New Deal for Young People:
Implications for Employment and the Public Finances

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Executive summary

The New Deal for Young People (NDYP) was introduced nationally in April 1998 as part of the Government’s Welfare-to-Work programme. It is focused on those young people who have been unemployed for over six months and is intended to help them find lasting jobs and increase their long-term employability. During the initial Gateway stage of the programme, participants are given assistance in job search and basic skills development. Those who are still unemployed four months after entering the Gateway are offered a number of options, including further skills development through full-time education and training, and work experience through job placements and subsidised employment. Importantly, there is no ‘fifth’ option to opt out of the programme and remain on unemployment benefits.

Since the programme was introduced it has affected a large number of people. By the end of September 2000, 546.5 thousand young people had participated in the programme. Of these 254.5 thousand had moved at one time or another from the programme into employment (including subsidised jobs).

Inevitably, some of these people would have found a job anyway because of natural labour market turnover and the general expansion of employment in the economy. This report evaluates the difference that NDYP has made to unemployment and employment and how much it has cost, considering evidence from the first two years of its operation (i.e. to March 2000). As such it assesses the consequences of the programme for the macroeconomy. It does not assess the effect of the programme on the lives of individuals who participate in it.

Overall the evidence presented in this report indicates that the NDYP programme is having a beneficial impact on the UK economy, although the magnitude of this impact cannot be quantified exactly. Given the small size of the programme in relation to the economy as a whole, it is not possible to observe its impact on national income directly, but it can be estimated using macroeconomic modelling techniques. These estimates suggest that:
- National income is around £½ billion per annum higher as a consequence of the programme, indicating a welfare gain to the economy as a whole.

Considering the impact on those leaving unemployment, the evidence suggests that during the first two years of the programme (up to March 2000):

- A little over 200 thousand young people left unemployment earlier than they would have done without the programme.

- Within this total, roughly 60 thousand more young people moved directly into work (including subsidised jobs) than would have been the case without NDYP.

The remainder who left unemployment because of the NDYP left for other destinations including the Voluntary Sector (VS), Environment Task Force (ETF) and Education & Training options that are part of the NDYP programme. Some of those who moved to options would subsequently have moved into work. Also, some of those who left unemployment because of the programme subsequently returned to it and this is reflected in an increase in inflows to unemployment – this includes those returning from options to the Follow-Through stage of NDYP.

- The rise in the numbers flowing out of unemployment is almost twice as high as the rise in the numbers flowing into unemployment due to NDYP, so that the net impact of the programme is to reduce unemployment.

The increase in flows of young people into and out of unemployment over the two-year period implies a fall in the count of people who are unemployed at the end of it. But the fall is smaller than the difference between flows out of and flows into unemployment. This is because those who are helped out of unemployment by NDYP would not have remained unemployed indefinitely in the absence of the programme. Rather, the programme is helping people leave unemployment earlier than they would otherwise have done. In addition to these direct effects, the NDYP is likely to have reduced wage pressure and so allowed the economy to grow faster without triggering policy action to
restrain inflation. Taking such indirect effects into account it is estimated that as of March 2000 the NDYP had:

- reduced total youth unemployment by approximately 40 thousand.

- reduced long-term youth unemployment by around 45 thousand; this fell from 118 thousand in March 1998 to 52 thousand in March 2000, and would have been almost twice as high without the NDYP.

- raised youth employment by approximately 15 thousand, excluding those employed on the ETF and VS options. When these are taken into account, around 30 thousand more young people were in work in March 2000 as a consequence of the programme.

- reduced unemployment among all age groups by around 45 thousand and raised employment by 25 thousand, excluding those employed on the ETF and VS options. When these are taken into account, total employment in the UK economy was around 40 thousand higher as a consequence of the programme.

The NDYP is being financed by the Windfall Tax that was levied on the privatised utilities. This report ignores the financial implications of this tax and focuses on the effects on the public finances of the NDYP programme itself. By March 2000, £668 million had been spent on the NDYP programme. This is much lower than was originally anticipated, partly because of the continued fall in unemployment throughout the period, and because most participants leave the programme during the cheaper Gateway period of intensive job search assistance. The overall net exchequer cost is smaller than this because of lower expenditure on JSA and higher tax revenues due to the greater level of employment and national income sustained by the programme.

As with the impact on national income, the impact on the Government’s budget cannot be observed directly, but it can be estimated using macroeconomic modelling techniques. The estimates suggest that:

- After taking account of lower benefit payments and higher tax revenues, worth about £3 in every £5 spent, the NDYP is likely to cost
the Exchequer less than £150 million per annum over the course of the current Parliament until March 2002. This does not take into account possible social benefits due to the programme.

- The annual exchequer cost per extra person in employment, including those in VS and ETF jobs, is estimated to be in the region of £4 thousand per annum. The cost per extra person in employment excluding those in VS and ETF jobs is about £7 thousand per annum. However, these amounts do not measure the cost to the economy as a whole. Indeed, since NDYP raises national income there is an economic benefit rather than a cost to the wider economy.
1. Introduction

The New Deal for Young People (NDYP) was introduced nationally in April 1998 as part of the Government’s Welfare-to-Work programme. It is focused on those young people who have been unemployed for over six months and is intended to help them find lasting jobs and increase their long-term employability. During the initial Gateway stage of the programme, participants are given assistance in job search and basic skills development. Those who are still unemployed four months after entering the Gateway are offered a number of options, including further skills development through full-time education and training, and work experience through job placements and subsidised employment. Importantly, there is no ‘fifth’ option to opt out of the programme and remain on unemployment benefits.

The NDYP is not the first major intervention in the youth labour market. Over the past twenty or more years, there have been a wide range of training programmes such as the New Job Training Scheme, introduced in 1987 and Modern Apprenticeships, introduced in 1995. Indeed government supported training for young people continues to be available through programmes other than the NDYP. Nevertheless the NDYP is claimed to be different from what went before. First, it is claimed that assistance in job search and training is focused more on clients’ individual needs and circumstances, supporting them while they prepare for work and find a job, and delivering skills and training that are relevant to local jobs. Second, the NDYP gives young people a clear incentive to improve their employability by imposing benefit sanctions if they do not participate actively in the programme. As Wells (2000) puts it, ‘in return for the rights of a comprehensive, individually based service young people aged 18-24 unemployed for six months or more have the responsibility to take up the help. They are not allowed to remain on benefit.’

The aim of this report is to assess what difference has been made by the NDYP in its first two years of operation up to March 2000. In particular, it aims to answer the following questions: What has been the impact of the programme on employment and unemployment? What has been the cost of the programme to the Exchequer?

In assessing the implications of the NDYP for employment and unemployment, it is vital to distinguish its effect on flows over a period of time from that on stocks at a point in time. This is because the numbers of people flowing into and out of unemployment can be very large in relation to the stock of people who are unemployed at any particular moment in time. As an illustration, claimant unemployment in the UK fell from 1251 thousand in August 1999 to 1082 thousand in August 2000, a net reduction of 169 thousand. But over the same period, the inflow of people who became unemployed was 2990 thousand and the outflow of people who left unemployment was 3178 thousand. The implication is that most people who

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1 See Hasluck (1999) for a comprehensive list.
2 Source: Tables C.12 and C.31, Labour Market Trends, October 2000. The difference between inflows and outflows does not add up to the change in unemployment as flows have been standardised.
became unemployed during this period left unemployment within a relatively short space of time. This is borne out by the fact that half of all unemployment claims terminating in the quarter ending July 2000 had lasted no more than 10 weeks and that over 80 per cent of those who had been unemployed in August 1999 had left the claimant count in the succeeding year.

Thus it is a mistake to see the unemployed as an unchanging population. This is especially true for younger age groups. Most people enter the labour market between the ages of 18 and 24 and those who do not go straight into a job will begin their working lives with a spell of unemployment. Some will experience further short spells of unemployment as they search for a job that is right for them. But others will struggle to find a job at all and suffer longer spells of unemployment. For some of these, the loss of self-esteem and the inability to invest in skills when young can have a long-term adverse effect on their life chances.\(^3\) In March 1998, just before the national introduction of the NDYP, 118 thousand people between the ages of 18 and 24 had been unemployed for more than 6 months. Of these, 51 thousand had been unemployed for over a year and 17 thousand for over two years.\(^4\)

In broad terms, these 118 thousand people represented the initial client group of the NDYP.\(^5\) Over the course of the ensuing two years covered by the analysis in this report, all should have participated in the NDYP in one way or another. But in considering its effect, it should be emphasised that most would have left unemployment after two years even in the absence of the NDYP. Since few are unfortunate enough to remain unemployed for long periods of time, the main effect of the NDYP for the majority of people is to help them leave unemployment earlier than they would otherwise have done and to help them stay out of unemployment by improving their search effectiveness and employability.

By the end of September 2000, 546.5 thousand young people had participated in the programme. This has much exceeded the size of the initial client group because large numbers of people flow into and out of unemployment each month. Of these 254.5 thousand had moved at one time or another from the programme into employment.\(^6\)

One of the difficulties inherent in evaluating the impact of NDYP on employment and unemployment is in assessing what would have happened in its absence. Although 254.5 thousand young people had gone into jobs through NDYP, some of these would have done so in the absence of the programme. Hence it is wrong to claim that all of these young people had found work because of NDYP.

In assessing what would have happened to unemployment and employment in the absence of the programme, it is important to be clear about what alternative labour market policy would have been in place otherwise. For the

\(^3\) See e.g. Arulampalam et al. (2000)
\(^4\) Source: Table C.12, Labour Market Trends, March 2000.
\(^5\) Some short term unemployed will have qualified for early entry to the programme.
\(^6\) DfEE Statistical First Release 49/2000
purposes of evaluating the NDYP, all spending on the NDYP is treated here as *additional* to what would have been spent otherwise. Consistently, it is assumed that the workplace training places provided under the Voluntary Sector (VS) and Environment Task Force (ETF) options would not otherwise have been made available by the government. As such, all are treated as supplementing rather than replacing other labour market programmes.

It is also necessary to be clear about how the NDYP operates and how it affects the labour market statistics. The NDYP helps young people out of unemployment and into employment via the assistance in job search and basic skills training provided during the initial Gateway period of the programme. Those who do not leave unemployment within the Gateway period are helped out of unemployment via the NDYP options that are provided as an alternative to passive benefit dependency. While these young people leave unemployment they do not leave the programme. Those who take up the subsidised employment option leave unemployment and are counted as employees in the official labour market statistics. Those who take up a job placement on the VS or ETF options leave unemployment and are counted as employed in government employment & training schemes, thus are included in the headline employment series. Those who take up the full-time education and training option leave unemployment and are counted as ‘out of the labour force’. Once young people leave their options, some find work. Those young people who return to unemployment within 13 weeks of leaving an option, rejoin NDYP in its Follow-Through stage. From here, the programme may yet again help young people out of unemployment.

It is clear that the NDYP programme initiates a large number of flows out of unemployment simply by design. It is also clear that a large number of these exits are to jobs, either unsubsidised or subsidised or in the form of government employment & training schemes. In the very short term then it seems almost inevitable that the programme reduces unemployment and raises employment among young people. If however these beneficial effects are to be sustained, and if the programme is to raise unsubsidised employment, it needs to improve young people’s employability. This means helping them out of unemployment and into unsubsidised jobs through the Gateway and the Follow-Through as well as providing valuable work experience and training through the NDYP options so that they may enjoy longer spells out of unemployment and in work once they leave the NDYP options.

The approach taken here to assessing the effect of the NDYP on employment and unemployment and on the public finances proceeds in two stages. First,

7 While the number of 18 to 24 year olds in Work-based training for adults in England has fallen from over 8 thousand in March 1998 to close to zero in March 2000, it is not clear that this is due to NDYP since the total number of young people in government supported training other than the NDYP has remained at similar levels to that before the NDYP was introduced. Here the assumption made is that the numbers in other types of training is independent of the NDYP. Thus, rough calculations suggesting that the government has saved about £100 million per annum as the result of lower numbers of young people in Work-based training for adults is not taken into account in the overall costings.

8 Labour Force Survey and Workforce Jobs

9 Wood (1998)
the direct impact is measured by looking at changes in the flows between unemployment and employment of 18 to 24 year-olds relative either to other age groups or to movements in the economy as a whole. This is not to be confused with flows onto and off the NDYP programme. The direct effect is also investigated by looking at changes in the stock of unemployed and employed 18 to 24 year-olds in relation to other groups. Second, the indirect effect of the programme is evaluated by analysing how the changes in the youth labour market affect the wider economy. The nature of the evaluation exercise is such that estimates of these effects cannot be very precise. Here central estimates are reported and the reader is referred to later sections for a discussion of the sensitivity of the results.

Section 2.1 examines the direct impact of NDYP on the youth labour market. Comparing the change in outflow rates from youth unemployment after the NDYP was introduced with similar changes applicable to other age groups, it is estimated that NDYP has led to a significant increase in the outflow rate from youth unemployment, reducing the average amount of time that young people spend in unemployment and the number of people unemployed at any particular time. This comparison measures the effect of the NDYP over and above that of other policies for young people that were in operation before and after the NDYP was introduced.

In the first two years since the national launch of NDYP around 590 thousand exits from claimant unemployment were through the programme. Over 40 per cent of these exits were estimated to be to jobs. Other exits include those to the NDYP VS, ETF, and Full-Time Education and Training options as well as those leaving for unknown destinations. Some of these will subsequently move to jobs. By March 2000 around 10 thousand people had left these options to take up unsubsidised sustained jobs. The estimated increase in outflow rates implies that around 215 thousand of the 590 thousand exits from the claimant count can be attributed to the direct impact of NDYP on the labour market. The remainder would have occurred in the absence of the programme, partly because of the general expansion in employment in the overall economy. Of these 215 thousand additional exits from the Gateway and Follow-Through, almost 60 thousand are directly to jobs. Chart 1.1 illustrates the difference between total and additional flows. The first set of columns show the number of exits from unemployment and from unemployment to jobs through NDYP. The second set of columns shows those estimated to be due to NDYP.

It is important to be clear about what the estimated impact on outflow rates from unemployment imply for the actual numbers in unemployment and work at a given point in time. As stressed above, those who are helped out of unemployment by NDYP would not have remained unemployed indefinitely in the absence of the programme. Rather, the programme mainly helps people leave unemployment earlier than they would otherwise have done. Many of

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10 Source: New Deal Evaluation Database, DfEE Statistical First Release 24/2000, and NIESR estimates. Exits from the claimant count through NDYP equal exits from the NDYP Gateway and Follow-Through stages, both temporary and permanent, to all destinations. Due to the inclusion of temporary exits from the Gateway, this measure is not comparable with standard published statistics.
those who were helped by the programme to leave unemployment before March 2000 would have left anyway by that date. This means that at any given point in time, the reduction in the unemployment stock due to NDYP will be smaller than the accumulated exits from unemployment due to NDYP. There is also evidence that some of the people who leave unemployment due to NDYP, re-enter unemployment quicker than other leavers. Overall, the evidence suggests that the numbers flowing into unemployment have risen by around half the numbers flowing out due to NDYP. Taking these considerations into account, additional flows from unemployment due to NDYP imply a reduction in the stock of youth unemployment of around 35 thousand and a rise in youth employment of almost 15 thousand, not counting those employed in the ETF and VS options. Changes in the stock of youth unemployment and employment are shown in the third set of columns in chart 1.1. These figures include a sharp fall of around 45 thousand in the number of young people who had been unemployed for more than six months, offset slightly by a rise in short term unemployment of a little under 10 thousand.

There are still further effects to be taken into account. Section 2.2 examines what impact these changes in the youth labour market are likely to have elsewhere in the economy. These repercussions could either magnify or offset the benefits of NDYP. For example, without a positive effect on employability and search effectiveness wages would be bid up requiring a tightening of macroeconomic policy to prevent this spilling over into higher inflation and this would offset the beneficial change. If on the other hand NDYP does raise employability and search effectiveness, the benefits of the programme could be sustained or even magnified as the people moving from unemployment to work have extra money to spend. In this case, those searching harder for work reduce wage pressure in the overall economy and this allows it to grow faster before inflation begins to pick up.
Taking account of repercussions throughout the wider economy, it is estimated that, due to NDYP, overall unemployment was around 45 thousand lower and employment around 25 thousand higher by Spring 2000. If those employed in the ETF and VS options are included, employment was around 40 thousand higher by Spring 2000. These estimates are shown in the last set of columns in chart 1.1. Long-term unemployment amongst young people, at 52 thousand in March 2000, would have been almost twice as high without NDYP.

Section 3 considers the cost to the Exchequer of the NDYP programme. The NDYP is being financed by the Windfall Tax that was levied on the privatised utilities. This report ignores the financial implications of this tax and focuses on the effects on the public finances of the NDYP programme itself. An estimated £668 million was spent on the NDYP programme by the end of its first two years of operation. As mentioned previously, this is taken to be spending that would not have occurred in the absence of the programme. This is much lower than was originally anticipated, partly because of lower than expected unemployment and also because most participants leave the programme during the Gateway period of intensive job search assistance, which is cheaper than the NDYP options. However this is the gross cost rather than the net cost of the programme. Estimates of the net cost of the programme take into account the fall in expenditure on JSA due to the reduction in unemployment as well as the rise in tax revenue due to the increase in employment and national income generally. Given the small size of the NDYP programme in relation to the economy as a whole, it is not possible to observe its impact directly. However, it can be estimated using macroeconomic modelling techniques. Such estimates, which cannot be very precise, suggest that the programme is likely to cost the Exchequer less than £600 million in net terms over the course of the current parliament until March 2002. This amounts to less than £150 million per annum since NDYP was launched nationally in April 1998.

The annual Exchequer cost per extra person in employment, excluding those in VS and ETF jobs, is estimated to be in the region of £7 thousand per annum. The cost per extra person in employment including those in VS and ETF jobs is about £4 thousand per annum.

In general, the cost of the jobs generated by the NDYP appears relatively small although it is not clear what this should be compared against. The cost to the Exchequer is a very narrow measure of the costs of the programme which takes no account of the benefits accruing to those who have participated in it. A more meaningful welfare comparison is to ask whether those who have gained from the programme could compensate the taxpayers who have financed it and still be better off. The estimates presented in this report show national income to be around £½ billion per annum higher as a consequence of the programme in its first two years, suggesting that the NDYP is performing a useful function in the UK economy.
2. Impact on employment and unemployment

As described in the introduction, the impact of NDYP on employment and unemployment depends on both the *direct* effect of the programme on the youth labour market and the *indirect* effect of the programme as the changes in the youth labour market affect the wider economy. It was suggested that the direct impact of the programme is a rise in youth employment of almost 15 thousand and a reduction in youth unemployment of around 35 thousand. However, the overall impact on employment and unemployment is larger when the wider economic impact is taken into account. This section reviews the evidence behind these results. First the direct or partial impact of the programme on the youth labour market is considered. Next the indirect or general equilibrium effects of the programme are investigated.

2.1 The direct impact of NDYP on the youth labour market

The NDYP consists of several measures which taken together are designed to help young long-term unemployed people into work. Firstly, NDYP assists young people who have been unemployed for more than six months with job search and basic skills development through the NDYP Gateway. Some short term unemployed young people, identified as having difficulties in finding work, will also qualify for this assistance. During this Gateway period many will find unsubsidised jobs. Those who leave unemployment at this stage, but who return to the claimant count within 13 weeks, will automatically re-enter the Gateway and do not have to wait an additional six months to re-qualify for NDYP assistance. Those who have not left unemployment after four months on the Gateway are offered either a subsidised job, a job placement in the VS/ETF options, or a programme of full-time education and training. There is no option to remain on unemployment benefit. The alternative to passively claiming benefit, i.e. participation in NDYP options, is intended to increase the employability of young people. Most options last six months, the exception being the full-time education and training option lasting for up to 12 months, after which many will find work. Those who return to the claimant count within 13 weeks of having participated in an option, enter the NDYP Follow-Through. Here they receive further assistance in finding a job and may be placed into a NDYP option. At the end of March 2000, 50 per cent of NDYP participants were on the Gateway, 34 per cent in NDYP options and the remainder on the Follow-Through. Thus two thirds of participants are unemployed and for these the programme is primarily working through job-search assistance, basic skills improvement and the threat of benefit sanctions, rather than through direct employment measures.

One way of evaluating the impact of the programme on the youth labour market is to monitor changes in flows between unemployment and work that have arisen since the programme was introduced. There are a number of possible changes given the design of the programme outlined above. Importantly, both inflows to unemployment from jobs and outflows from unemployment to jobs can change. Furthermore, the direction of these changes is not always clear a priori as discussed below.
Possible NDYP effects on labour market flows

It is clear that by design NDYP puts a limit on the duration of unemployment benefits so that a significant rise in exits from long-term unemployment is to be expected. NDYP targets the long-term unemployed as this group is known to have greater difficulty finding work than the short-term unemployed.

However, many short-term unemployed young people will be on the programme as well. These will include early entrants, Gateway returners and people on Follow-Through. For early entrants and Gateway returners, the NDYP operates in much the same way that it does for the long-term unemployed, hence a rise in exits from short-term unemployment is to be expected due to the design of NDYP if not for other reasons. Similarly, if NDYP options have been successful in raising the employability of those who proceed to the Follow-Through stage of NDYP, a rise in exits from short-term unemployment should also be expected. However, the overall effect on outflows from short-term unemployment is ambiguous. The rate at which young people leave short-term unemployment will be depressed, to the extent that those on the Follow-Through represent the least employable young people. It is also possible that the help received by NDYP participants disadvantages short-term unemployed young people not qualified for the programme. This would be the case if for example fewer Employment Service resources are available to non-participants or if employers substitute New Dealers with subsidised wages for other young people. In total the impact of the programme on exits from short-term unemployment may be either positive or negative.

A rise in inflows to unemployment may also be expected if the programme simply churns individuals off and on to the unemployment count. The fact that many people return to the Gateway and the Follow-Through stages of the programme could reflect such churning. On the other hand, the progress of individuals through different stages of the programme may simply reflect ordinary labour market turnover. Also, if NDYP prevents discouraged individuals from leaving the labour force after long spells of unemployment, then inflows should rise as people return from options. The overall effect of the programme on unemployment depends on its effect on all of these flows and their interaction.

If NDYP is to have a significant impact on employment then those leaving unemployment must be going into jobs. If these additional jobs are shorter than normal, then inflows back into unemployment from employment will rise. It is important here to distinguish between temporary jobs and jobs that are ‘shorter than normal’. For NDYP to have a significant impact on employment, the crucial question is not whether the jobs that are filled due to NDYP are temporary rather than sustained, but whether they are of a similar duration to the jobs that young people normally fill upon exiting unemployment. NDYP may also affect employment through those who find work after participating in a NDYP option and will also affect jobs in government employment and training programmes through those participating in the VS and ETF options. If for example there is no additional impact on outflows from unemployment to
‘regular’ jobs, but a significant rise in outflows to options, overall employment (i.e. including employment in government employment and training programmes) will rise initially. The impact on regular employment would primarily depend on where these people went after their option.

**Has NDYP changed labour market flows?**

To answer this question, the change in behaviour of unemployment inflows and outflows for young people, since the NDYP programme was introduced, is compared with the change in behaviour of flows for 25-29 year olds over the same period. The 25-29 year olds provide a benchmark group as they are not eligible to participate in NDYP, but are likely to be more similar to 18-24 year olds than other age groups. To the extent that 25-29 year olds are substituted for by 18-24 year olds taking up subsidised employment through New Deal, the use of this age group as a benchmark will tend to exaggerate any positive effect of NDYP on outflows from youth unemployment. However, there is little evidence of such substitution. Larger NDYP effects are generally found when benchmarking the 18-24 year olds against the 30-49 year olds, rather than 25-29 year olds. The opposite would be expected if the NDYP was causing substitution, as the younger group is likely to be a closer substitute for 18-24 year olds than the older group.\(^{11}\)

**Outflows**

Table 2.1 shows a simple difference-in-difference estimator of the impact of NDYP on outflow rates from unemployment by duration and destination.\(^{12}\) The percentage change in outflow rates from unemployment for 18-24 year olds since the introduction of NDYP is compared to the percentage change in outflow rates from unemployment for 25-29 year olds and 30-49 year olds since the introduction of NDYP. The numbers shown are averages across New Deal Units of Delivery.\(^{13}\)

The first three columns in table 2.1 show the percentage change in average monthly outflow rates in the two years following the introduction of NDYP compared to the three years before. For example, for both 18-24 year olds and 25-29 year olds unemployed for less than three months, the probability of finding an unsubsidised job rather than spending another month in unemployment rose by 11 per cent (not percentage points). In fact, it appears that outflow rates from unemployment of all durations rose for all age groups since NDYP was introduced. Also, the outflow rate to jobs from unemployment of all durations rose for all age groups, with the exception of the 30-49 year olds unemployed for over six months.

This general rise in outflow rates is to be expected given the benign behaviour of the macroeconomy over the period in question. However, there is a

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\(^{11}\) See Anderton *et al* (1999a, 1999b) and Riley & Young (2000a) for further discussion of substitution effects.

\(^{12}\) See Riley & Young (2000a) for details.

\(^{13}\) Geometric means.
noticeable difference in the magnitude of the rise in outflow rates between young people and other age groups. This is particularly the case for those unemployed for more than six months. For 18-24 year olds unemployed for over 9 months, the outflow rate from unemployment rose by 106 per cent compared to 9 and 1 per cent for 25-29 and 30-49 year olds respectively. In the last two columns of table 2.1 the change in the outflow rate for young people is compared to the change in outflow rates for other age groups. This ‘difference-in-difference’ provides an estimate of the impact of NDYP on flows from unemployment to jobs and other destinations.

Table 2.1  Impact of NDYP on monthly outflow rates from unemployment

<table>
<thead>
<tr>
<th>Destination</th>
<th>Duration (months)</th>
<th>Percentage change in outflow rates after introduction of NDYP¹</th>
<th>Percentage change in outflow rates for 18-24 year olds due to NDYP²</th>
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<td></td>
<td></td>
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<td>benchmark group: 25-29 30-49</td>
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<tr>
<td>Unsubsidised work</td>
<td>0-3</td>
<td>11 11 8</td>
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<td></td>
<td>3-6</td>
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Notes:
1. Average percentage change (across New Deal Units of Delivery) in average monthly outflow rates before and after NDYP; before NDYP period is March 1995 – February 1998; after NDYP period is March 1998 - February 2000; all averages refer to geometric means.
2. Difference-in-difference estimator applied to log outflow rates from youth unemployment; sample includes 95 New Deal Units of Delivery for each age group aggregated from the original 144.
3. Outflows to unknown destinations, to voluntary sector, environmental taskforce, and education & training options, and to other benefits are included in all destinations; subsidised employment option included in work.

* indicates insignificantly different from zero at 5% level
Changes in outflows that arise due to factors separate from the introduction of NDYP are being stripped out by comparing the change in outflows for young people to that of other age groups who do not qualify for NDYP. In table 2.1, the probability of leaving unemployment and finding a job rose by 54 per cent for 18-24 year olds unemployed for more than nine months. Comparing this to the 3 per cent rise in this probability for 25-29 year olds, the difference-in-difference estimate would suggest that the probability of leaving unemployment and finding a job rose by 49 per cent for 18-24 year olds due to NDYP.\textsuperscript{14} If young people are benchmarked against the 30-49 year olds, the rise is even greater.

While these estimates are fairly simple, in that they do not take account of differences in the labour market behaviour of different age groups, they generally lie within the very broad range of plausible estimates provided by alternative models.\textsuperscript{15} In assessing the impact of the programme on young people 18-24 year olds are compared to 25-29 year olds, as these are likely to be more similar to young people than the older age group. Hence the appropriate estimates of the impact of NDYP on outflow rates are in the second column from the right in table 2.1.

For those young people unemployed for more than 9 months, it appears that the NDYP has increased the probability of finding an unsubsidised job by 26 per cent (not percentage points). For those unemployed between 6 and 9 months, the change is more modest at 14 per cent. Nevertheless, this still represents a substantial rise in the probability of finding work. Most individuals leaving unemployment from these duration categories will be leaving unemployment through the New Deal Gateway. Hence, these numbers suggest that the Gateway is doing more than channelling young people into NDYP options. It is also directly helping them find jobs. The NDYP also appears to have increased the outflow rate to unsubsidised jobs for those unemployed between 3-6 months. However, this effect is much smaller than for the long-term unemployed. This is to be expected given that New Dealers will represent a far smaller fraction of the short-term unemployed than the long-term unemployed. In the case of the very short-term unemployed the impact of NDYP is slightly negative, but statistically insignificant from zero. Nevertheless, using a broader range of estimates than those presented here, the possibility of a small negative impact on outflows from short-term unemployment to unsubsidised jobs cannot be ruled out. Neither can the possibility of a small positive effect.\textsuperscript{16} A negative effect could imply that young people returning to the claimant count from NDYP options on Follow-Through are less employable than other short-term unemployed. In other words, this would suggest that NDYP has led to some reclassification of long-term unemployed individuals as short-term unemployed without significantly altering their behaviour. It could also reflect some substitution of the long-term unemployed for the short-term unemployed.

\textsuperscript{14} The relation between these numbers is \( \ln(1 + \frac{49}{100}) = \ln(1 + \frac{54}{100}) - \ln(1 + \frac{3}{100}) \), barring rounding errors.

\textsuperscript{15} See Riley & Young (2000a).

\textsuperscript{16} See Riley & Young (2000a).
As one might expect, the impact of NDYP on exits to both subsidised and unsubsidised jobs, ‘work’ in table 2.1, is greater than the impact on exits to unsubsidised jobs alone. The percentage rise in the probability of finding a job is almost twice the percentage rise in the probability of finding unsubsidised work. This suggests that subsidised jobs are also playing a significant role in getting people from welfare to work, perhaps helping those who are otherwise disadvantaged.

NDYP is having its largest effect on exits from very long-term unemployment, i.e. over 9 months, to all destinations. For people unemployed over 9 months, the probability of leaving the claimant count within the next month was 89 per cent higher than in absence of NDYP. This very substantial change in outflow rates is partly due to the design of the programme. With NDYP, the programme design is such that for most people it is simply not possible to remain in unemployment much longer than 9 months. However, as illustrated in the change in the rate of outflow to jobs, the rise in the outflow rate from long-term unemployment is not merely a case of forced exit from the claimant count (though this would not necessarily be interpreted as a negative finding, as it implies an end to passive benefit dependency). Instead some of the rise is due to an increase in outflow rates to jobs. Exit rates with and without NDYP, using estimates in table 2.1 to generate counterfactual rates, are illustrated in chart 2.1.

The estimates in table 2.1 should be treated with some caution. First, the finding of a significant positive effect on outflow rates to jobs, to unsubsidised jobs and to all destinations from long-term unemployment is a consistent finding throughout this research. However, it is not possible to estimate precisely the actual magnitude of the impact of NDYP on outflow rates. Table 2.1 illustrated one scenario using a simple difference-in-(log)difference
estimate. In reality it is possible to argue sensibly for a wide range of estimates. Second, the finding of a positive and significant effect on outflows from short-term unemployment to all destinations is similarly robust, however the estimated magnitude of this effect varies, depending on the macro controls and variables used to capture the impact of NDYP. The impact on exits from short-term unemployment to jobs is less robust. As mentioned above, it is possible to detect both positive and significant as well as negative and significant NDYP effects for these groups. The estimates in table 2.1 generally lie in the middle of this range.

Using the estimated impact of NDYP on outflow rates, it is possible to assess the share of exits from unemployment through NDYP that are additional to those that would have occurred in its absence. The first column in table 2.2 shows the number of exits from unemployment that were through NDYP during the first two years of the programme. Exits from the claimant count through NDYP include exits from the Follow-Through and Gateway stages of NDYP. In total an estimated 590 thousand exits from unemployment were through the NDYP Gateway or Follow-Through in the first two years of the programme. Of these, around 215 thousand were to unsubsidised jobs, 35 thousand to subsidised jobs and 340 thousand to other destinations. These figures are not directly comparable to the official statistics in DfEE Statistical First Releases, since they include all claim interruptions during the Gateway as exits from the claimant count through NDYP, not just those that last more than 13 weeks. This means that an individual who leaves unemployment via the Gateway twice, will be counted twice in table 2.2 but only once in the official statistics.

The second column in table 2.2 shows those exits that would not have occurred in the absence of the programme. On average, an additional 9 thousand young people leave the claimant count every month (from all unemployment durations) due to New Deal. Of these around 2½ thousand leave unemployment to go to work. Slightly over half of these job flows are to unsubsidised jobs. The remaining 6½ thousand include additional flows to the VS and ETF options, hence include additional flows to jobs in government employment and training programmes. It also includes additional flows to other destinations such as the full-time education and training option. By March 2000, two years after the national launch of the programme, the additional flows from unemployment accumulate to 215 thousand. Of these 60 thousand go directly to employment. Of the remaining 155 thousand

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18 In assessing the impact of the programme on overall unemployment and employment it is irrelevant whether it is the same individual or two separate individuals that exit unemployment to jobs through NDYP at different times.
19 The counterfactual in this calculation is generated by scaling average monthly outflows since NDYP was introduced with the estimated impact of NDYP on outflow rates.
20 The estimates used to generate these additional flows represent the average of estimates that reflect more positively and more negatively upon the impact of NDYP on outflow rates than those in table 2.1. The additional flows generated in this manner correspond quite closely to those generated by the estimates in table 2.1, with the exception of the flows to subsidised employment (the residual flow to jobs when the flow to unsubsidised jobs is removed). The estimates in table 2.1 would suggest a slightly higher flow to subsidised jobs than other estimates.
additional exits from unemployment, many will have gone to jobs in government employment and training programmes.

Table 2.2  Outflows from unemployment through NDYP*

<table>
<thead>
<tr>
<th>Destination</th>
<th>Outflows* by March 2000</th>
<th>Additional outflows by March 2000</th>
<th>per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>All destinations</td>
<td>590</td>
<td>215</td>
<td>9</td>
</tr>
<tr>
<td>Jobs</td>
<td>250</td>
<td>60</td>
<td>2 ½</td>
</tr>
<tr>
<td>Unsubsidised</td>
<td>215</td>
<td>35</td>
<td>1 ½</td>
</tr>
<tr>
<td>Subsidised</td>
<td>35</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>Other**</td>
<td>340</td>
<td>155</td>
<td>6 ½</td>
</tr>
</tbody>
</table>

Notes:
1. Additional flows exclude the wider economy effects of the programme on flows. If these are taken into account, additional flows are larger; Additional outflows are shown gross of additional inflows.
2. Numbers to March 2000 rounded to nearest five thousand; Numbers per month rounded to nearest five hundred.

* Outflows from unemployment through NDYP include exits from the NDYP Gateway, both permanent and temporary, and exits from the NDYP Follow-Through. Source New Deal Evaluation Database, DfEE Statistical First Release 24/2000, and NIESR estimates.

** Other destinations include the NDYP Voluntary Sector, Environmental Taskforce and Education & Training options, other benefits, as well as unknown destinations. Both the Voluntary Sector and Environmental Taskforce options are included in the Workforce Jobs series. Additional outflows to unknown destinations may include additional outflows to jobs, although this is not necessarily the case.

Comparing the numbers who left the claimant count via NDYP with the numbers who left the claimant count due to NDYP, the deadweight associated with outflows from unemployment through NDYP can be calculated. For example, 590 thousand people left unemployment via NDYP and 215 thousand were additional, so that the remaining 375 thousand (65 per cent) would have left unemployment without help from the programme. Note that this estimate takes account of any reduction in outflows of non-participating young unemployed people due to potential substitution of NDYP participants for non-participants. Similar calculations suggest that 75 per cent of exits to jobs from the Gateway and Follow-Through stages of NDYP would have occurred in absence of the programme. However, only around 35 per cent of those who find subsidised employment through NDYP would have found regular employment in the absence of the programme.\(^{21}\) The finding of higher deadweight associated with flows to unsubsidised employment suggests that many of those who would have left unemployment anyway in the absence of

\(^{21}\) Hales \textit{et al.} (2000) estimate the deadweight of the employment subsidy to be 69 per cent. Their estimate is calculated by asking employers whether the job would have existed without the subsidy. Here the question is whether a young person would have left unemployment and found work without the NDYP.
NDYP are doing so through the Gateway rather than the relatively expensive options.

It is important to realise the limitations of this measure of deadweight. In particular, it would be wrong to interpret it as a share of NDYP expenditure that yields no outcome. First, this measure of deadweight does not indicate the number of people leaving from options that would not have found work without prior participation in an option. Second, this measure of deadweight does not take into account the fact that some of those who leave unemployment due to NDYP soon return to unemployment (see section on inflows to unemployment below). If this were taken into account the estimate of deadweight would be higher. Third, it does not take into account the fact that individuals may have longer-term gains due to the programme. If the programme prevents the scarring effects of unemployment, a more appropriate estimate of deadweight would include the discounted value of these future benefits. As a last point, this measure does not take into account the wider economy effects of the programme, which could be substantial even if this measure of deadweight was higher. The need to take into account these wider economy effects is emphasised in e.g. Boeri, Layard & Nickell (2000). A more appropriate estimate of the value of the programme taking into account these considerations is presented in section 3.1.

**Chart 2.2: Non-additional share of outflows from unemployment through NDYP**

![Chart showing non-additional share of outflows from unemployment through NDYP](chart2_2)

Note: Bars indicate deadweight range. For example, the deadweight associated with flows off the claimant count through NDYP to all destinations lies between 50 and 80 per cent.

As mentioned previously, it is not possible to estimate precisely the actual magnitude of the impact of NDYP on outflow rates as the estimates are very sensitive to the macroeconomic controls included in estimation. Therefore, it is not possible to estimate precisely the deadweight of the programme. Rather than a deadweight number, chart 2.2 gives a plausible range for the deadweight using different estimates of additional outflows. For example, of
those who left unemployment for an unsubsidised job via the Gateway or Follow-Through, between 65 and 100 per cent may have done so in absence of the programme. Of those leaving unemployment, between 50 and 80 per cent would have done so in absence of the programme. As few as 25 to 40 per cent would have found regular employment without the employment subsidy.

**Inflows**

With the introduction of NDYP it is also possible that inflows to unemployment have changed. If for example some of the additional exits through NDYP prove to be less durable than other exits, then they will be followed by a rise in inflows. The New Deal would then be churning individuals through the programme off and on to the claimant count. Applying a similar methodology to inflows as to outflows, i.e. comparing the change in inflows before and after NDYP for 18-24 year olds to the same change for 25-29 year olds, suggests that the average inflow rate to unemployment, in the two years after NDYP was introduced, had risen by around 7 per cent. This would amount to around 5½ thousand additional inflows to unemployment per month. As with outflows, there is great uncertainty attached to this estimate.  

Others have also found evidence of a rise in inflows due to NDYP using repeat claims data. Wells & Meredith (2000) find that inflows to unemployment amongst young people are increasingly concentrated among those who signed off unemployment 3-6 months earlier. This would most likely represent the youths who, after finishing their options, were starting to flow back on to the claimant count and onto the New Deal’s Follow Through stage. Similarly, preliminary analysis (in Wilkinson 2000) suggests a significant rise since NDYP was introduced in the proportion of young people who leave and come back to unemployment 12 months after first entering long-term unemployment.

While additional inflows to unemployment will raise unemployment, whether they affect employment will generally depend on whether these additional inflows to unemployment are equivalent to additional outflows from employment. There is however little evidence so far that the rise in inflows is due to early terminations of jobs. Preliminary analysis of job terminations into non-employment (in White 2000) using data from the Labour Force Survey suggests no evidence of NDYP inducing an increased rate of movement among young people from jobs to non-employment. There is also preliminary evidence that the rise in the proportion of young people who leave from and come back to unemployment within 12 months of entering long-term unemployment is predominantly due to those returning after having participated in government supported training rather than work (Wilkinson 2000). Taken together the evidence so far suggests that the rise in inflows is primarily due to people returning from other destinations than employment.

22 See Riley & Young (2000a).
Has NDYP changed employment and unemployment?

All in all there is evidence of quite significant change in labour market flow rates due to NDYP. As illustrated in chart 2.1 in the previous section, outflow rates from unemployment of all durations are greater with NDYP than without. Furthermore, the programme has significantly changed the duration structure of exit rates. With the introduction of NDYP, exit rates from unemployment are no longer strictly decreasing in unemployment duration. This is primarily due to the design of the programme, nevertheless, a significant proportion of the rise in exit rates from long-term unemployment is due to a rise in exit rates to jobs. There is also evidence of a significant rise in flows back into the claimant count from non-employment. The next question is what these changes in flow rates imply for the numbers of young people in unemployment and in jobs.

Since outflows have risen by more than inflows it is likely that unemployment has fallen. The change in the duration structure of outflows from unemployment will necessarily imply a change in the duration structure of the unemployment stock. This can be beneficial in its own right, if it leads to a reduction in wage pressure. There is also evidence of a rise in outflows from unemployment to jobs, but so far little evidence of a rise in inflows to unemployment due to job terminations. It is therefore likely that employment has risen.

There are generally two ways to check whether NDYP has changed the numbers in jobs and unemployment. One is to use the changes in labour market flow rates to derive the change in stocks. The other is to assess the change in stocks by modelling them directly. Results from both approaches

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23 See section 2.2.
are reported here. Chart 2.3 shows the ratio of unemployment for 18-24 year olds compared to those over 25 of working age. A very striking pattern emerges. In the two years before the introduction of NDYP, the ratio of youth unemployment to other unemployment was stable, barring seasonal fluctuations. With the introduction of NDYP, this ratio has steadily declined. This provides one estimate of youth unemployment had the NDYP not been introduced. If the ratio of youth to other unemployment had remained stable through to March 2000, it would have been around 30 thousand higher than it actually was. The question is whether this change in the relation between youth unemployment and that of other age groups is due to NDYP.

One way of checking this is to look at the change in the duration structure of youth unemployment relative to that of other age groups. If the NDYP is responsible for the breakdown in the relation between youth unemployment and that of others, this would primarily be due to a reduction in youth long-term unemployment rather than youth short-term unemployment. The yellow columns in chart 2.4 show what youth unemployment of different durations would have been in March 2000, had the ratio of youth unemployment by duration to that of others remained the same as in March 1998, right before the national roll out of NDYP. The white columns show actual youth claimant unemployment at March 2000. On this basis, youth long-term unemployment (greater than 6 months) at March 2000 would have been higher by 51 thousand than it actually was. From the same picture, youth short-term unemployment at March 2000 would have been lower by 17 thousand. In total this would imply a reduction in youth unemployment in the order of 35 thousand. The change in the duration structure clearly indicates that the change in youth unemployment relative to others cannot be independent of NDYP. Nevertheless, while these comparisons of stocks are useful, they do
not control for other factors that could have altered the relationship between unemployment of different age groups.

A closer look at the pattern of youth unemployment relative to other age groups suggests the decline in youth unemployment may not be entirely attributable to NDYP. Table 2.3 shows estimates of the decline in youth unemployment relative to other age groups across New Deal Units of Delivery. While it is clear from this table that youth unemployment has fallen relative to other age groups, it is also clear that the magnitude by which it has fallen depends on which age group the young are benchmarked against. For example, comparing the change in youth unemployment, from the beginning of 2000 to the beginning of 1998, to the change in unemployment of 25-29 year olds over the same period, would suggest that youth unemployment had been reduced by around 10 thousand in the first two years of NDYP. The same comparison to 30-49 year olds would suggest that youth unemployment had fallen by around 50 thousand. This is a broad range and illustrates the uncertainties involved in determining the magnitude of the NDYP effect.

Table 2.3 Estimates of change in youth unemployment

<table>
<thead>
<tr>
<th>Difference:</th>
<th>benchmark group:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>age 25-29</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2.5  (2.02)</td>
</tr>
<tr>
<td><strong>Thousands</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-9</td>
</tr>
</tbody>
</table>

Notes: Difference in log difference estimates; [t-statistics] in brackets; December-February 1999/2000 compared to December-February 1997/1998; sample includes 95 New Deal Units of Delivery for each age group aggregated from the original 144.

Another way of assessing the change in the number of people in jobs and in unemployment due to NDYP, is to interpret what the changes in flow rates imply about changes in stocks. Chart 2.5 illustrates the change in short-term and long-term unemployment implied by the changes in flows rates in table 2.1 discussed above. On this basis, the programme has reduced youth long-term unemployment by around 45 thousand and raised youth short-term unemployment by a little less than 10 thousand, adding up to a reduction in total youth unemployment of 35 thousand. The rise in short-term unemployment occurs due to the rise in inflows to unemployment.

The reduction in unemployment is the result of a rise in employment, the number on government employment & training schemes, and the number in training and education. It may also reflect a rise in the number on other benefits. Chart 2.6 shows that after two years, the programme has increased employment (unsubsidised and subsidised jobs) by almost 15 thousand. It
also illustrates two other scenarios for the change in youth employment brought about by NDYP. As mentioned above, the magnitude of the NDYP effect on flow rates is not determined precisely. Hence, chart 2.2 illustrated a range for the size of the deadweight associated with the programme. Similarly, the uncertainty surrounding the NDYP effect on flow rates translates into uncertainty around the NDYP effect on stocks. This is illustrated by the other two scenarios shown in red. The black line shows the impact on employment generated using the estimates in table 2.1.

**Chart 2.5: Change in youth unemployment due to NDYP**

![Chart 2.5](chart2.5.png)

**Chart 2.6: Change in youth employment due to NDYP**

![Chart 2.6](chart2.6.png)
Chart 2.7 shows a similar range of estimates of the level of total youth unemployment in the absence of NDYP. The white line shows actual unemployment from March 1996 to March 2000. The black line shows what unemployment would have been in absence of the programme. This counterfactual is generated using the estimates in table 2.1. By March 2000 the difference between actual and counterfactual unemployment is around 35 thousand, suggesting that the programme has reduced total youth unemployment by this amount. Although, as the scenarios in red indicate, estimates of the NDYP effect on unemployment flow rates support a wider range. The breakdown between changes in short-term and long-term unemployment was shown above in chart 2.5.

There is also other evidence to support a reduction of approximately 30 thousand in youth claimant unemployment. Preliminary analysis suggests that NDYP has reduced the probability of being unemployed 6 months after reaching long-term unemployment by 13-18 percentage points for men and 6-14 percentage points for women. The probability of being unemployed 12 months after entering long-term unemployment has been reduced by 6-7 and 5-6 percentage points for men and women respectively. Applying these probabilities to those who joined the NDYP Gateway before September 1999 would suggest that by March 2000, unemployment was reduced by around 30 thousand.

While a range of estimates of the impact of NDYP on youth unemployment has been presented, it seems clear that the programme has reduced youth unemployment substantially. By March 2000, the reduction in youth long-term unemployment brought about by the programme is in the order of 45

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24 Wilkinson (2000)
thousand. The effect on total youth unemployment is smaller, due to the rise in inflows, at around 35 thousand. The rise in inflows implies a rise in youth short-term unemployment of slightly less than 10 thousand. Much of the additional flow from unemployment was due to a rise in exits to jobs and there is little evidence so far of NDYP inducing an increased rate of movement among young people from jobs to non-employment. By March 2000, the programme is likely to have increased employment by around 15 thousand, excluding those on government employment schemes. The next section discusses the implications of these changes in the youth labour market for the wider economy.

2.2 Further effects of the NDYP on the overall economy

The analysis so far indicates that the NDYP has led to a reduction in unemployment among young people, a fall in the average length of time that people in the target group spend unemployed and the creation of new jobs. But, as stressed earlier, there are still further effects to be taken into account. Each of these changes in the youth labour market has additional effects elsewhere in the economy that have so far been ignored. The people moving from unemployment to work have extra money to spend, those moving to full time education acquire extra skills, those searching harder for work reduce wage pressure in the overall economy. These additional effects may magnify the impact of the NDYP on the youth labour market and there are other possible channels through which the beneficial impact of the NDYP may be negated.

In order to have a sustainable impact on employment, the NDYP needs to raise the employability of the workforce and to put downward pressure on wages and/or other employment costs. Downward pressure on wages creates jobs through two channels. First, and probably most important, it raises the level of activity at which the economy can operate without generating inflationary pressure. Put another way, the non-accelerating inflation rate of unemployment (the NAIRU) is reduced. This allows aggregate demand to expand thus creating additional employment. Second, it encourages employers to create more jobs at given levels of demand for their products.

As discussed in Anderton et al (1999a) there are strong grounds for expecting the NDYP to reduce wage pressure at any given level of employment. It is widely believed that there is a link in the UK between the composition of unemployment, as between long term and short-term joblessness, and wage pressure. Because long spells of unemployment reduce the motivation of those affected to look for jobs, their unemployment puts less downward pressure on wages than if they had been very active in searching for work. An implication of this, and a motivation for the NDYP, is that sustainable unemployment can be reduced by targeting help on the long term unemployed, making them behave as if they were short term unemployed.
It is clear from the results reported above that the NDYP has reduced long term relative to short term unemployment. Has this had the predicted effect and reduced wage pressure?

**Has there been a reduction in wage pressure?**

Research in Riley and Young (2000b) suggests that reducing long term unemployment at any given level of total unemployment *does* reduce wage pressure. This means that the upward effect on wage pressure of a fall in unemployment is partly offset by a reduction in the share of long term in total unemployment.

Estimates of the size of this effect vary according to the method of estimation. An estimated historical relationship suggests that a permanent reduction in the share of long-term in total unemployment from 0.42 to 0.40, similar to the fall in the two years covered by this report, is sufficient to offset the effects on wage pressure of a rise in employment of around 100 thousand. This is a large effect as with unemployment at around a million, it could be brought about by a shift of 20 thousand people from long term to short term unemployment. But, it needs to be emphasised that such a large effect can only be sustained if the shift in unemployment composition is permanent. This requires permanently higher search activity among the unemployed that changes the duration structure of unemployment and sustains the lower rate of long-term unemployment.

Analysis of the influences on wages of different age groups implies that there is a fairly high degree of substitution between workers of different ages. As such, an excess supply of workers in one age group does not just affect the wages of that group alone, but influences pay more generally. This has important implications for the assessment of the NDYP as it implies that policy aimed at the young could have beneficial effects on the employment of others. However, the evidence also indicates that the composition of unemployment has less effect on the wages of young workers than for other age groups.

The behaviour of wages since the introduction of the NDYP provides an important test of the effect of changes in the composition of unemployment on wage setting. This is because the NDYP has caused a sharp fall in long-term relative to short-term unemployment over the past two years. If the hypothesis that a reduction in the share of long-term unemployment partially offsets the effect on wage setting of falling unemployment is incorrect then faster wage growth than suggested by the estimated historical relationship is likely.

One means of evaluating the effect of the NDYP on wage setting therefore is to re-estimate the historical relationships over the period since the NDYP has been running and include a variable measuring the size of the programme. The variable chosen is defined as the number on the programme as a proportion of the claimant count, this varies over time to reflect the strength of

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25 See Riley and Young (2000b) for details.
the ‘treatment’ provided by the NDYP programme. At face value, the evidence suggests that the impact of falls in long term youth unemployment on wage setting has been over-estimated since wage pressure over 1998 and 1999 has been larger than the equation suggests.

However, the build up of the NDYP coincides quite closely with the introduction of the National Minimum Wage (NMW) in April 1999. The size of the increase in wages not accounted for by the equation, an increase of approximately 0.7 percentage points, is very close to estimates of the impact of the NMW on aggregate wages (Riley and Young, 1998). This suggests that some effort be made to disentangle possible effects of the NDYP on wage setting from NMW effects.

Greater upward pressure on the pay of young people than the estimated relationships would predict is also found when looking at age-specific wage setting relationships. However, this is too large to be due to over-estimating the impact on wages of changing unemployment composition. In fact the change in earnings is much more likely to reflect the NMW which, despite being graded, has a greater percentage effect on the wages of the young because of their generally lower level of pay. This implies that some other information, such as regional data, is needed to separate the effect on pay of the NMW and the NDYP. Re-estimating the regional pay equations to include the extra two-year period covering 1999 and 2000 and adding the NDYP variable does not reveal a change in the effect of the composition of unemployment on wage setting. Moreover, there is some evidence that earnings pressure is reduced in those areas where the NDYP effect is strongest even after taking account of its effect on earnings through the composition of unemployment.

This possibly indicates that the effect of the NDYP in reducing wage pressure has been greater than originally expected. However, in view of the relatively short period covered, this evidence is not yet strong enough to suggest that the NDYP effect on wages might be larger than the effect working through the composition of unemployment.

This evidence suggests that there has been no change since the NDYP was introduced in the influence of the composition of unemployment on wage pressure. Consequently, the fall in long-term relative to short-term unemployment brought about by the NDYP is believed to have reduced wage pressure at any given level of employment in accordance with the estimated equations. To reflect the apparent smaller impact on wages of the composition of youth unemployment, this has been distinguished from the composition of overall unemployment in the aggregate wage equation. Its effect has been reduced to about forty per cent of that for the composition of total unemployment. The effect of a change in wage pressure caused by a shift in the composition of unemployment is illustrated using the National Institute model of the UK economy (NiDEM) in box A.
Box A  The effect of a shift in the composition of unemployment

Purely in order to illustrate the effects of a reduction in wage pressure the chart below shows how employment and unemployment would be affected by a change in the duration structure of unemployment. Here long-term unemployment is reduced and short-term unemployment raised by 20 thousand. For application to the youth labour market, the effect on wages of the composition of unemployment is set at forty per cent of the estimated effect in the aggregate time-series wage equation.

Raising the share of short-term in total unemployment imparts extra downward pressure on wages as the short term unemployed search more intensively for work. This downward pressure on wages allows aggregate demand to expand without putting upward pressure on prices and shifts the sustainable rate of unemployment downwards. The increase in employment comes about gradually, but after ten years is about 60 thousand higher than it would otherwise have been. The fall in unemployment is smaller than this reflecting the fact that some of the extra jobs will be taken by people from outside the labour force.

The effect of changing the composition of unemployment

It may seem surprising that employment can be increased in the long run by up to sixty thousand by an initial reduction in long-term unemployment of twenty thousand. But this effect on employment can only be sustained if the change in the composition of unemployment is permanent. This means that people passing through unemployment search much more intensively so as to reduce the average duration of unemployment spells. The chart also contains lines showing the effect of a temporary one-off change in the unemployment composition. The effect is so small that it is hardly visible, emphasising the importance of sustained increases in job search in generating the extra jobs.
The possible effects of the NDYP on employability and productivity

In addition to the effect of the NDYP on job search and hence wage pressure, the programme is also intended to affect the employability of those participating in it. However, an assessment of this requires an evaluation of the impact of the NDYP on individuals. It is not possible to discern an effect from the macroeconomic evidence available so far. Thus, as in Anderton et al (1999a), the NDYP is assumed to have a small permanent effect on the quality of the workforce. This is based on the following assumptions:

1. The flow onto options is approximately 20 thousand per quarter. At this rate, about one in ten of the population would join an option at some stage between the ages of 18 and 24;
2. A spell on an option is assumed to add 10 per cent permanently to the underlying productivity of each participant. This partly reflects the effect of training, but is also intended to take account of the possibility that option participation reduces the extent to which individuals are ‘scarred’ by continuous long spells of unemployment.
3. Then with equal income distribution, this would eventually (40 years) add 1 per cent to the quality of the workforce and take four years to add 0.1 per cent.
4. But because those on the NDYP will tend to be from the lower end of the skill distribution, the effect will be smaller. Therefore it is assumed to take eight years to add 0.1 per cent.

This assumption about the effect of option participation on employability mainly has a long-term impact on the macroeconomy. For the purposes of short-term analysis, the effect is sufficiently small that it could be ignored altogether.

The whole economy effects of the NDYP

The results in this section show how the various effects of the NDYP that have been identified combine together to impact on the overall economy. The initial effect of the NDYP is to increase the aggregate demand for labour across the main UK industries, as a consequence of job subsidies and the provision of work on the ETF and in the voluntary sector. Some extra demand for workers also arises from the need to deliver the programme by providing NDYP advisers, trainers and options supervisors. In this respect the NDYP acts in a similar way to any other increase in public spending. There is also assumed to be some effect on the quality of the workforce in the whole economy, but as described above, this is taken to be small. Most importantly, the NDYP has reduced long term unemployment among the NDYP group, lowering the ratio of long term to total unemployment and putting downward pressure on wages. The overall effect of the programme depends on the repercussions of these individual components throughout the economy more generally.
Based on these preferred assumptions as to how the NDYP will work, its impact is calculated using the National Institute’s model of the UK economy. Comparisons are made against a counterfactual case that estimates the state of the economy in the absence of the NDYP. This exercise involves making a number of assumptions about how policy would have reacted to different circumstances, as well as believing that the model itself provides an accurate description of macroeconomic behaviour in the UK. Experience suggests that relatively small changes in assumptions or model parameters can have an observable effect on the calculated impact of policy. For this reason the estimates of the impact of the NDYP have been rounded in the text to avoid spurious precision.

This analysis suggests that the NDYP by encouraging search activity has raised the sustainable level of employment and activity in the UK economy. Estimates of the overall effects of the NDYP on the youth labour market and the wider labour market are set out in the following tables.

Table 2.4: Impact on 18-24 year olds: Claimant unemployment

<table>
<thead>
<tr>
<th>At:</th>
<th>Less than 6 months</th>
<th>More than 6 months</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999q1</td>
<td>+3</td>
<td>-47</td>
<td>-44</td>
</tr>
<tr>
<td>2000q1</td>
<td>+7</td>
<td>-46</td>
<td>-39</td>
</tr>
</tbody>
</table>

**Expected Future Effects**

<table>
<thead>
<tr>
<th>At:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2001q1</td>
<td>+6</td>
<td>-46</td>
<td>-40</td>
</tr>
<tr>
<td>2002q1</td>
<td>+6</td>
<td>-46</td>
<td>-40</td>
</tr>
</tbody>
</table>

Table 2.4 shows the impact of the NDYP on levels of unemployment for the target group of 18 to 24 year-olds. This adds to the direct effects the further consequential effects from changes in the level of activity in the overall economy. In fact, the feedback to the youth labour market is relatively small reflecting its small share in the overall economy. The impact is greatest in the first year when the size of the client group was at its peak and before short-term unemployment rises as some of those finishing NDYP options flow back into unemployment. These more general results suggest that short-term unemployment among young people is about 5 thousand higher as a consequence of the NDYP. Long term unemployment among young people has been reduced by around 45 thousand. Overall youth unemployment has been reduced by around 40 thousand. The beneficial effect of NDYP on youth unemployment is expected to be sustained over the coming year or two.

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26 For example, monetary policy is assumed to target the inflation rate. Tax rates are assumed to be fixed at actual values and public spending, other than on the NDYP, is assumed fixed at actual levels in money terms. It is also assumed that the workplace training places provided under the Voluntary Sector (VS) and Environment Task Force (ETF) options would not otherwise have been made available by the government.
The employment effects of NDYP are shown in Table 2.5. The NDYP has directly created Workforce Jobs through two separate sources. First through the ETF and VS options, which are classified as government supported trainees and secondly through the employer option. As with unemployment, any second round effects from the expansion of the overall economy on youth employment are relatively small. Nevertheless, this simulation evidence indicates that after two years operation the NDYP had raised the number of young people in work by around 30 thousand, evenly split between regular jobs, including subsidised jobs, and NDYP options. There is not expected to be any extra effect on the stock of youth employment over the following two years.

### Table 2.5: Impact on 18-24 year olds: Employment

<table>
<thead>
<tr>
<th>At:</th>
<th>Employment*</th>
<th>Government Supported Trainees</th>
<th>Workforce Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999q1</td>
<td>+13</td>
<td>+14</td>
<td>+27</td>
</tr>
<tr>
<td>2000q1</td>
<td>+16</td>
<td>+14</td>
<td>+30</td>
</tr>
</tbody>
</table>

*Expected Future Effects*

<table>
<thead>
<tr>
<th>At:</th>
<th>Employment*</th>
<th>Government Supported Trainees</th>
<th>Workforce Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001q1</td>
<td>+16</td>
<td>+14</td>
<td>+30</td>
</tr>
<tr>
<td>2002q1</td>
<td>+16</td>
<td>+14</td>
<td>+30</td>
</tr>
</tbody>
</table>

*Employment includes those on the NDYP employer option, but excludes government supported trainees.*

### Table 2.6: Overall impact on unemployment

<table>
<thead>
<tr>
<th>At:</th>
<th>Less than 6 months</th>
<th>More than 6 months</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999q1</td>
<td>+1</td>
<td>-48</td>
<td>-47</td>
</tr>
<tr>
<td>2000q1</td>
<td>+5</td>
<td>-49</td>
<td>-44</td>
</tr>
</tbody>
</table>

*Expected Future Effects*

<table>
<thead>
<tr>
<th>At:</th>
<th>Less than 6 months</th>
<th>More than 6 months</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001q1</td>
<td>+3</td>
<td>-47</td>
<td>-44</td>
</tr>
<tr>
<td>2002q1</td>
<td>+3</td>
<td>-48</td>
<td>-45</td>
</tr>
</tbody>
</table>

The effect on overall unemployment (in Table 2.6) is dominated largely by lower unemployment among young people. However, it appears that the downward pressure on pay caused by the NDYP is likely to have increased employment opportunities for the rest of the population.

The NDYP is shown to have a beneficial impact on the economy as a whole (Table 2.7). The reduction in wage pressure allows the economy to expand by a little under 0.1 per cent per annum in real terms relative to what it would
otherwise have been. At current (2000) prices, this is worth upwards of £½ billion per annum. This is estimated to have generated about 25 thousand extra employee jobs by the first half of 2000, of which around 10 thousand went to people outside the NDYP target group. Jobs are created for people outside of the target group as falling wage pressure enables the economy to expand by more than would otherwise have been the case.

Table 2.7 Impact on wider economy

<table>
<thead>
<tr>
<th>At:</th>
<th>GDP* (per cent)</th>
<th>Employment** (thousands)</th>
<th>Workforce jobs (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999q1</td>
<td>+0.1</td>
<td>+19</td>
<td>+33</td>
</tr>
<tr>
<td>2000q1</td>
<td>+0.1</td>
<td>+25</td>
<td>+39</td>
</tr>
</tbody>
</table>

**Expected Future Effects**

<table>
<thead>
<tr>
<th>At:</th>
<th>GDP* (per cent)</th>
<th>Employment** (thousands)</th>
<th>Workforce jobs (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001q1</td>
<td>+0.1</td>
<td>+27</td>
<td>+41</td>
</tr>
<tr>
<td>2002q1</td>
<td>+0.1</td>
<td>+28</td>
<td>+42</td>
</tr>
</tbody>
</table>

* 1995 constant market prices
** Employment excludes government supported trainees.

In this analysis, the key component of the programme is its effect on wage pressure. The programme reduces wage pressure by raising the search effectiveness and employability of the unemployed through Gateway assistance, training and work experience during options and through the mere fact that benefits are time limited with NDYP. The options also raise employment directly by creating new opportunities for the long-term unemployed.

![Chart 2.8: Employment response incl. ETF and VS (difference from base)](image)
To illustrate how these two effects work, chart 2.8 shows the extra employment generated in the main case simulation alongside an estimate of how the NDYP would have worked without the direct employment effect of the NDYP options and an estimate of how the NDYP would have worked without any effect on wage pressure.

The importance of the NDYP options in moving employment more quickly into line with the change that can be sustained by lower wage pressure on its own, is illustrated by comparing the main case with the red line in chart 2.8. As the chart suggests, by around 2004 the employment effect of the NDYP would be similar with or without the direct job effect of the NDYP options, since by then extra search activity would in itself have generated the necessary extra jobs. This emphasises that the importance of the options is to bring about greater employability and search effectiveness among those who might otherwise have become detached from the labour market.

The importance of the wage pressure effect of NDYP is illustrated by comparing the main case with the yellow line in chart 2.8. This shows that job subsidies and other job creation measures are ineffective in the long-run unless they are backed up by measures to prevent them being offset by rising wage pressure.
3. Impact on the public finances

One of the key questions addressed in this research is what is the impact of the NDYP on the public finances? In answering this question, the effect of the Windfall Tax that was levied to finance the programme is ignored. Instead the main focus is on the implications of the programme itself. This analysis first sets out what is being spent on the programme and then goes on to consider the likely impact on other parts of the government budget of the economic changes due to the NDYP. It should be stressed that it is not possible to observe these effects directly. Instead macroeconomic modelling techniques are used to describe the likely implications for the budget of the changes described in the previous section.

**Overall spending on the NDYP programme**

The main publicly available source of information on NDYP spending is the figures given in successive Budget reports on how the £5.2 billion Windfall Tax levied on privatised utilities to pay for the Welfare-to-Work programme is to be allocated. Originally, the NDYP was to have been the main beneficiary of this tax but, as shown in Table 3.1, the anticipated costs of the programme have been reduced substantially since spending plans were set out in the July 1997 Budget.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>July 97</td>
<td>100</td>
<td>700</td>
<td>830</td>
<td>770</td>
<td>740</td>
<td>3150</td>
</tr>
<tr>
<td>March 98</td>
<td>100</td>
<td>580</td>
<td>650</td>
<td>640</td>
<td>640</td>
<td>2620</td>
</tr>
<tr>
<td>March 99</td>
<td>50</td>
<td>300</td>
<td>820</td>
<td>690</td>
<td>690</td>
<td>2550</td>
</tr>
<tr>
<td>March 00</td>
<td>50</td>
<td>210</td>
<td>320</td>
<td>440</td>
<td>460</td>
<td>1480</td>
</tr>
</tbody>
</table>

Source: Budget documents.

Initially, the programme was expected to have cost £3150 million spread over a five-year period. Now, it is anticipated that the cost will be £1480 million, less than half of the original estimate. Spending is forecast to rise in 2000-01 partly as a consequence of the costs associated with the intensification of the Gateway. The downward revision to spending plans over time mainly reflects the sustained reduction in unemployment seen over the last three years.

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27 Table 3.1 shows Windfall Tax allocations for New Deal for Young People. Figures include an element for New Deal for Young People in Northern Ireland.

28 In Budget 2000, the Chancellor announced an investment of £79 million per year in intensifying support in Gateway. Intensive Gateway aims to increase employability by developing effective workplace behaviours and attitudes. The key features of intensive Gateway are a two week "Gateway to Work" course to address employability skills, typically undertaken in the second month of Gateway, and weekly interviews by advisers before and after the course.
Table 3.2 reports official figures showing how total NDYP spending is broken down. This also includes some expenditure on the programme which is not funded by the Windfall Tax and therefore does not appear in table 3.1. 

Table 3.2: Spending on the New Deal for Young People

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ND Gateway and Options</td>
<td>0.3</td>
<td>100.1</td>
<td>195.6</td>
<td>296</td>
</tr>
<tr>
<td>Allowances</td>
<td>0.0</td>
<td>44.9</td>
<td>74.1</td>
<td>119</td>
</tr>
<tr>
<td><strong>Programmes</strong></td>
<td><strong>0.3</strong></td>
<td><strong>145</strong></td>
<td><strong>269.7</strong></td>
<td><strong>415</strong></td>
</tr>
<tr>
<td>New Deal personal adviser salary and other ES running and implementation costs</td>
<td>29.5</td>
<td>95.1</td>
<td>78.4</td>
<td>203</td>
</tr>
<tr>
<td>Capital costs</td>
<td>5.6</td>
<td>12.2</td>
<td>4.2</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total ES Expenditure</strong></td>
<td><strong>35.4</strong></td>
<td><strong>252.3</strong></td>
<td><strong>352.3</strong></td>
<td><strong>640</strong></td>
</tr>
<tr>
<td>Total DfEE Expenditure</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>11</td>
</tr>
<tr>
<td>Total DSS Expenditure</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total NDYP Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>668</strong></td>
</tr>
</tbody>
</table>

Source: Supplied by DfEE Finance Division.

These figures indicate that up to and including the financial year 1999-2000, £668 has been spent by the government in delivering the NDYP. Of this, £203 million has been spent on employing New Deal advisers and on other running costs, including marketing and implementation costs. The programme costs amount to £415 million, including £119 million paid in allowances to those taking part in FTET, VS and ETF options. Of the remaining £296 million, £231 million has been spent on supplying the options.

At any one time, most NDYP participants are on the Gateway. The main cost of this is in employing additional advisers to help the unemployed in their job search. The options are more expensive, but the guaranteed exit from unemployment that they offer is an essential component of the programme.

The cheapest of the options is the employer option. This costs up to £2070 per participant, made up of a £60 per week subsidy over a six-month period (twenty-two weeks) plus a contribution of £750 to training. The main reason why the employer option is the cheapest is that the NDYP participant is paid a wage by the employer and receives no state unemployment benefit.

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29 Table 3.2 shows GB expenditure on New Deal for Young People. ES expenditure for 1998-99 and 1999-2000 includes non-Windfall tax expenditure of £67.5m a year. This represents existing resource for pre-New Deal programmes which was made available to the New Deal for Young People.
Included in the costs for the other options is the allowance that participants are paid to leave them at least as well off as they would be on JSA. For the VS and ETF options this is equal to what they would have received on JSA plus an additional allowance worth about £15 per week. The allowance for FTET participants is equal to JSA and they also have materials including books provided.

Adjusting for JSA savings

In evaluating the overall cost to the Exchequer of the NDYP, account needs to be taken of the budgetary implications of the changes in employment, unemployment and national income caused by the programme. As a first step in this direction, it is worth noting that the official estimates of overall spending on the NDYP programme almost certainly give a misleadingly high impression of its exchequer cost. This is because they include the allowances paid to option participants without deducting the saving on JSA from those ceasing to be unemployed. The official approach is appropriate for those who have gone into options instead of leaving unemployment for another destination, but not for those who would otherwise have remained unemployed. For such individuals, the cost of the programme is much smaller. Since JSA in 1999 for 18-24 year olds was at least £40.70 per week and would amount to £1058 over a six month period, the net cost of the employer option to the government for somebody who otherwise would have been on JSA is therefore only £1012 per participant over a six-month placement.

While it is not possible to be certain that all option participants would have been unemployed in the absence of the NDYP programme, this is not crucial. What matters in adjusting the cost of NDYP for JSA savings is the overall change in unemployment that it has caused. Earlier figures in table 2.6 suggest that the overall reduction in unemployment due to the programme is around 45 thousand. Thus the JSA saving would amount to around £95 million per annum. On this basis, the exchequer cost in 1999-2000 of delivering the NDYP would be closer to £250 million rather than the £352 million reported in table 3.2.

Adjusting for wider economic effects

More generally further adjustments are necessary to take account of the impact on the public finances of the wider economic repercussions of the NDYP. As shown in section 2, it is likely that the NDYP has raised national income and the sustainable rate of employment in the UK and this will have had further effects on the public finances. Notably, tax payments will have gone up as a consequence of higher incomes and higher spending. But the size of these effects cannot be more precisely estimated than the response of the whole economy to the NDYP. This section illustrates how tax revenues would have changed if the economy responded to the NDYP broadly in the way described in the previous section.

The impact of the NDYP on aggregate money income in the UK is shown in chart 3.1. This shows money GDP rising by £500 million in 1998-99, by £600
million in 1999-00 and by £400 million in 2000-01. The increase in real GDP is slightly larger than this, with the lower figure in money terms reflecting a slight fall in the price level. Initially, the increase in money GDP is reflected in an increase in employee incomes as employment rises, but over time this is offset by the effect of lower wage pressure and profits rise by more.

One means of calculating the extra government revenue generated by the NDYP is to note that government receipts are now approximately 40 per cent of money GDP. As a consequence a rise in money income of £600 million, as estimated for 1999-2000, is likely to generate extra receipts of around £250 million, sufficient to cover the cost of the NDYP after JSA savings discussed above. In table 3.3, more detailed calculations of the impact of the NDYP on the public finances are shown, derived from the main case effect on the overall economy discussed in section 2.

In its first two full years of operation, extra tax receipts due to the NDYP are estimated to have been close to sufficient to pay for expenditure on the programme. According to these estimates, an outlay of over £600 million resulted in a net drain on the public finances of only a little over £100 million. Much of the extra revenue is estimated to have been generated by higher indirect tax payments. This reflects an increase in household spending. This is partly due to higher incomes generated by higher employment. But it also reflects the effect on the saving rate of the fall in unemployment. Previous National Institute research on household spending finds that it responds positively to falls in unemployment, independent of any income effect, as this makes people feel more secure about their job prospects and encourages them to save less.
Table 3.3: Detailed impact on public finances taking account of wider economic effects

difference from counterfactual, £ million

<table>
<thead>
<tr>
<th>FY</th>
<th>Net Exchequer Cost*</th>
<th>Receipts</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Indirect Taxes</td>
<td>Direct Taxes</td>
<td>Social Benefits</td>
</tr>
<tr>
<td>FY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998-99</td>
<td>+29</td>
<td>+77</td>
<td>+40</td>
</tr>
<tr>
<td>1999-00</td>
<td>+80</td>
<td>+99</td>
<td>+72</td>
</tr>
</tbody>
</table>

Expected Future Effects

|         |                  |          |             |                     |
| 2000-01 | +187              | +29      | +70         | -144                | +360 |
| 2001-02 | +194              | +27      | +74         | -168                | +370 |

Notes:
1. Additional spending of £35.4 million for 1997-8 and DfEE/DSS spending of £28 million not allocated to individual years not shown.
2. Social benefits include JSA saving.

* The net exchequer cost is equal to the increase in expenditure less the increase in receipts. Total receipts and expenditure include further items not shown in the table. These are debt interest payments, profits on government trading, spending on fixed investment and social contributions paid to government.

The estimated increase in direct taxes is entirely due to higher income tax payments caused by the greater level of activity in the UK economy. Some of the additional income tax will have been paid by those who would have been out of work without the NDYP. However, this is likely to be a relatively small part of the overall total. According to survey evidence, the majority of those who found unsubsidised work through the NDYP earned around £4.50 an hour, while those on the employer option earned around £3 an hour. Annual earnings on this level of pay amount to around £8500 for those in unsubsidised jobs and £6000 for those in subsidised jobs. With the single person’s tax allowance set at £4335, and the tax rate at 10p on the first £1500 of taxable earnings and 23p thereafter, a person earning £6000 per annum would pay £188 in income tax and a person earning £8500 would pay £648. The additional regular youth employment of around 15 thousand estimated for 1999 would generate extra annual income tax payments of only £10 million, even if all them were being paid £8500 per annum. Thus these direct effects on tax revenues are small.

According to official figures, spending on the NDYP is forecast to rise by over £100 million in 2000-2001 despite the fact that the number of participants in the programme has been falling from its peak in July 1999. This arises from the costs associated with changes to the Gateway which are intended to increase its intensity. Since it is not possible to take account of this change in

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the nature of the programme, it would be inconsistent to take account of the estimated change in its cost. In the analysis of the overall macroeconomic effects of the NDYP, which requires a forecast of future costs, it has been assumed that spending in real terms remains at around 1999-2000 levels.

On the receipts side a much smaller gain in indirect tax payments in future years is expected as household spending wanes after the initial surge that was induced by the fall in unemployment. The saving on social benefits increases as the aggregate employment effects of the NDYP build up, but these are not sufficient to offset the slackening in the effect on indirect taxes.

Given that estimates of the impact on the deficit fluctuate from year to year in line with changes in the growth path of the economy, it is better to look at the estimated impact averaged over a number of years. Assuming that there is no offset to higher spending of £35 million in 1997-98 and other spending not allocated to individual years, then over the five-year period considered here, additional gross NDYP spending of £1.4 billion results in increased net borrowing of just under £0.6 billion. This implies that only a small proportion of the Windfall Tax is actually needed to fund the NDYP over the life of the current parliament, the period over which the programme was originally intended to operate.

**Cost per job**

These estimates of the net exchequer cost of the NDYP can be combined with estimates of the number of jobs created to calculate the exchequer cost per job. There are a number of approaches to this. The simplest is to divide the gross cost of the programme by the number of people who have left the programme to take up a job. However, as discussed in previous sections, most flows into jobs would have occurred in the absence of the NDYP and the gross cost does not take into account the revenue generated by the programme or JSA savings. Hence, the assessment of the programme as a whole presented in this report can be used to calculate the net budgetary cost of each additional job. This is shown in table 3.4.

In calculating these figures, the denominator includes only the stock of additional *regular* jobs created as a consequence of the NDYP programme, i.e. additional jobs in the VS and ETF options are excluded. These figures suggest that the cost per job is in the region of £7 thousand per annum. The average cost per additional job, including those working on the ETF and VS options, is around £4 thousand per annum.
### Table 3.4 Cost per job calculations

<table>
<thead>
<tr>
<th>FY</th>
<th>Additional jobs (thousands, all age groups)</th>
<th>Net exchequer cost (£million)</th>
<th>Cost per job (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-99</td>
<td>6</td>
<td>29</td>
<td>4800</td>
</tr>
<tr>
<td>1999-00</td>
<td>24</td>
<td>80</td>
<td>3300</td>
</tr>
<tr>
<td>2000-01</td>
<td>26</td>
<td>187</td>
<td>7200</td>
</tr>
<tr>
<td>2001-02</td>
<td>27</td>
<td>194</td>
<td>7200</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>20</strong></td>
<td><strong>140</strong></td>
<td><strong>7000</strong></td>
</tr>
</tbody>
</table>

Note: Additional jobs excludes VS and ETF employment on NDYP. Average exchequer cost includes spending of £64 million incurred in 1997-98 and that not allocated to individual years.

In general, the cost of the jobs generated by the NDYP appears relatively small although it is not clear what this should be compared against. The cost to the Exchequer is a very narrow measure of the costs of the programme which takes no account of the benefits accruing to those who have participated in it. A more meaningful welfare comparison is to ask whether those who have gained from the programme could compensate the taxpayers who have financed it and still be better off. According to these estimates, in its first two years national income is a little under 0.1 per cent higher as a consequence of the programme, currently worth slightly more than £½ billion per annum, suggesting that the NDYP is performing a useful function in the UK economy. In the longer term, if the productivity enhancing aspects of the programme become quantitatively more important, the improvement could be larger.
References


Research areas covered by the National Institute include Britain and finance; education and labour; employment and social policy; exiting the EU; macroeconomics; and trade, investment & productivity. National Institute Economic Review. Since 1959, the NIESR has published the National Institute Economic Review. the National Savings Stock Register. the National Trust. the natural sciences. Test your vocabulary with our fun image quizzes.

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