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The evaluation of labour market programs: some issues for Aboriginal policy formulation from experience in the United States

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SERIES NOTE

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ABSTRACT

This paper considers some of the major issues involved in evaluating labour market programs for Aboriginal people in the light of the extensive United States (US) literature on the topic. The paper focuses on the US experience under the Comprehensive Employment and Training Act (CETA), with some reference to the Training for Aboriginals Program (TAP) in Australia. It first considers the need for clearly stated objectives in the formulation of labour market programs. It then outlines some of the problems faced by both experimental and non-experimental evaluations of these programs. A wide range of results has been reported on the effects on income of participation in labour market programs in the US, and there is now considerable scepticism concerning the value of non-experimental studies. The range of results suggests that these need to be interpreted with caution, but strong advocates for non-experimental techniques remain. The paper concludes by presenting some of the implications of the US results for Australian policy formulation and evaluation.

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The evaluation of labour market programs has received regular attention in Australia following the growth in the number of participants in such programs in the last twenty years.[1] Aboriginal people are among the disadvantaged groups who have received particular attention under these programs.[2] In real terms, Commonwealth expenditure on Aboriginal education and training programs increased three-fold over the period 1979-80 to 1989-90 (Stretton and Chapman 1990).

The important issue is whether the money allocated to programs has been spent effectively. In terms of public accountability, the Auditor General presents reports to Parliament which assess the extent to which government departments fulfil the standard requirements of accountability for public funds. This is, of course, an important issue. This paper focuses on another aspect of evaluation of labour market programs; namely, do these achieve their stated objectives? The range of problems associated with any evaluation of a labour market program is examined in the light of the extensive American literature on this topic.

Indigenous minority groups in Australia and the United States (US) have received funding through both mainstream labour market programs and programs specifically designed for these groups. Expenditure by the Australian Commonwealth Government on specific Aboriginal education and training programs, administered by the Department of Employment, Education and Training (DEET), increased from zero in 1978-79 to 15 per cent of total expenditure on labour market programs in 1989-90 (Stretton and Chapman 1990). There has thus been a dramatic increase in the share of funds earmarked specifically for Aborigines. In contrast, over a similar time period, about 5 to 6 per cent of the US federal expenditure on labour market programs was targeted at certain disadvantaged groups, including Indians and Native Americans.[3]

The numbers participating in the major Aboriginal program, the Training for Aboriginals Program (TAP), have fluctuated, but in the latest period for which complete data are available, the 1990-91 financial year, almost two-thirds of Aborigines participating in labour market programs were included in TAP (Johnston 1991: 97). Special programs accounted for a smaller proportion, about 50 per cent, of all Indians and Native Americans assisted under US federal labour market programs. Although it is very difficult to make cross-country comparisons, both the expenditure and participation figures suggest that specific programs directed towards indigenous minorities have been given greater emphasis in Australia than in the US.

This paper focuses on the US experience under the *Comprehensive Employment and Training Act* (CETA), with some reference, by way of comparison, with TAP in Australia. It first considers how the objectives

of the major Australian and US labour market programs have been stated and then presents some of the problems faced in evaluating the effects of participation in a program which assesses an individual's subsequent position in the labour market. Some results of evaluations in the US are also presented. The paper concludes by considering some of the lessons from the US experience for the evaluation of labour market programs for Aborigines in Australia. A brief outline of the principal components of CETA and the Job Training Partnership Act (JTPA) and TAP is presented in the Appendix.

Stating the objectives

Ideally, any government program should have clearly stated objectives by which it can be evaluated. The Aboriginal Employment Development Policy (AEDP), of which TAP is a part, is an example of a program with such objectives (Australian Government 1987). The goals of statistical employment and income equality are clearly stated in the AEDP policy statement (Sanders 1991).

The output of most Australian labour market programs has been measured in terms of the employment status of the participants. However, the objectives have not always been clear. One of the issues discussed in Johnston's (1991) review of TAP was the lack of clarity in the program's objectives. Some sections of the guidelines suggest that employment generation is the major objective of the program, while other sections suggest that providing training opportunities for Aboriginal people is the primary goal (Johnston 1991: 27). Any measurement of the success of the program will depend on the weight given to each of these objectives. However, for an evaluation of the effectiveness of the program, there is a further issue which must be considered. Even if training is the primary function of the program, a measure of training opportunities provided is not an adequate measure of the program's output, as what needs to be measured is the long-term effect of training on an individual's employment and income status. Training opportunities are merely an intermediate step towards improving a person's economic status.

In addition to the use of employment status as a measure of the output of labour market programs, the American programs have used income indicators. The purpose of CETA, the major federal program during the period 1973-1982, was defined in the Act as providing:

> job training and employment opportunities for economically disadvantaged, unemployed, or underemployed persons which will result in an increase in their earned income, and to assure that training and other services lead to maximum employment opportunities and self-enhancement (Gay and Borus 1980: 29).

The JTPA, which replaced CETA in 1982, also measured the success of the programs with both income and employment indicators. (See Appendix for a description of the major programs funded under CETA and JTPA).

There is a strong case for using both income and employment indicators to measure the outcome of a labour market program. The rationale for providing people with additional labour market training is based on the assumption that such training is expected to increase their probability of employment by providing them with skills which both enhance their productivity and are of value in the labour market. However, the benefits of training should be reflected in earnings as well as employment. In fact, employment status may be misleading as to the effect of training on an individual's labour market performance. An extreme hypothetical example illustrates this: A labourer becomes unemployed and goes on a program training as a computer programmer. Three months after completing the course he is asked about his employment status. He is now employed as a labourer. This would be measured as a successful training outcome if employment status were the only indicator used, but the result is probably unrelated to the training. In fact, he may be worse off due to the earnings foregone as a labourer while training to be a computer programmer.

A further example, which demonstrates that employment status alone may be a misleading indicator of the impact of participation in a training program, can be developed in the context of current Aboriginal labour market policy. If an unemployed Aborigine receives training under TAP and then gains employment under the Community Development Employment Projects (CDEP) scheme, this employment would be counted as a successful outcome of training.[4] If the training provides an important input into community projects, the outcome should be measured as a success. However, employment under the CDEP scheme falls outside of the mainstream labour market. Individuals are employed under the scheme by virtue of belonging to an Aboriginal community, not necessarily because of the skills they have acquired through training. Employment status will therefore be unaffected by skill acquisition, and the TAP training may provide little benefit to the trainee or the community. Furthermore, as CDEP scheme workers are paid the near equivalent of their welfare entitlement, the income of former TAP participants need not reflect the full benefit that the community receives from their training. Additional information beyond employment status, e.g. occupation status, is required to assess whether the training has been useful.

The problems of evaluation

Once the objectives of any labour market program have been stated, the next step is to evaluate the success of the program in achieving these objectives. The major question posed in any evaluation of employment and training programs is what would have happened to an individual's employment status and earnings in the absence of the program. Even without participation in a labour market program, an unemployed person may eventually find a job, and perhaps even one with higher earnings. Therefore, there is a problem in determining which, if any, part of an increase in earnings can be attributed to participation in a program. Comparison groups can be established using either experimental or non-experimental methods.

In Australia, the use of a control or comparison group, with which to compare the outcomes for program participants, has been limited. Certainly, in the recent review of TAP (Johnston 1991), there was no attempt to compare the outcomes for TAP participants with those of non-participants. For the labour market programs administered by DEET, 'positive outcomes', including both employment and participation in further training, are the major measures used of the output of the programs. These data are collected from the Post Program Monitoring (PPM) postal survey of participants, undertaken three months after the completion of a program. A summary of the results of these surveys until December 1990 was presented in a quarterly monitoring report. Since then, the results have only been available in internal DEET reports. There have been more detailed evaluations of specific DEET programs, although the results are not always publicly available. (See Stretton and Chapman (1990) for a recent survey of these.)

In the US, it was a requirement under CETA that the programs be evaluated, particularly with respect to their effect on earnings, but also with reference to other indicators. It would appear that the criteria used by the Department of Labor were similar to some of those applied by DEET in quarterly monitoring reports. Gay and Borus (1980) listed eight indicators used by the Department of Labor, based on program placement rates within three months of the completion of a program:

i Percentage of those leaving CETA programs for employment.

ii Percentage of terminees with a positive outcome (including employment, school, military or another CETA program).

iii Percentage of total positive terminees entering employment.

iv Percentage entering employment after receiving more than minimal CETA services.[5]

v Percentage of terminees who receive more than minimum CETA services.

vi Program cost per person entering employment.

vii Cost per positive termination.

viii Cost per person placed after receiving more than minimum CETA services.

The Gay and Borus (1980) study tested whether these eight performance indicators correlated with longer-term success in the labour market, using data from earlier programs operating during the period 1969-72. They used longitudinal data on program participants collected at four interviews: the first was held a week after program entry; the second at the time of program exit; the third, four months later; and the final interview one year after exit. These data were linked with earnings data for 1973 from the Social Security Administration. The long-term success of the program was measured by assessing earnings 18 months to three years after the completion of the program. A control group was selected, by screening more than 50,000 households in low income areas in ten cities, to locate a sample of persons eligible to enter these programs who had not done so. Individuals were included in the control group to match participants on the basis of age, race, city and, where possible, neighbourhood.

The study concluded that training had a larger positive effect on earnings for women and minority groups than for white men. The authors also argued that ' ... based on our findings for the four types of programs studied here, it appears that placement in a job within three months after leaving a program is among the poorest performance indicators' (Gay and Borus, 1980: 42). They found that the most reliable indicators of long-term income gains were changes in weeks worked, wage rates and earnings.

Several reasons were suggested for this result. Firstly, placement alone does not provide information on the type of job. More detailed information on weeks worked, earnings and other job attributes are needed to provide a real indication of the nature of the work and, therefore, the level of earnings in the longer run. It is also possible that those who find work quickly after the completion of a program have searched the job market less effectively, and do not utilise their newly-acquired skills as fully in their new jobs as those who take longer to find

work. The result that simple measures of outcomes, in the period immediately following participation in a labour market program, are unreliable indicators of longer-term success suggests that caution is needed in accepting similar measures used by DEET as the sole criteria for measuring the success of programs.

Non-experimental evaluation

One method used to answer the counterfactual question of the effect of programs is a comparison of outcomes for those participating in the program with a control group of non-participants. In the absence of a true experiment in which individuals are randomly assigned to a program or a control group, non-experimental data have been used to construct a control group. This raises a number of important methodological issues. The results of any evaluation of a training program have been shown to be highly dependent on the choice of control group.

In the 1970s, considerable effort was directed towards the collection of data for the evaluation of CETA programs by non-experimental methods. The Department of Labor established the Continuous Longitudinal Manpower Survey (CLMS) which contained records from an annual sample of individuals commencing CETA programs. Information on labour market experience over a four-year period commencing one year prior to CETA enrolment, the type of CETA program in which the individual had participated, basic demographic characteristics, a history of public benefits received by the individual and his or her family, and family-related variables, were included (Bassi 1983). For comparative purposes, a cross-section sample from the Current Population Survey (CPS), which covers the whole of the US population, was also included. These data were further augmented by annual earnings data reported by these individuals to the Social Security Administration from 1951.

The CLMS database was managed by a private company, and it formed the basis for many studies of the impact of CETA (Barnow 1987). Some researchers were critical of the methods used to select the control group from the CPS and returned to the original data source to establish a comparison group.[6] The choice of control group has important implications for the estimated impact of CETA programs on earnings and a wide range of estimates has been produced (see discussion below).

A related issue in selecting a non-experimental control group is the problem of 'contamination' bias. If the control group is selected from a general survey of the population, such as CPS, some of those included in the control may have received training under the program being evaluated without the researcher being able to identify this. In Bassi's (1983) study, based on 1976 data, she reported that only 0.8 per cent of the total population participated in CETA. If a random sample were selected from

CPS, it would be expected to include only a small number of CETA participants. However, if the comparison group were selected to match the characteristics of known participants, this group could be expected to include a larger proportion of program participants than in one selected from the general population. These individuals could not be identified by the researcher. Bassi estimated that between 4 and 5 per cent of the individuals in the control group were enrolled in CETA during 1976. If program participation has a positive effect on earnings, the inclusion of this group in the control group would reduce the estimated effect of training.

Another issue that has been the subject of considerable discussion in the literature on non-experimental evaluation is the problem of selectivity bias.[7] The individuals who participate in these programs are not randomly selected from the population and are likely to vary from non-participants in a systematic manner. It is possible that only the more highly motivated among the unemployed agree to engage in training. Similarly, the program administrators, with their need for positive outcomes in mind, may only select participants for programs most likely to succeed in the labour market under any circumstances. If either of these two factors were important, to attribute any post-program increase in earnings to the participation in the program would be to overestimate the effects of training on earnings. Alternatively, these programs may attract the least motivated members of the unemployed; those who do not expect to find a job independently and therefore face a low opportunity cost of participating in training. The US evidence, presented in these studies, shows that CETA participants were disadvantaged compared with non-participants of similar age, sex and race in the population at large. If CETA participants were, on average, less motivated and able than similar individuals in the population, the effects of training on earnings, without a correction for selectivity bias, would underestimate the benefits of training. Many studies evaluating CETA have included a correction for selectivity bias, but the problem of a wide range of estimates of the effect of these programs remains.[8]

The results of the evaluation exercise have also proved to be sensitive to the choice of year as the pre-program benchmark for earnings. 'Trainees have typically experienced a decline in their earnings, both absolutely and relative to any comparison group selected, in the period immediately prior to training.' (Ashenfelter and Card 1985: 648). This is perhaps not surprising as CETA was formulated to target disadvantaged groups, but the question remains as to whether this decline typically represents a permanent or transitory change in earnings. The answer to this question has implications for the choice of the pre-program benchmark year. If an individual becomes unemployed due to some temporary factor, for example the bankruptcy of an employer, earnings immediately prior to

commencement of training may be temporarily depressed and thus not represent longer-term earnings potential in the absence of training. If earnings at the temporary low pre-training level are taken as the benchmark for comparison with post-training earnings, the effect of training on earnings will be overestimated. The immediate pre-training earnings, however, may represent a good estimate of the employee's likely earnings in the future. This situation may arise, for example, when a person's skills have become obsolete and new skills are needed to compete in the labour market. In general, researchers have found that estimates of the impact of CETA on earnings are very sensitive to the choice of benchmark year and tend to show larger effects of training the closer the benchmark is to the time of training.[9]

At the other end of the process, there is the question of the appropriate time to evaluate the effect of the programs on earnings. Some results suggest a large initial impact of program participation on earnings followed by a declining effect, while others suggest that the longer-term effect exceeds the impact effect.[10] These results show that programs need to be evaluated at more than one point in time.

In summary, there are numerous problems associated with non-experimental estimates of the impact of training on earnings, and assessments of the usefulness of these techniques tend to be pessimistic. There is strong support for the view that programs, such as CETA, can only be evaluated by conducting methodologically rigorous social experiments. Ashenfelter and Card (1985: 659), for example, concluded that 'the sensitivity of the non-experimental results ... leads us to conclude that for the evaluation of training programs experimental tests using random assignment are especially desirable'.

The debate on the usefulness of non-experimental evaluation remains inconclusive. Heckman and others have argued that the problem lies more with the appropriate choice of model for non-experimental evaluation, rather than with the technique itself:

> The recent negative assessments of nonexperimental methods have created a mood of unwarranted pessimism. The available assessments of nonexperimental methods confuse rather than clarify matters ... The wide range of estimates produced from their studies simply illustrate that false models produce poor estimates and different false models produce different poor estimates. Missing from their studies is any serious attempt to test the validity of the assumptions maintained in the alternative models (Heckman, Hotz and Dabos 1987: 424).

Non-experimental methods may, in principle, produce accurate assessments of the impact of labour market programs, but, at the very least, the range of estimates produced by these techniques suggests that people using these estimates need very detailed knowledge of the methods used to construct them.

Experimental evaluation

A frequent conclusion of the US literature is that for an accurate evaluation of labour market programs, such as CETA, classical experiments with random assignment of individuals to a program or control group is required. 'The principle advantage of experimentation over ... non-experimental analysis is that it allows the effects of a given policy intervention to be estimated without bias and measured with a known degree of statistical precision' (Burtless and Orr 1986: 609). This conclusion has been accepted by US policy-makers. Evaluation under JTPA has been conducted using experimental techniques (Riddell 1991: 50).

LaLonde (1986) compared estimates, gained by means of experiment using randomly assigned workers, of the impact on earnings of the National Supported Work Program (a temporary employment program for disadvantaged workers), with results using non-experimental estimates of the impact of the program. He concludes that:

> many of the econometric procedures and comparison groups used to evaluate employment and training programs would not have yielded accurate or precise estimates of the impact of the National Supported Work Program. The econometric estimates often differ significantly from the experimental results. Moreover, even when the econometric estimates pass conventional specification tests, they still fail to replicate the experimentally determined results (LaLonde 1986: 617).

This finding was replicated by Fraker and Maynard (1987) in a similar study of the same program.[11]

Burtless and Orr (1986) provide an interesting discussion of the criticisms levelled against experimentation. They suggest that the most widely held criticism is based on the ethical argument that people should not be denied access to programs which may benefit them. This view appears to dominate the Australian debate, and there has been resistance to the suggestion of any form of experimental evaluation. For example:

> Random assignment has not been applied in evaluation work in Australia because government objectives of equal opportunity and equity of access to assistance mean that eligible applicants cannot be denied assistance on a random basis. Some rationing according to predetermined priorities may occur, but this rationing primarily involves restriction of access to a specific target group. Members of the target group are not denied the opportunity to participate (DEET 1991: 143).

Against this view, Burtless and Orr (1986) argue that so long as participation in the experiment is subject to a number of conditions, there seems little to object to on ethical grounds. These conditions include the following: participation is voluntary; participants are fully informed about the nature of the experiment; and those randomly selected into the control group are compensated, preferably by lump sum payments, for the loss of potentially beneficial services. This is a rather long list of

conditions to attach to the acceptability of the experiments. Voluntary inclusion in the experiment would leave the problem of selectivity bias unresolved. There is also the problem of deciding the appropriate compensation for those in the control group prior to the evaluation of the program.

Other criticisms raised against experiments relate to the extent to which experimental results can be replicated on larger numbers of individuals, for example the whole population, or in other environments. If participation in a program changes an individual's position in the job queue so that participants gain at the expense of non-participants, then the expansion of the program may remove this 'benefit'. An experiment would provide useful information about the operation of a program in a particular set of labour market conditions in a particular location, but the results may offer little guidance about the success of the same program under different conditions. It is also possible that people behave differently when they know they are participating in an experiment than if they are in a 'real' situation.

The major disadvantage, cited by Burtless and Orr (1986), of experimental evaluation of labour market programs is their cost. The costs of the experiments undertaken in the US have totalled millions of dollars. However, it is important to remember that the expenditure on the programs themselves has amounted to billions of dollars.

The use of experiments to evaluate programs would not, of course, eliminate all problems. The problems of choosing a pre-training benchmark and the appropriate point for post-training evaluation remain. Non-response bias is always expensive to reduce. A further general consideration relating to all evaluation methods is the time involved. It may take four or five years to collect the data needed to undertake an evaluation, and with the additional time necessary for analysis and publication of results, it may be six or seven years before results are widely available. This sort of time-frame is unlikely to be politically acceptable, especially given the potential brevity of Australian political cycles, and given the substantial changes which can take place in an economy over such a period, the results may be of little help to the policy-makers in the short run.

Results of evaluations of labour market programs

In a survey article of CLMS-based studies of the impact of CETA on earnings, Barnow (1987: 159) concluded that 'it is difficult to draw strong conclusions about how effective the CETA programs were at increasing the earnings of participants'. Estimates ranged from a negative effect on

earnings[12] to substantial positive effects[13], depending on assumptions and the specifications of the regression model used. LaLonde and Maynard (1987: 430) note with respect to CETA evaluations that 'the estimates of earnings gains for women range from under $400 to over $2,000 per year; those for men range from an increase of over $2,000 to a decrease of over $3,000 per year; and the estimates for youth range from nearly a $1,000 increase to a $1,900 decrease in earnings per year.'

Although the estimated impact on earnings of participation in CETA varied between studies, some generalisations were apparent. Riddell (1991: 59) summarised the findings as follows:

> Women are generally found to benefit more from training than men. In terms of the different services offered by the programme, public service employment and on-the-job training generally had the highest estimated impacts, and classroom training and work experience the lowest.

I have not read any results of evaluation studies on American Indians and Natives, but propose to investigate this in forthcoming research.

In Australia, there have been few evaluations of labour market programs, and those which have been undertaken have generally been carried out from within the public service, rather than by independent academic researchers. There has been very limited use of a control group with which to compare the outcomes of participants. Outcomes have been measured in terms of employment status rather than income. In their discussion of Australian labour market programs, Stretton and Chapman (1990: 49) argue that the evidence suggests that wage subsidy schemes are the most successful in assisting the unemployed, followed by training programs and finally direct job creation schemes.

One non-experimental estimate of the impact of participation in a labour market program on the probability of employment for Aborigines is presented by Ross (1991). Ross conducted a survey of Aboriginal employment in five Aboriginal Land Council regions in New South Wales.[14] He found that for a given age, marital status, years of schooling, area of residence, years of work experience and level of other income, participation in a labour market program had a highly positive and significant impact on the probability of employment. These results were very dramatic: for example, for unemployed Aboriginal men participation in a labour market program was estimated to increase the probability of employment by 29 percentage points. Further investigation is required, as these estimates are based on a small number of observations. In addition, as estimating the impact of labour market programs on Aboriginal employment was not the main focus of Ross's analysis, he did not attempt to make any allowance for selectivity bias in the sample. Those who had participated in these programs may differ in

some unmeasured but sytematic way from those who did not. This has not been taken into account in the estimates.

Table 1. The employment status of TAP participants three months after finishing training, 1983-84 and 1990-91 (per cent).

	1983-84 Total TAP[b]	4 April 1990 - 26 May 1992[a] Community employer		Private employer	
		A30[c]	A31[d]	A30[c]	A31[d]
In:					
Subsidised empl.[e]	12.2	9.2	26.7	11.8	29.1
Unsubsidised empl.[f]	30.7	48.5	29.1	39.8	20.1
Total employment	42.9	57.7	55.8	51.6	49.2
Total unemployment	48.8	36.4	36.5	39.5	41.8
Not in the labour force	8.3	5.8	7.8	8.9	9.1
Total	100.0	100.0	100.0	100.0	100.0

a. The choice of dates was not explained in Johnston (1991). The raw numbers on which the figures were based were not presented in Johntson's table, so it was not possible to calculate the figures for the whole of TAP. Table 6.3 of Johnston shows that in 1990-91, about two-thirds of placements were in the private sector and one third in the community sector. This breakdown may not, however, apply to those completing the post program monitoring questionnaire.
b. A further breakdown of these figures by type of program is presented in Miller (1985), but the categories used make comparisons of sub-programs between the two periods difficult.
c. A30 placements provided on-the-job training with employers. (See Appendix.)
d. A31 placements provided fully subsidised short-term work experience. (See Appendix.)
e. Subsidised employment included employment in all programs subsidised by DEET. Any employment subsidised by agencies other than DEET was included in the unsubsidised employment included all employment where direct subsidies were not paid to employers by DEET. CDEP employment, for example, was included in this category and may differ in some unmeasured but systematic way from those who did not. This has not been taken into account in the estimates.

Source: Miller (1985: 152-3); and Johnston (1991: 94).

Table 1 presents some summary data for TAP taken from the Miller and Johnston Reports. The data are taken from the Post Program Monitoring Survey conducted by DEET and therefore only refer to the outcomes for the 57 per cent of Aboriginal participants who answered the postal questionnaire. The table shows that the percentage of respondents who

were unemployed three months after the completion of a program had decreased between 1983-84 and 1990-91, but the percentage in subsidised employment had probably increased. The figures, however, offer no guide to how a comparable group of non-participants fared in the labour market over the same period. It is therefore not possible to assess the effectiveness of TAP in promoting Aboriginal employment from these data.

Summary and conclusion

In Australia, $527.7 million was spent in total on labour market programs by the Commonwealth Government in 1989-90. $78.5 million of this was spent on special training and education programs for Aborigines.[15] It is important to have some idea of the benefits gained from this expenditure.

A review of the US literature shows that there are no easy solutions to the problem of how to evaluate the effects of employment and training programs. The general conclusion of American studies is in favour of experimental, rather than non-experimental, evaluation. Certainly, if non-experimental evaluation techniques are adopted, it is very important that the assumptions underlying the choice of control group and econometric model are clearly spelt out and that some sort of sensitivity analysis is undertaken.

The issues raised in this paper have a number of implications for Australian Aboriginal employment and training policy. If a serious attempt is to be made to evaluate labour market programs, then a range of measures of outcomes should be used. For example, both employment status and income status must be gauged, and surveys must be repeated.

The recent review of TAP focused on administrative issues and did not attempt to rigorously evaluate the effectiveness of the program. The evidence that was presented on effectiveness was either anecdotal or based on PPM data, with no results presented for a control group. The effectiveness of TAP needs to be evaluated more rigorously.

TAP is currently being divided into a private sector employment and training program administered by DEET and a community sector program administered by the Aboriginal and Torres Strait Islander Commission. Standard indicators of success, such as the employment status and income of participants, are relevant in an evaluation of the TAP private sector program. But given the likely additional goal of 'community development' under the TAP community sector program, the appropriateness of these indicators used in isolation is limited. Any evaluation of community-based training will need to consider the effects

of this training on the broader goals of 'community development'. Judgements on such issues are likely to be extremely subjective, and there is a danger that any outcomes can be justified as optimal. There needs to be considerable clarification of the term 'community development' and subsequent assessment of its success or failure in relation to specified criteria.

The Australian Longitudinal Survey (ALS) provides information on participation in employment and training programs for young people, but there is no Australian data source which covers longitudinal data for the whole of the Australian population. In principle, this survey could be used, using non-experimental techniques, to compare labour market outcomes for participants and non-participants. There is an Aboriginal identifier in the ALS, but the sample is very small, and it would be difficult to generalise the results.

Following the recommendations of the Royal Commission into Aboriginal Deaths in Custody, a national survey of the economic and social status of the Aboriginal population is to be undertaken (Commonwealth of Australia 1992). One issue which could be raised concerns participation in labour market programs. This would provide a basis for a limited non-experimental evaluation of the effects of labour market programs by comparing outcomes for participants and non-participants, making appropriate allowances for selectivity bias. This would be necessary, as participation in a labour market program is not based on random allocation. However, a one-off survey of the Aboriginal population would not provide all the information necessary to evaluate the impact of participation in a program on labour market performance; longitudinal data are therefore essential (Daly 1992).

The American experience shows that it is possible for government departments to cooperate in the formation of a data set useful for research purposes. Although the data collected for administrative purposes were not ideal for the evaluation of CETA, they provided a starting point. There are a number of problems that would need to be overcome in combining data from different Australian Government agencies. These include: the standardisation of the geographical, administrative and program delivery divisions of the country used by various departments and agencies; and for those interested in Aboriginal policy, the standardisation of definitions of Aboriginality used.

At a political level, more consideration needs to be directed towards the establishment of experiments to evaluate the effects of labour market programs in Australia. Such experiments are expensive, but given the emphasis placed on training in government policy, it is important to determine if its assumed beneficial effects are in fact real.

Notes

1. Among the recent reviews of labour market programs are the Kirby Report (1985), Stretton and Chapman (1990) and Sloan (1991). Miller (1985) and Johnston (1991) look specifically at Aboriginal participation in these programs.

2. The terms 'Aboriginal' and 'Aborigines' refer to the Aboriginal and Torres Strait Islander populations throughout this discussion paper.

3. The disadvantaged groups covered by these programs included Indians and Native Americans, migrant and seasonal farm workers, ex-offenders, older workers and the handicapped (see Appendix). It is not a major focus of this paper to examine the position of Indians and Native Americans in US labour market programs. It is proposed to consider this in greater detail in further research.

4. For a description of the scheme see Sanders (1988), Altman and Sanders (1991) and Morony (1991).

5. The term 'minimal' was not defined by Gay and Borus (1980).

6. See for example, Ashenfelter and Card (1985) and Dickinson, Johnson and West (1986). There are many technical issues concerning the most appropriate way to select the control group. This will not be pursued here. A further important technical question is the appropriate specification of the regression equations used to estimate the effect of training on earnings. Interested readers are directed to the original studies.

7. For a technical discussion of the issue of selectivity bias see Heckman (1979) and Heckman and Robb (1986).

8. See, for example, Ashenfelter and Card (1985) and LaLonde (1986).

9. See Ashenfelter (1978), Ashentfelter and Card (1985) and Bassi (1983).

10. See, for example, Ashenfelter (1978) and Bassi (1983).

11. For a report of the results of another American experimental program see Woodbury and Spiegelman (1987).

12. See, for example, Dickinson, Johnson and West (1986). The authors explained this negative result in terms of CETA diverting participants from productive job search or employer discrimination against CETA participants. They argued that individuals may have continued to enrol in CETA despite those estimated detrimental effects on earnings due to the short-term benefits of the payments made to trainees and those in public sector employment under CETA.

13. See, for example, Bassi (1983).

14. These Regions are jurisdictions created by the NSW *Aboriginal Land Rights Act 1983*.

15. See Stretton and Chapman (1990).

Appendix

Labour market programs in the US have been federally funded since the 1960s under three pieces of legislation, covering 1982 to the present: the *Manpower Development and*

Training Act (MDTA), 1962-73; the *Comprehensive Employment and Training Act* (CETA), 1973-82; and the *Job Training Partnership Act* (JTPA). In contrast, Australian labour market programs have not been established by legislation. This appendix provides a brief outline of the activities under CETA and JTPA in the US and TAP in Australia.

CETA, 1973-82

Responsibility for training at the federal level was concentrated in one organisation but programs were actually operated by prime sponsors, usually State or local governments, with:

> wide discretion with regard to program design. The range of devices provided includes classroom and on-the-job training, basic and remedial education, testing, job referral and development, work experience, and supportive social services. Sponsors may provide these services directly or indirectly through contracts or subgrants with such organisations as State Employment Security Agencies (SESAs), vocational agencies, schools, community groups, labor organisations, or private businesses. Prime sponsors are responsible for monitoring and evaluating programs to determine that local needs are met (Employment and Training Report of the President 1980: 24).

CETA was amended several times. This outline relates to CETA after the amendments of 1978 which strengthened the focus of the Act on the economically disadvantaged. According to the 1982 Employment and Training Report of the President, 97 per cent of participants were 'disadvantaged' in the sense that they or their families received cash welfare payments, or the family had a total income estimated on an annual basis to be below the official poverty line set by the Office of Management and Budget for their family size and location (Employment and Training Report of the President 1982: 29). The major functions of the Act, apart from the administrative functions covered under Titles I and V, can be summarised as follows:

i Title II: Comprehensive Employment and Training Services. This title authorised classroom-based and on-the-job training, work experience and job-search assistance under titles IIB and C. Under title IID, people who had been unemployed for 15 of the last 20 weeks, or who were in a family receiving welfare benefits could join a public service employment program.

ii Title III: Special National Programs and Activities. This title covered programs for special target groups, such as Indians and other Native Americans, migrants and seasonal workers, ex-offenders, older workers, women and the handicapped.

iii Title IV: Youth Programs. This title covered classroom-based and on-the-job training for young people.

iv Title VII: Public Service Employment Program. This title authorised a countercyclical public service employment program.

v Title VII: Private Sector Initiative Program. Private Industry Councils were established with representatives from industry, organised labour, community-based organisations and educational institutions to improve the access of CETA participants to the private sector.

vi Title VIII: Young Adult Conservation Corps. Young people aged 16-23 years were organised for conservation work in national parks and other public land.

JTPA, 1982

The Act has been amended since, but under the original provisions there were five Titles, four of which were employment and training program titles:

i Title I: Job Training Partnership. Established state and local delivery services and the Private Industry Councils to plan training and employment programs at the local level.

ii Title II: Training for the disadvantaged.

iii Title III: Employment and training assistance for dislocated workers.

iv Title IV: Federally administrated programs. Included a range of programs for special groups such as Indians and Native Americans, migrants and seasonal workers.

The legislation aimed to promote the role of the private sector and abolished public sector job creation. A system of standards was created to measure program performance in terms of participants' increased employment and earnings and reduction in welfare dependency. For Indians and Native Americans, for example, there were three performance indicators: the proportion entering employment; positive terminations; and the cost per positive termination. The organisations running the programs were expected to meet particular targets on these three measures (US Department of Labor (1988:14). For further discussion see the Department of Labor (various years) and Guttman (1983).

TAP

TAP was established in 1980-81. Under the original scheme, assistance was provided to Aborigines in the form of wage subsidies for on-the-job training in the public sector, wage subsidies for on-the-job training and work experience in the private sector, assistance for participating in training courses and additional assistance, such as allowances for living away from home (Miller 1985: 97).

The basic idea of providing subsidised training, either on-the-job or formally, has persisted throughout the duration of the scheme, but there have been changes in the direction these programs have taken. The outline presented here focuses on the major elements of the program as reviewed by Johnston. Following this review, there have been changes in the operation of the program. At the time of writing, many of Johnston's recommendations are still being considered, but his major recommendation that the administration of the community sector program be transferred to the Aboriginal and Torres Strait Islander Commission (ATSIC) from DEET is currently being implemented. The objectives of the TAP scheme, as set out in DEET (1991b: 89), were to:

> achieve employment equity for Aboriginal people and contribute to the promotion of Aboriginal economic independence by increasing permanent employment opportunities for Aboriginal people in all occupations and at all levels of the mainstream labour market; and by generating employment and economic development opportunities for Aboriginal people living in communities in rural and remote areas where there are few or no mainstream labour and economic markets.

Assistance was provided under the following headings:

i A20: The major employment strategy provides subsidies to large employers, both public and private sector, to develop employment strategies for Aborigines.

ii A30: Jobs skills development provides a subsidy of between 25 and 100 per cent for up to a year to employers who provide employment and training. It is a requirement that the placement is likely to result in a permanent job.

iii A31: Work experience offers employers a 100 per cent subsidy for providing work experience for up to three months for Aboriginal people, usually women and youth, newly entering the labour force. These positions need not be permanent.

iv A34: Aboriginal Employment Action encourages the appointment of Aboriginal employment development officers with employers who employ one thousand or more employees). This is sometimes used in conjunction with A20.

v A40: Skills training aims to develop skills relevant to the economic development of Aboriginal communities.

vi A41: Information and preparation provides training to the staff of Aboriginal community and service organisations.

vii A42: Enterprise Employment Assistance (EEA) is a community-based program which provides wage subsidies equivalent to the welfare entitlement of the employee, for new Aboriginal employees.

viii A44: Aboriginal Enterprise Incentive Scheme (AEIS) offers small 'soft' loans to enterprises established by unemployed Aborigines or CDEP participants.

ix A50: Work preparation covers course costs and income support during participation in formal courses with an accredited on-the-job training component.

x A54: Formal course development provides support for apprenticeships and management training in a formal environment.

It should be noted that following the Johnston Report, all community sector elements of JAP were transferred to ATSIC. As from 1 July 1992, TAP (community sector) became the Community Training Program administered by ATSIC and TAP (private sector) remained with DEET.

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