.

to help prevent the subsequent expansion from running into an inflationary phase.

Roughly, the argument is as follows. There is widespread acceptance of the principle that if there are society-wide benefits to be gained from policies of inflation-restraint, it is inequitable that the cost burden be borne by the (relatively) small group of people who become unemployed or have to undertake readjustment. Thus governments may on occasion be under pressure to hold back their efforts to reduce inflationary excess demand because of the unemployment effects. The case for adult training programmes is that, by absorbing such unemployment, they allow the government the freedom to utilize more vigorous anti-inflation monetary and fiscal measures than would otherwise be possible. ³⁴ The training expenditure itself, moreover, is unlikely to neutralize the anti-inflation effect, since the unemployed would have to be provided with some form of income maintenance in any case.

Furthermore, it is felt that the subsequent expansion may be achieved without the typical attendant inflationary pressures because of the possibilities of meeting the increasing demand for labour from the supply of newly trained personnel and/or by a temporary reduction in the number of persons in training and a shortening of courses. ³⁵

IV. In this section we attempt to comment critically on some of the implications of a countercyclical training policy of the type outlined above. Our first question concerns the extent to which there is a required « critical minimum effort » for an effective training programme. This, of course, has important implications for government decision-makers, operating under budget constraints, who must consider the repercussions of a large and expensive training programme upon alternative expenditure priorities. The OECD study cited earlier suggests that not until the training system has reached a size of more than 1 per cent of the labour force can variations in its activities be expected to exert real influence on the maintenance of overall labour market balance.³⁶ The Canadian programme is currently approaching this 1 per cent mark. This already involves a significant commitment of federal funds (over \$300 million this year) and one wonders, first, what expenditures will eventually be required to fully achieve the hoped-for effects of a countercyclical train-

³⁴ OECD, op. cit., p. 9.

³⁵ OECD, op. cit., p. 10

³⁶ OECD, op. cit., p. 11.

ing system and, second, what opportunity costs would be incurred by such a commitment of funds, in terms of alternative priorities and policies forgone.

Next, it would seem obvious that the effective functioning of the training system would require the support of rather elaborate forecasting techniques. In this regard, the rapidly expanding network of labour market information in Canada is expected, when fully developed, to facilitate the anticipation of changes and the preplanning of the requisite training measures. Swedish experience, however, suggests that sophisticated forms of forecasting are not an essential precondition of the successful operation of a training system that is directed to short-run imbalances. Rather, « what is required is the ability of the manpower authorities to arrive at sound judgements regarding the probable nature of demands in expanding sectors. If these judgements prove inaccurate, a system designed for maximum flexibility can adjust quickly ». ³⁷

This clearly underlines the point made by Professor Sultan (in section II(c), above) that there is a trade-off between foresight and flexibility. However, there is some questions as to just how flexible the training system can be expected to be, in quickly meeting the demands placed upon it. Canadian manpower authorities are well aware of the need to plan courses well ahead of time in order to arrange the necessary materials, teachers, and equipment. In the Canadian programme, training for more specialized skills appears to be « considerably less flexible » than what is known as « basic training for skill development » (BTSD) which provides the prerequisite to skill courses, and in which a new class can be organized in about six weeks. ³⁸

An important question to which we now turn concerns the potential contribution of training programmes to the diminution of inflationary pressure. The « stabilization problem » is generally thought of as consisting of the twin evils of inflation and unemployment. The role of training programmes in « soaking up » unemployment has received much attention, but what of the other twin?

We should point out that, in the schema envisaged by OECD (as outlined in section III, above) training programmes play the auxiliary role of facilitating the use of traditional monetary and fiscal weapons. That is, the training, *qua* training, is not viewed as the deterrent to inflation.

³⁷ OECD, op. cit., p. 31.

^{38 «} The Canadian Adult Training and Retraining Program », op. cit., pp. 27-28.

Rather, given the need for government-induced deflation by traditional means, training programmes obviate the undesired effects on the level unemployment.

In addition to this contribution, it is of course argued that training also diminishes inflationary pressure by meeting skill shortages, and preventing the emergence of « bottlenecks ». To the extent that it has any overall effect on productivity, too, training may be expected to curb upward pressure on prices. Sultan, however, is somewhat less than optimistic in this regard. There is, he asserts, increasing suspicion that both prices and wages are set without reference to capacity utilization. With sustained cost pressures even during recession, he feels, it is unlikely that the productivity gains from training can serve as an offset. ³⁹

On the anti-inflationary potential of manpower programmes in general the recent Manpower Report of the President is not very sanguine, either. Since its arguments apply in part to training programmes in particular, as well as to manpower policy in general, we review them briefly here. The proponents of manpower (including training) programmes contend that there are inefficiencies and inertias in labour markets which limits capacity and thus contribute to inflationary pressure. To the extent that manpower programmes alleviate the inertias, they are counter-inflationary. However, it is not certain that labour market inefficiencies are the key determinant of capacity in all industries: raw materials shortages, technological constraints upon the rate of growth of the capital stock, and possible inefficiencies in financial and other markets, may be of even greater importance. If such factors are the really important ones, the counter-inflationary effectiveness of manpower programmes may be severely limited. Moreover, even if labour market inefficiencies are a significant determinant of economic capacity, meaningful reductions in these inefficiencies may be beyond the scope of any realistically sized manpower effort. 40

The question of programme spillovers is a difficult one to deal with in the confines of this brief paper. We suggest, however, that it is an important one, deserving of detailed study. A crucial problem, to which we have alluded earlier, is that of gauging the effects and implications of training programmes vis-à-vis possible alternatives designed to meet the

³⁹ P. E. Sultan, « Retraining Programs as a Remedy for Cyclical Unemployment: A Critical Evaluation », April 1970; Report prepared for Department of Manpower and Immigration, Chapter VIII, pp. 7-8.

⁴⁰ Manpower Report of the President, 1970, op. cit., p. 15.

same objectives. It is often maintained that, compared with more traditional countercyclical weapons, the advantage of « selective » manpower programmes is that they can be directed more exclusively toward unemployed factors of production. 41 In the case of training programmes, in times of slack, the opportunity cost of enrolling trainees is low: little is lost in the form of forgone production, and the allowances paid to trainees may not vary significantly from the cost of the subsistence income which would in any case have to be provided. There is, however, the problem of resource complementarities. That is, training requires instructors, space, materials, and equipment — resources that may already be scarce — so that real costs depart significantly from zero. 42

We suggest that what would be useful in this area is an input-output study of alternative programmes (how, for example, do training programmes with « public works » programmes of various types?) from which the probable spillovers and multiplier effects of given expenditures could be determined. Given some estimates of the tightness of the markets for the complementary resources involved, such a study would at least serve to provide the basis on which judgements could be made as to the desirability or otherwise of the « by-products » of various programmes.

V. We have now sketched some of the features of a countercyclical training programme and have raised what we consider to be a few important problems for such a programme. It is within this framework that we attempt, in the following brief section, to compare the relative efficacy of two major types of training in achieving the goal of stabilization.

In Canada, much of the training provided by the federal government is of the « institutional » variety. However, some training is undertaken in the establishment itself, rather than in a classroom external to the work environment. This latter system typically makes use of instructors, facilities and equipment provided by the employer, and the government subsidizes the employer accordingly. It is argued that depending upon such factors as the level of skill, occupation, and industrial attachment of the trainees, the labour market location, etc., etc., one form of training may be more appropriate than the other. We attempt here to extend the

⁴¹ This seems to be the gist of the paper by Bellan, op. cit.

⁴² See B. A. Weisbrod «Benefits of Manpower Programs: Theoretical and Methodological Issues», in *Cost Benefit Analysis of Manpower Policies*, G. G. Somers and W. D. Wood (eds.), Proceedings of a North American Conference sponsored by the Canadian Department of Manpower and Immigration and the U.S. Department of Labor, 1969, p. 5.

dimensions of this debate by asking whether institutional training or onthe-job training (OJT), respectively, may be thought to have particular relative advantages in the countercyclical context.

We suggest, first, that with respect to the question of capacity, OJT has much to recommend it. The OECD study, which concentrates largely on government training centres as the medium for implementing a countercyclical training programme, appears to recognize the problem of capacity constraints in suggesting that « it may be considered advantageous for the economy to accept the cost of a certain over-capacity of the adult training system in order to maintain a high degree of flexibility and preparedness for rapid and adequate reaction to unforeseen balance disturbances in various parts of the labour market ». 43 The advantage of OJT, by contrast, is that during a recessionary period the idle capacity of the firm can be put to good use. Space, machinery, and equipment, instructors, foremen, and skilled workmen can be utilized for training. It is well known that during cyclical downturns firms tend to « hoard » their skilled labour anyway, and in such periods they do, themselves, tend to do more training. Why not take advantage of these propensities? Government subsidies for training would presumably be a good incentive to the firm to do what it ordinarily attempts in any case.

For institutional training, on the other hand, the capacity constraints appear somewhat more severe. Of course, it is sometimes argued that educational institutions carry some idle capacity: people point to empty classrooms and ask « why not a shift system? » This may be feasible in some cases, but we would point out, first, that many institutions already have evening classes scheduled and, secondly, the limiting factor may in any case be the shortage of complementary factors such as teachers and support staff, and not the physical facilities.

On the question of flexibility the argument is not quite so clear. Under a system of OJT the government presumably enters into contracts with firms to retain and train workers who would otherwise have been laid off. Suppose the firm contracts to train people for X weeks or months, thus retaining them and continuing to pay them. If the level of economic activity were to manifest a sharp upturn the firm *could* find itself with, as it were, a built-in capacity constraint in the form of its commitment to continue training. The effort devoted to training, particularly by foremen, supervisors, and skilled workmen, might conflict sharply with the need to fill new orders. Inflationary bottlenecks could arise in this way.

⁴³ OECD, op. cit., p. 36.

With institutional training, on the other hand, it might be argued that, with the advent of the upswing, better-qualified trainees would simply drop out of their courses to take advantage of the burgeoning job oportunities.

We suggest, however, that the disadvantage of OJT in this context is less real than apparent, being more a question of administrative detail than of inherent inflexibility. First, the timing of contracts could be staggered somewhat, and a finger kept on the economic pulse, so that the number of new, or renewed, contracts could be expanded or reduced according to the growing slackness or tightness of the market. This would presumably have to be done with a view not only to the overall level of activity but also with a view to the differential impact of unemployment in particular industries, areas, etc. Secondly, a further safeguard might be « escape » clauses for the employer, so that sudden upsurges in the demand for his product would not catch him unawares with potentially inflationary order backlogs.

The major problem for OJT, as we see it, stems from the fact that accompanying, and underlying, any cyclical fluctuation in economic activity there may be structural changes as well. Thus OJT, which entails subsidizing employers to retain and train workers who might otherwise be laid off, may possibly ignore the subtle underlying structural shifts. Hence the grave problem is to disentangle the structural component of unemployment and, for that component, concentrate not on upgrading the skills of workers in their present occupation, firm, industry, or location, but perhaps training them in different skills, and/or for another firm or industry, or in another labour market area. ⁴⁴ Perhaps the most that can be said concerning this particular problem of OJT is that it could be accommodated given enough information and foresight on the part of employers and manpower officials, and efficient communication between them. It is in any case a problem which is not wholly avoided by institu-

⁴⁴ Professor Dennis Maki has pointed out that a related question concerns the extent to which OJT, in cyclical downturns, may help to subsidize the inefficient firm which might otherwise «go under». Conversely, how much subsidy should be given to more viable concerns which might be capable of retaining and training workers of their own volition? (Does a recession hit large and small firms proportionately?) So an unavoidable externality of OJT may be a prolongation of the life of small or inefficient concerns. This raises the further questions of, first, whether such prolongation is, or is not, a good thing, and, secondly, if it's a bad thing, what are the priorities of the moment — that is, are the benefits of reduced unemployment worth the cost of some loss of allocative efficiency?

tional training. It is true that in the upswing many institutional trainees may drop their courses voluntarily and, in their job search, adapt to the structural characteristics of the labour market. But to the extent that many trainees will need to avail themselves of the placement and counselling services of the manpower centres, the need for information is simply delayed slightly.

VI. This section presents a short summary of the discussion so far, and concludes by examining the countercyclical role for training in the light of the other objectives at which training might be aimed.

In section I we outlined some of the theoretical constructs upon which the arguments for countercyclical manpower policy, and countercyclical training programmes in particular, have been based. We reviewed evidence of interest in the use of training programmes for countercyclical purposes in the third section. Fundamental research into the question seems somewhat sparse to date. However, the Swedish experience with selective manpower policies has apparently been sufficient to prompt OECD to undertake research into the subject in the form of a series of studies of training activities in a number of countries. In Canada it is the stated aim of the manpower authorities to utilize training programmes in a counterseasonal and countercyclical manner and, although there are presently no data with which to confirm this aim, recent pronouncements by officials indicate continuing interest in a stabilization role for training.

Section III contained an outline of the way in which a countercyclical training policy might be expected to work. It seems fair to say that a large part of the case for training is simply a growing loss of faith in more traditional stabilization instruments. Whether they take the form of tax reductions, increased government spending, expansion of the money supply, lowering of interest rates, etc., the usual monetary and fiscal weapons are increasingly felt to have undesirable consequences as a way of combatting the unemployment effects of inflation control. The inherent lags, spillovers, and the attendant danger of once again alleviating unemployment only at the cost of further inflationary pressure, have led to the search for more flexible means of control. It is argued, however, that rather than replacing traditional weapons, training would complement them and permit them to function more effectively.

Suppose, for example, that a government institutes a policy of deflationary demand-management. Then, it is argued, training programmes would, as it were, short-circuit the system of growing unemployment — relaxation of controls — inflationary pressure — further restraint, etc.

Training is seen as serving the purpose of absorbing the unemployment which would normally accompany deflationary measures. The human cost of unemployment (typically the argument for policy reversal during deflation) is alleviated, and the upgrading of skills which occurs during the training period helps to meet the demands of industry in the subsequent upswing with at least fewer inflationary skill bottlenecks than would be the case if the government simply relied upon the relaxation of fiscal and monetary controls to cure unemployment. The government may have to pay just as much in subsidies, training allowances, and purchase of training facilities as it would for unemployment insurance and welfare and relief payments of various kinds but, through training, idleness is avoided, and productivity increased.

In the forth section we examined some of the implications of such a training programme and raised questions concerning the magnitude of the effort which would be required to achieve the desired results, the information needs for adequate forecasting and flexibility, the anti-inflationary potential of training, and the problems of input complement-arities and spillover effects. With respect to the latter point it was suggested that research into the comparative effects of various means of reducing the unemployment resulting from a demand-managed deflation would provide a firmer basis for judging the relative efficacy of training for stabilization purposes.

Our examination of the arguments for the use of on-the-job, as opposed to institutional training, in section V, suggested that on the criteria of flexibility and employment of idle capacity, OJT enjoys some advantages over institutional training. It was pointed out, however, that without the benefit of a highly developed system of information and forecasting, and efficient communication between employers and manpower officials, OJT might have difficulty in detecting and dealing with the possible structural components of an overall change in labour demand.

Two further points will be discussed before we conclude. The first is that there appear to be two ways in which training may be viewed in the countercyclical context. We may discuss the pros and cons of conducting training programmes in a countercyclical manner and, on the other hand, we may discuss the pros and cons of conducting training programmes as a countercyclical weapon. The two views are, we suggest, related but distinct.

According to the former view we may start with the conviction that, on the basis of some criteria, training is a « good thing » and should,

therefore, be undertaken. Then, given that it's a good thing, and is to be conducted, the question is whether it can be conducted more efficiently—i.e. yield better returns, as indicated by cost-benefit analysis— in slack periods rather than in periods of expansion. It is understood, of course, that if cost-benefit analyses do show greater returns to training in times of slack, and if, accordingly, training is expanded in such periods, then it may be expected to contribute to stabilization.

We suggest, however, that the distinction between the two views is that, in the first, the *objectives* of training might be, say, allocative efficiency (e.g. raising productivity for the long-run economic goal of « growth ») or distributional equity (which subsumes the economic goal of reducing poverty). The fact that such training, if concentrated in recessionary periods, has stabilizing effects might, on this view, be considered a welcome additional benefit of the programme.

The second view poses the question: can training be used as a countercyclical weapon? That is, can training be directed to the *goal* of stabilization? The further question of whether it *should* be so directed then raises two sets of problems: what is the relative effectiveness of training vis-à-vis alternative programmes for stabilization purposes and, second, what is the relationship among the possible goals to which training may be directed — i.e. what priority do we place upon stabilization as opposed to allocative efficiency and/or distributional equity? It is to this question that we now turn.

It is hoped that the discussion of the last few paragraphs has served to indicate that, in the evaluation of training programmes, considerable problems arise not only because of the multiplicity of alternative means to a given end, but also because of the multiplicity of the ends themselves. We suggest that, in the field of manpower, and with respect to training in particular, considerable clarification is required concerning the objectives to which programmes are to be directed. There is perhaps a tendency to see training as a bright new tool with great potential and some doubt as to what we want it to do for us. And, to put it very simply, unless we're sure what things we want our tool to do for us, we will have difficulty in establishing criteria for judging how well it's doing them.

We have attempted, in this paper, to outline some of the main arguments concerning a countercyclical role for training programmes in Canada. Before more definite conclusions can be reached, it would appear that three types of questions require clarification. They may be

exemplified as (1) of the possible alternative objectives for training programmes, to what extent are there conflicts and mutual inconsistencies between them? (2) which of these possible alternatives — allocative efficiency, stabilization, distributional equity — is considered the most important? and (3) which of these objectives does training promote best?

Pending answers to such questions, a subtitle to this paper might be « Growth, Full Employment, Price Stability, Redistribution, or What? », or, « A Means in Search of an End ».

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PROGRAMME DE FORMATION ANTICYCLIQUE AU CANADA

Le rôle potentiel de la politique de la main-d'oeuvre en général, et des programmes de formation des adultes en particulier, en tant qu'instruments de stabilisation économique, a soulevé beaucoup d'intérêt au cours des dernières années.

On peut mettre au point des programmes de formation anticyclique en utilisant des concepts analytiques relativement simples. On a estimé qu'il était possible de réduire le taux de chômage en transformant la main-d'oeuvre de manière qu'elle réponde à la demande par des projets destinés à accroître l'information, à favoriser la mobilité et à faire connaître les compétences. En même temps, par l'élimination des engorgements et de la pression à la hausse qu'ils exercent sur les prix, ils peuvent aussi aider à freiner l'inflation.

L'intérêt de tels programmes de formation anticyclique s'est manifesté dans de récentes études de l'Organisation de coopération et de développement économique (O.C.D.E.). Les fonctionnaires de la main-d'oeuvre et les recherchistes aux États-Unis et au Canada se sont aussi intéressés à cette question.

En ce qui concerne les mécanismes des programmes de formation visant à la stabilisation, il faut d'abord, prétend-on, que le lieu et le contenu professionnel des cours soient établis de façon à correspondre aux changements de structure dans la demande pour différents métiers à l'intérieur de l'économie nationale. De plus, le nombre d'individus à ainsi former (dans l'ensemble et dans chaque région) devrait varier selon les fluctuations de l'emploi global.

En ce qui a trait à leur impact sur le chômage, on soutient qu'ils l'emportent sur d'autres mesures, en particulier sur les programmes de travaux publics parce qu'il n'est vraiment pas facile de les mettre en oeuvre dans les régions où il y a excédent de main-d'oeuvre. En tant que remède à l'inflation, on considère les programmes de formation comme un moyen d'absorber en partie le chômage qui pourrait résulter des mesures fiscales antiinflationnistes.

L'étendue d'un programme de formation suffisant pour contribuer d'une façon efficace à la stabilisation revêt beaucoup d'importance pour des autorités gouvernementales assujetties à des contraintes budgétaires strictes. L'accumulation et le calcul des données relatives à la main-d'oeuvre est aussi nécessaire en tant que fonction adjuvante quand il s'agit d'un effort de formation de grande envergure.

Pour ce qui est du genre de formation le mieux approprié dans un projet de stabilisation, il ne paraît pas faire de doute que, même si la plupart des programmes de formation subventionnés par l'État se donnent en milieu scolaire, il y a de fort bons arguments en faveur de la formation sur place.

Avant d'en arriver à un jugement final touchant la valeur des programmes de formation au Canada en tant qu'instruments de stabilisation, il importe d'en clarifier les objectifs. Dans l'hypothèse, par exemple, où l'objectif principal de la formation est la croissance économique, on orientera le programme selon un *mode* anticyclique en tenant compte du rapport coût - efficacité, et, dans ce cas, strictement parlant, les effets stabilisateurs ne seront que secondaires. Dans l'hypothèse, au contraire, où les programmes de formation sont présentés comme une *arme* anticyclique et orientés principalement vers la stabilisation, il faudra en mesurer l'efficacité par rapport à d'autres formules disponibles.

Conclusion: il faut donc clarifier trois points.

- 1. Dans quelle mesure peut-il y avoir conflit et incompatibilité entre les différents objectifs possibles qu'un programme de formation peut chercher à atteindre?
- 2. Lequel de ces différents objectifs croissance économique, stabilisation de l'emploi et justice distributive considère-t-on comme le plus important?
- 3. Lequel de ces objectifs la formation sert-elle le mieux?