## Title:

## Further Education - 24+ Advanced Learning Loans

## IA No:

Lead department or agency:
BIS
Other departments or agencies:
Skills Funding Agency

Impact Assessment (IA)
Date: 08/06/2012
Stage: Final
Source of intervention: Domestic
Type of measure: Secondary legislation
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## Summary: Intervention and Options

Cost of Preferred (or more likely) Option - Option 4

| Total Net Present <br> Value | Business Net <br> Present Value | Net cost to business per <br> year (EANCB on 2009 prices) | In scope of One-In, Measure qualifies as <br> One-Out? |  |
| :--- | :--- | :--- | :--- | :--- |
| $+£ 11,197 \mathrm{~m}$ | $-£ 6 m$ | $£ 0.8 \mathrm{~m}$ | Yes | IN |

What is the problem under consideration? Why is government intervention necessary?
Given tighter resources as a result of the Spending Review 2010 - the overall Further Education (FE) and Skills budget will be reduced by $25 \%$ between 2011-12 and 2014-15 - the challenge for Government is to ensure that its remaining investment in this area is targeted such that economic impact, and therefore value for money, is maximised.

Skills make an important contribution to economic growth, both through raising the employment opportunities for individuals and by increasing productivity. However, the UK lags behind other OECD countries in terms of the proportion of individuals holding qualifications at or above level 2. Government intervention in FE and Skills is justified by the presence of market failures - including spillovers to other individuals and employers, wider benefits to society as a whole, imperfect information and credit market constraints. Government funding should be targeted where market failures are greatest, and where funding can have the greatest impact.

## What are the policy objectives and the intended effects?

In the context of reductions in levels of public spending in the Spending Review 2010, compared to previous Spending Reviews, it is necessary to reassess the balance of who contributes to the costs of FE. To the extent that individuals or their employers benefit (e.g. in the form of higher wages or increased profits), then we should look to reassess the contribution which they make, compared to the level of subsidy. The proposed changes prioritise available grant funding on young people, those without basic skills, and those seeking work; and remove grant funding for learners aged 24 and over, at Level 3 and above. Evidence suggests that these qualifications bring significant future benefits to individuals, and therefore they should fund the costs to a greater extent. However, income contingent loans - based on those in Higher Education - will be made available in order to provide access to the necessary finance to afford contributions upfront. Such a system will generate higher economic returns than investing the same amount of money (net of learner repayments) under current grant funding arrangements (Option 2), thus delivering better value for money.

This Impact Assessment presents a central estimate of the potential take-up of income contingent loans, with a total Net Present Value of $+£ 11,197 \mathrm{~m}$, but also includes an "upper bound" estimate, reflecting that we will use management action to maximise individuals' awareness and understanding of the loans system, such that all the funding for loans is taken up.

## What policy options have been considered, including any alternatives to regulation? Please justify preferred

 option (further details in Evidence Base)The options considered are the same as those in the consultation-stage Impact Assessment, published in July 2011. However, this final-stage Impact Assessment contains the Department's latest modelling of the number of learners who can be supported under the different options, and incorporates the results of new research with potential learners on their attitudes towards loans, and therefore potential levels of take-up under the preferred option.

Although Option 1 is the starting point for the analysis in this Impact Assessment, in practice it is not itself an option, because of the reduced level of funding available for FE and Skills as a result of the 2010 Comprehensive Spending Review. A more appropriate baseline i.e. what we might reasonably consider to be the 'do nothing' option, is maintaining the current system but with a reduced level of funding. This is considered in option 2 - where we invest the same amount, net of learner repayments, as we do in a system of loans, given assumptions about take-up. We are therefore comparing like-forlike i.e. economic returns under the two different systems for the same level of government investment.

Option 1: Continue grant funding according to the position prior to the Spending Review. This is not itself an option in light of reductions in the FE and Skills budget, and is therefore not considered further. It is however used as the starting point for our analysis, in particular as a basis for assessing take-up of loans under the preferred option.
Option 2: Continue grant funding, but with a reduced level of public funding i.e. to the same amount we invest through loans (net of learner repayments) under Option 4. This is the most appropriate benchmark against which the other possible options can be assessed, because it takes into account the reduction in the FE and Skills budget. It is therefore used as the baseline for this assessment. However, it was ruled out as an option because we can support a smaller number of learners for the same amount of funding compared to option 4; it therefore offers lower value for money relative to the preferred option.
Option 3: Stop grant funding provision for new learners from the 2013/14 academic year (and do not replace with any system of loans). This has been ruled out because of the estimated large reduction in learner numbers and thus in economic value added.
Option 4: Replace grant funding with income contingent loans based on those in HE. This option would enable support to be provided to learners at the point of access, thus overcoming problems in accessing finance. Loans would only become repayable when the learner had reached the prescribed earnings threshold. This is the preferred option, because relative to Option 2, more learners are supported for a given amount of government funding. It therefore delivers greater economic returns.
Option 5: Replace grant funding with Professional Career and Development style loans. Loans would be provided by commercial organisations at the market rate. This has been ruled out on the basis that it does not meet policy requirements in terms of providing the necessary access to loans, and has thus not been considered further, nor worked up in detail (and presented as a summary sheet) bearing in mind proportionality.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 09/2014

| Does implementation go beyond minimum EU requirements? | No |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Are any of these organisations in scope? If Micros not <br> exempted set out reason in Evidence Base. | Micro <br> Yes | $<\mathbf{2 0}$ <br> Yes | Small <br> Yes | Medium <br> Yes | Large <br> Yes |
| What is the $\mathrm{CO}_{2}$ equivalent change in greenhouse gas emissions? <br> (Million tonnes $\mathrm{CO}_{2}$ equivalent) | Traded: <br> 0 | Non-traded: <br> 0 |  |  |  |

> The Chief Economist has been consulted on the Impact Assessment. The overall approach to the cost-benefit analysis has been approved, and the Chief Economist advises that, given the available evidence, the Impact Assessment represents a reasonable view of the likely costs, benefits and impacts of the policy.

Amanda Rowlatt
Date: $4^{\text {th }}$ April 2012

Summary: Analysis \& Evidence
Description: Continue grant funding according to the position prior to the Spending Review - assuming that funding is the same as in 2013-14 for each subsequent year. This option is not feasible in light of reductions to the FE and Skills budget.
FULL ECONOMIC ASSESSMENT

| Price Base <br> Year: <br> 2012 | PV Base <br> Year: <br> $2013-14$ | Time <br> Period <br> Years <br> 46 | Low: | Net Benefit (Present Value (PV)) (£m) |
| :--- | :--- | :--- | :--- | :--- | :--- |


| COSTS (£m) | $\begin{array}{c}\text { Total Transition } \\ \text { (Constant Price) }\end{array}$ |  | Years |
| :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Average Annual <br>

(excl. Transition) (Constant Price)\end{array} \quad $$
\begin{array}{l}\text { Total Cost } \\
\text { (Present Value) }\end{array}
$$\right]\)

## Description and scale of key monetised costs by 'main affected groups'

The estimates above refer to learners starting their courses over a ten-year period - thus implying ten annual cohorts. These costs will all be incurred over the next ten years, but the average annual costs (in the table above) are calculated over a period of 46 years in order to make them comparable with the costs under the preferred option (where loans are repaid over a period of up to 30 years) and with the benefits presented in relation to this option. The fact that these costs are realised over a shorter time period than the benefits is taken into account when calculating the NPV figures above.

The costs of this option, relative to the baseline (Option 2), include the higher government funding costs, due to the fact that more learners are being supported. This higher funding amounts to around $£ 207 \mathrm{~m}$ in 2013-14 and $£ 199 \mathrm{~m}$ in each year from 2014-15 onwards. There will also be a higher level of contributions paid by individuals and their employers, amounting to around $£ 11 \mathrm{~m}$ more in 2013-14 and $£ 24 \mathrm{~m}$ more in each year from 2014-15 onwards. This reflects the fact that although fewer qualifications will be wholly privately-funded relative to the baseline (because some of the increased government provision will represent 'deadweight'), this will be outweighed by the increase in individual and employer contributions towards co-funded qualifications.

On top of this, the increased level of learning compared to the baseline means that more output will be foregone whilst learning takes place. Compared to the baseline, this amounts to around $£ 852 \mathrm{~m}$ for the 201314 cohort, and $£ 800 \mathrm{~m}$ for each cohort of learners from 2014-15 onwards.

See Annex 2 embedded spreadsheet for full derivation of average annual costs relative to the baseline.
Although this scenario is used as the starting point for our analysis, in practice it is not itself an option, because of the reduced level of funding available for FE and Skills as a result of the 2010 Comprehensive Spending Review.

Other key non-monetised costs by 'main affected groups'

| BENEFITS (£m) | $\begin{array}{c}\text { Total Transition } \\ \text { (Constant Price) }\end{array}$ | Years |
| :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Average Annual <br>

(excl. Transition) (Constant Price)\end{array} \quad $$
\begin{array}{l}\text { Total Benefit } \\
\text { (Present Value) }\end{array}
$$\right]\)

Description and scale of key monetised benefits by 'main affected groups'
The estimates above refer to learners starting their courses over a ten-year period - thus implying ten annual cohorts.

The benefits include the increased future value added, due to the higher number of learners compared to the baseline. Relative to the baseline, there would be around 126,000 more learner starts in 2013-14, and 121,000 more in each year from 2014-15 onwards. There is strong evidence that learning generates substantial economic benefits (described in the evidence base section), which are realised over the rest of the learner's working life. Under this option, the economic value added, discounted over their lifetime, is around $£ 9.5$ billion higher for the cohort of learners starting their courses in 2013-14, and $£ 9.3$ billion higher for each cohort from 2014-15 onwards (the estimates for subsequent cohorts are further discounted to reflect the later 'starting point'). These benefits would have been realised over the rest of the learners' working lives, amounting to a period of 46 years in total.

See Annex 2 embedded spreadsheet for full derivation of average annual benefits.

Although this scenario is used as the starting point for our analysis, in practice it is not itself an option, because of the reduced level of funding available for FE and Skills as a result of the 2010 Comprehensive Spending Review.

## Other key non-monetised benefits by 'main affected groups'

Research suggests that there are wider social benefits associated with adult learning, such as improved confidence, positive impacts on health, and a reduced propensity to commit crime. Such benefits would also be higher given the increased number of learners compared to the baseline. However, they are more difficult to quantify.

## Key assumptions/sensitivities/risks

## Discount rate (\%)

- But for the reductions in public funding as a result of the Spending Review 2010 (compared to previous Spending Reviews) we assume that the level of funding, and thus the number of learners who could be supported under this option, would have continued at the same level an in 2013-14 for the rest of the period covered by this Impact Assessment.
- Based on our assessment of the evidence, we assume deadweight of around $10 \%$ across all learning streams. In other words, if government funding is increased relative to the baseline, then $10 \%$ of the extra learning which government now funds would still have gone ahead on a privately-funded basis.
- This policy option would not impose any further statutory obligations or direct costs on businesses. Therefore, this would be out-of-scope for the purposes of 'One-In One-Out' (OIOO). Although there are indirect benefits, resulting from the reduction in skilled labour, such costs are not in scope for OIOO.


## BUSINESS ASSESSMENT (Option 1)

| Direct impact on business (Equivalent Annual) $£ \mathrm{~m}$ : |  | In scope of OIOO? Measure qualifies as |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Costs: 0 | Benefits: 0 | Net: 0 | No | NA |

## Summary: Analysis and Evidence

Description: Continue grant funding for individuals aged 24+ at Level 3 and above, as under the current system, but at a reduced level. Under this option, the number of learners would be determined by the amount of funding invested in income contingent loans under the preferred option. The net lifetime benefit of this and other options, for each cohort of learners starting courses in 2014-15 onwards, is shown in Table 28 of this Impact Assessment. The net benefit of this option compared to Option 4 (income contingent loans) is $£ 1.4$ billion lower for each cohort of learners from 2014-15 onwards, and compared to Option 3 (stop grant funding) is $£ 5.4$ billion higher.

| Price Base <br> Year: <br> 2012 | PV Base <br> Year: <br> $2013-14$ | Time Period <br> Years <br> 46 | Net Benefit (Present Value (PV)) (£m) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Low: | High: | Best Estimate: $\mathbf{0}$ |  |


| COSTS (£m) | $\begin{array}{c}\text { Total Transition } \\ \text { (Constant Price) }\end{array}$ |  | Years |
| :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Average Annual <br>

(excl. Transition) (Constant Price)\end{array} \quad $$
\begin{array}{l}\text { Total Cost } \\
\text { (Present Value) }\end{array}
$$\right]\)

Description and scale of key monetised costs by 'main affected groups'
The relative costs are zero, since this is the baseline against which the other options are assessed. Under this baseline, there would be 101,000 learner starts in 2013-14 and 106,000 in each year from 2014-15 onwards. The costs are derived on this basis, and are outlined in more detail later in this Impact Assessment.

Other key non-monetised costs by 'main affected groups'

| BENEFITS (£m) | $\begin{array}{c}\text { Total Transition } \\ \text { (Constant Price) }\end{array}$ | Years |
| :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Average Annual <br>

(excl. Transition) (Constant Price)\end{array} \quad $$
\begin{array}{l}\text { Total Benefit } \\
\text { (Present Value) }\end{array}
$$\right]\)

Description and scale of key monetised benefits by 'main affected groups'
The relative benefits are zero, since this is the baseline against which the other options are assessed. Under this baseline, there would be 101,000 learner starts in 2013-14 and 106,000 in each year from 2014-15 onwards. The benefits are derived on this basis, and are outlined in more detail later in this Impact Assessment.

Other key non-monetised benefits by 'main affected groups'

## Key assumptions/sensitivities/risks

Discount rate (\%) $3.5,3$
It is assumed that the mix of provision across different learning streams, and between co-funded and fully-funded aims, is the same as under Option 1. Learner numbers are simply scaled down from this, to reflect the lower level of government funding available.

| Direct impact on business (Equivalent Annual) $£ m$ : |  | In scope of OIOO? | Measure qualifies as: |  |
| :--- | :--- | :--- | :--- | :--- |
| Costs: 0 | Benefits: 0 | Net: 0 | No | N/A |

## Summary: Analysis and Evidence

Description: Stop grant funding for learners aged $24+$ at Level 3 and above from the start of the 2013/14 academic year (and do not replace with any system of loans). The net lifetime benefit of this and other options, for each cohort of learners starting courses in 2014-15 onwards, is shown in Table 28 of this Impact Assessment. As shown in table 29, the net benefit of this option compared to Option 2 is $£ 5.4$ billion lower for each cohort of learners from 2014-15 onwards, and compared to Option 4 (income contingent loans) is $£ 6.7$ billion lower.

| Price Base | PV Base | Time Period |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Year: |  |  |
| 2012 |  |  |


| COSTS (£m) | $\begin{array}{c}\text { Total Transition } \\ \text { (Constant Price) }\end{array}$ |  | Years |
| :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Average Annual <br>

(excl. Transition) (Constant Price)\end{array} \quad $$
\begin{array}{l}\text { Total Cost } \\
\text { (Present Value) }\end{array}
$$\right]\)

Description and scale of key monetised costs by 'main affected groups'
The estimates above refer to learners starting their courses over a ten-year period - thus implying ten annual cohorts. Because of the lower number of learners relative to the baseline, the categorisation of costs and benefits is effectively 'reversed' compared to the other options.

The costs are therefore in terms of future value added which is foregone, due to the reduction in learner numbers compared to the baseline (Option 2). Relative to the baseline, there will be around 54,000 fewer learner starts in 2013-14, and 83,000 fewer in each year from 2014-15 onwards. There is strong evidence that learning generates substantial economic benefits (described in the evidence base section), which are realised over the rest of the learner's working life. Under this option, the economic value added, discounted over their lifetime, is around $£ 3.7$ billion lower for the cohort of learners beginning their course in 2013-14 and $£ 6.1$ billion lower for each cohort from 2014-15 onwards (the costs for subsequent cohorts are further discounted to reflect the later 'starting point'). The value added which is foregone would have been realised over the rest of the learners' working lives, amounting to a period of 46 years in total.

See Annex 2 embedded spreadsheet for full derivation of average annual costs.

## Other key non-monetised costs by 'main affected groups'

Research suggests that there are wider social benefits associated with adult learning, such as improved confidence, positive impacts on health, and a reduced propensity to commit crime. Such benefits would also be foregone given the lower number of learners compared to the baseline. However, they are more difficult to quantify.

| BENEFITS (£m) | $\begin{array}{l}\text { Total Transition } \\ \text { (Constant Price) }\end{array}$ |  | Years |
| :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{l}Average Annual <br>

(excl. Transition) (Constant Price)\end{array} \quad $$
\begin{array}{l}\text { Total Benefit } \\
\text { (Present Value) }\end{array}
$$\right]\)

Description and scale of key monetised benefits by 'main affected groups'
The estimates above refer to learners starting their courses over a ten-year period - thus implying ten annual cohorts. These benefits will all be incurred over the next ten years, but the average annual benefits (in the table above) are calculated over a period of 46 years in order to make them comparable with the costs presented in relation to this option. The fact that these benefits are realised over a shorter time period than the costs is taken into account when calculating the NPV figures above.

The key monetised benefits of the preferred option include the reduction in government funding costs due to the withdrawal of funding from supporting this group of learners. In 2013-14, the saving in government funding amounts to $£ 77 \mathrm{~m}$ - there is still some funding required to continue to fund learners carrying over from the previous year, as well as those who start their course prior to the start of the academic year in September. In 2014-15, the reduction in government funding costs compared to the baseline will amount to $£ 167 \mathrm{~m}$; a small amount of funding would be required in 2014-15 to support learners who have not yet completed courses which started prior to the introduction of loans, so this benefit will increase to $£ 211 \mathrm{~m}$ in subsequent years. There will also be a lower level of contributions paid by individuals and their employers, amounting to around £5m less in 2013-14, £23m less in 2014-15 and £67m less in each year from 2015-16 onwards. These reductions reflect the fact that although more qualifications will be wholly privately-funded (due to the removal of government funding which was previously 'deadweight'), this will be outweighed by the reduction in individual and employer contributions towards co-funded qualifications.

On top of this, the lower level of learning compared to the baseline suggests that less output will be foregone whilst learning takes place. Relative to the baseline, this amounts to around $£ 325 \mathrm{~m}$ for the 2013-14 cohort and then $£ 543 m$ for each cohort from 2014-15 onwards.

See Annex 2 embedded spreadsheet for full derivation of average annual benefits.

## Other key non-monetised benefits by 'main affected groups'

Because more qualifications will be wholly privately-funded, this could provide incentives for learners and their employers to choose courses with greater and more certain economic value, thus enhancing the value of the learning which does take place. However, the evidence presented in the evidence base suggests that deadweight in publicly-funded provision is relatively low, and therefore this effect is likely to be small. In any case, it is difficult to quantify the impact of this effect on the economic value of courses undertaken.

## Key assumptions/sensitivities/risks

Discount rate (\%) 3.5, 3

- Based on our assessment of the evidence, we assume deadweight of around 10\% across all learning streams. In other words, if government funding was reduced and no other measures (e.g. loans) were put in place, then 10\% of learning would still go ahead on a privately-funded basis.
- This policy option would not impose any further statutory obligations or direct costs on businesses. Therefore, this would be out-of-scope for the purposes of OIOO. Although there are indirect costs, resulting from the reduction in skilled labour, such costs are not in scope for OIOO because of their indirect nature.

| Direct impact on business (Equivalent Annual) $£ m$ : |  |  | In scope of OIOO? | Measure qualifies as: |
| :--- | :--- | :--- | :--- | :--- |
| Costs: 0 | Benefits: 0 | Net: 0 | No | N/A |

## Summary: Analysis and Evidence

Policy Option 4
Description: Replace grant funding with income contingent loans, based on those in HE, for individuals aged 24+ at Level 3 and above. This option would enable support to be provided to learners at the point of access, thus overcoming problems in accessing finance. Loans would only become repayable when the learner had reached the prescribed earnings threshold. The net lifetime benefit of this and other options, for each cohort of learners starting courses in 201415 onwards, is shown in Table 28 of this Impact Assessment. As shown in table 29, the net benefit of this option compared to Option 2 is $£ 1.4$ billion higher for each cohort of learners from 2014-15 onwards, and compared to Option 3 is $£ 6.7$ billion higher. This is the preferred option, because relative to Option 2, more learners are supported for a given amount of government funding. This option therefore delivers greater economic returns on government investment.

| Price Base | PV Base | Time Period |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Year: | Year: | Years |
| 2012 |  |  |


| COSTS (£m) | Total Transition (Constant Price) | Years | Average Annual (excl. Transition) (Constant Price) | Total Cost (Present Value) |
| :---: | :---: | :---: | :---: | :---: |
| Low | N/A |  |  |  |
| High | N/A |  | 97 | 3,520 |
| Best Estimate | N/A |  | 43 | 1,613 |

## Description and scale of key monetised costs by 'main affected groups'

The estimates above refer to learners starting their courses over a ten-year period - thus implying ten annual cohorts. The central estimate is based on an assessment of research undertaken since the consultation stage IA, which suggests that around 55\% of the learners who would have been supported under option 1 would go ahead with learning under such a system of loans. This would mean that around $70 \%$ of the available funding for loans is taken up in 2014-15. However, given the lower level of funding available in 2013-14, the same take-up of learning relative to option 1 implies that all of the available loans funding would be taken up in that year.

Because of the way in which this option has been defined, government funding costs - net of learner repayments - are the same as under the baseline. However, contributions paid by learners and their employers will increase. For the cohort of learners beginning their course in 2013-14, private contributions will be around $£ 10 \mathrm{~m}$ higher than under the baseline, and for each cohort from 2014-15 onwards, they will be $£ 77 \mathrm{~m}$ higher. Whilst employer contributions will be paid upfront, learners repayments will potentially be made over the rest of the their working lives - up until 30 years after their course has ended, when any unpaid loans would be written off.

On top of this, the higher number of learners compared to the baseline suggests that more output will be foregone while learning takes place. This amounts to $£ 129 \mathrm{~m}$ more for each cohort of learners from 2014-15 onwards. This cost will be a short-term one - realised over the period when learning would have taken place. For the 2013-14 cohort, this benefit would amount to $£ 42 \mathrm{~m}$.

There are also direct costs to businesses under this option, the derivation of which is outlined in more detail in the evidence base section. There would be an initial compliance cost of $£ 0.8 \mathrm{~m}$ to collect repayments for loans, which would be incurred in the 2014-15 financial year - in preparation for the first cohort, due to enter repayment in 2016. Then, from 2015-16 onwards, there would be an estimated annual cost of around $£ 0.8 \mathrm{~m}$ per year. This reflects the cost of two obligations for employers - to make the necessary salary deductions each month, and to submit annual returns to HM Revenue and Customs (HMRC) on the repayments deducted by the employer.

The 'high' costs above follow our assessment that an upper bound would be to assume that take-up of loans is such that around $90 \%$ of the learners, who would have been supported under option 1, would still go ahead with learning under this option in 2014-15. This is equivalent to assuming that all of the funding available for loans would be taken up. In 2013-14, all of the funding is taken up under our central estimate, so this assumption remains the same here. Again, in order to continue to compare the two options based on the same level of government investment, the grant funding provided under option 2 has been increased accordingly (for 2014-15). Compared to this revised baseline, the number of learner starts would be 8,000 higher than the baseline in 2013-14 (as under the central estimate), and 48,000 higher in each year from 2014-15 onwards. Contributions by individuals and employers would be around $£ 10 \mathrm{~m}$ higher than under the baseline for the 2013-14 cohort, and $£ 134 m$ higher for the 2014-15 cohort and each cohort thereafter. Output foregone while learning takes places would be $£ 42 \mathrm{~m}$ higher in 2013-14 and $£ 324 \mathrm{~m}$ higher in each year from 2014-15 onwards. The costs to businesses, in terms of administering loan repayments, are slightly higher than under our central estimate - to reflect the higher number of learners, and therefore more businesses needing to administer repayments - around $£ 1.2 \mathrm{~m}$ in 2014-15 and each year thereafter.

See Annex 2 embedded spreadsheet for full derivation of average annual costs.

## Other key non-monetised costs by 'main affected groups'

| BENEFITS (£m) | Total Transition (Constant Price) | Years | Average Annual (excl. Transition) (Constant Price) | Total Benefit (Present Value) |
| :---: | :---: | :---: | :---: | :---: |
| Low | N/A |  |  |  |
| High | N/A |  | 1,590 | 31,479 |
| Best Estimate | N/A |  | 593 | 12,810 |

## Description and scale of key monetised benefits by 'main affected groups'

The estimates above refer to learners starting their courses over a ten-year period - thus implying ten annual cohorts. The central estimate is based on an assessment of research undertaken since the consultation stage IA, which suggests that around $55 \%$ of the learners who would have been supported under option 1 would go ahead with learning under such a system of loans. This would mean that around $70 \%$ of the available funding for loans is taken up in 2014-15. However, given the lower level of funding available in 2013-14, the same take-up of learning relative to option 1 implies that all of the available loans funding would be taken up in that year.

The benefits are in terms of increased future value added, due to the higher number of learners compared to the baseline (Option 2). Relative to the baseline, and under our central estimate, there will be around 8,000 more learner starts in 2013-14, and 19,000 more in each year from 2014-15 onwards. There is strong evidence that learning generates substantial economic benefits (described in the evidence base section), which are realised over the rest of the learner's working life. Under this option, the economic value added, discounted over their lifetime, is around $£ 0.6$ billion higher for the cohort of learners starting their courses in 2013-14, and $£ 1.6$ billion higher for the 2014-15 cohort onwards (the benefits for subsequent cohorts are further discounted to reflect the later 'starting point'). These benefits would have been realised over the rest of the learners' working lives, amounting to a period of 46 years in total.

The 'high' benefits above follow our assessment that an upper bound would be to assume that take-up of loans is such that around $90 \%$ of the learners, who would have been supported under option 1, would still go ahead with learning under this option in 2014-15. This is equivalent to assuming that all of the funding available for loans would be taken up. In 2013-14, all of the funding is taken up under our central estimate, so this assumption remains the same here. The number of learner starts would therefore be 8,000 higher than the revised baseline in 2013-14, and 48,000 higher in each year from 2014-15 onwards. This means that the increase in value added over the 46 -year period would amount to $£ 0.6$ bn for the 2013-14 cohort, and $£ 4$. Obn for the 2014-15 cohort and each subsequent cohort.

See Annex 2 embedded spreadsheet for full derivation of average annual benefits.

Other key non-monetised benefits by 'main affected groups'

- Research suggests that there are wider social benefits associated with adult learning, such as improved confidence, positive impacts on health, and a reduced propensity to commit crime. Such benefits would also be higher under this option, given the increased number of learners compared to the baseline. However, they are more difficult to quantify.
- The preferred option could also provide incentives for learners to undertake courses with greater and more certain economic value, thus enhancing the value of the learning which does take place. Learners could also place greater focus on quality and practical relevance of the course undertaken, which could have similarly positive effects. This would further increase the future value added relative to the baseline, but the extent of this is difficult to quantify.


## Key assumptions/sensitivities/risks

Discount rate (\%) 3.5, 3

- For our central estimate, we assume that around $55 \%$ of the learners who would have been supported under option 1 would go ahead with learning under such a system of loans. This is based on our assessment of the evidence - in particular, bespoke research on potential learners' attitudes towards the introduction of loans, which has been undertaken since the publication of the consultation stage IA in July 2011. This evidence is outlined in detail in the evidence base section, and implies that around 70\% of the funding available for loans is taken up in 2014-15, and all of the funding is taken up in 2013-14. There will be considerable work undertaken to increase awareness and knowledge of loans, such that all the funding for loans is taken up. We have defined this level of take-up the "upper bound". Our upper bound estimate of NPV is based on around $90 \%$ of the learners who would have undertaken learning under option 1, doing so under a system of loans, and is equivalent to assuming that all of the funding available for loans would be taken up in both 201314 and 2014-15.
We also adopt the position that $40 \%$ of loans will be repaid by learners. This is based on modelling using Labour Force Survey data. This group is different in many respects from HE learners, for whom an income-contingent loan system is already in place. In particular, FE learners have lower incomes on average than HE learners. As a result, our estimate of the proportion of loans which will be repaid is lower than in Higher Education.
- This option is within scope for OIOO because of the direct costs to businesses of administering loan repayments - outlined in the costs section above. There will also be indirect benefits to businesses in terms of the positive impact on productivity stemming from an increased amount of skilled labour, but these are not considered to be in-scope for OIOO purposes.

| Direct impact on business (Equivalent Annual) $£ m$ ): |  |  | In scope of OIOO? | Measure qualifies as: |
| :--- | :--- | :--- | :--- | :--- |
| Costs: $£ 0.8$ | Benefits: 0 | Net: $-£ 0.8$ | Yes | In |

## Evidence Base (for summary sheets)

Skills make an important contribution to economic growth, both through raising the employment opportunities for individuals and by increasing productivity. International evidence suggests that the UK is ranked $9^{\text {th }}$ out of the 34 OECD countries (who provide such data) in terms of the proportion of the working age population with higher-level qualifications (Level 4+), and only $19^{\text {th }}$ out of 33 in the proportion holding intermediate qualifications (Level $2 / 3$ or above) ${ }^{1}$. It is therefore below the OECD average in terms of intermediate skills, and although it fares better in terms of higher level skills, it is still behind world leaders.

Economic theory suggests that the costs of learning should be incurred by those who reap the benefits:

- To the extent that individuals benefit e.g. in terms of higher wages and better employment prospects, then they should fund their learning;
- To the extent that their employers benefit e.g. in terms of increased profits or competitiveness, then they should fund their workers' learning;
- To the extent that there are spillover effects i.e. benefits which accrue to those beyond the individual undertaking the learning and their employer, then this provides a rationale for government funding.

These spillovers mean that in the absence of government funding, there would be underinvestment in skills from an economic perspective. Such spillovers could occur through the direct transfer of knowledge from one individual to another (including through the movement of labour between firms), or indirectly through Research and Development and the adoption of new technologies. There may also be wider benefits to society as a whole, including reduced crime ${ }^{2}$ and increased social cohesion. ${ }^{3}$

Even aside from these 'spillovers' and externalities, there are further market failures which may lead to underinvestment in skills. These are:

- Information failures: Individuals are unaware of the benefits of learning, or of the different options available to them;
- Risk aversion: The future benefits of learning for individuals and their employers are variable and uncertain, and they are unable to insure against the risk of no or low returns.
- Credit market constraints: Individuals may not have access to the necessary finance to fund their learning, and they are unable to use future human capital as collateral in order to secure a loan.

With tighter resources as a result of the Spending Review 2010 - the overall FE and skills resource budget will be reduced by 25\% between 2011-12 and 2014-15-government investment should be targeted at learning where its impact is maximised i.e. towards individuals who would not otherwise have undertaken learning and where the market failures are strongest. A key element of this is considering the age groups and qualification levels which should be targeted through government investment, and which of these groups should fund their own learning.

The evidence suggests that market failures are more acute for lower skilled individuals:

[^0]i. The barriers to learning are greater at lower qualification levels, for example 33\% of those with no qualifications have no interest in learning, compared to $10 \%$ of those who have reached L2 and $5 \%$ of those who have reached higher education ${ }^{4}$.
ii. Financial constraints: the financial barriers faced by learners, which result from the inability to borrow against future increased productivity, are more difficult for the low skilled who are typically poorer and have less flexibility in financing.
iii. Information: information barriers affect the low skilled more, because they have less ability to access information sources, and their personal networks are likely to be similarly affected.

There is also a stronger need to invest in learning for younger adults. International evidence shows that the 19-25 age group is a critical period where the UK has traditionally fallen behind other developed countries. The evidence suggests that for levels 2 and 3 , the UK falls behind Germany and to some extent behind the US and France. The main reason is the greater takeup of vocational qualifications in Germany and France. This suggests that a particular market failure is affecting this age group in the UK, or alternatively it could reflect broader issues around failure at school, a lack of motivation to carry on studying at the same level, and other cultural or social barriers. To demonstrate this, according to Steedman et al (2004) ${ }^{5}$ :

- In the UK, $48 \%$ of individuals have reached L3 by the 19-21 year age group, compared with $47 \%$ in Germany. But by the $25-28$ age group, the proportions are $54 \%$ in the UK and $74 \%$ in Germany.
- In the UK, 72\% of individuals have reached L2 by the 19-21 year age group, compared with $68 \%$ in Germany. But by the $25-28$ age group, the proportions are $73 \%$ in the UK and $85 \%$ in Germany.

Furthermore, the barriers to learning for individuals who have not achieved by 19 are greater than for those who have been successful through to age 18 and are entering Higher Education. People who have not managed to reach L3, or in some cases even L2, by age 19, face increased disincentives to learning, and require greater incentives to persist in learning and to achieve the level they can.

As suggested previously, to the extent that individuals benefit from learning, then they should fund its costs. The evidence, summarised in table 1, suggests that L3 qualifications bring significant wage and employment benefits to individuals. For example, an individual in employment with an advanced apprenticeship will earn $22 \%$ on average more than a similar individual whose highest qualification is at L2, and on average is also $14 \%$ more likely to be employed. The equivalent wage premium for an intermediate apprenticeship is $12 \%$ compared to similar individuals whose highest qualification is at L1 or L2, and the equivalent employment premium is $10 \%$. Therefore, the returns are slightly higher in percentage terms at L 3 , but even higher in monetary terms because the wages and employment rates of the comparison group will be higher.

[^1]Table 1: Percentage wage and employment gain associated with each qualification type as highest qualification

| Level | Qualification Type | Average wage <br> premium compared <br> to people with lower- <br> level qualifications | Average employment <br> premium compared to <br> people with lower- <br> level qualifications |
| :--- | :--- | :--- | :--- |
|  | Advanced Apprenticeship | $22 \%$ | $14 \%$ |
|  | BTEC | $20 \%$ | $8 \%$ |
|  | City and Guilds | $15 \%$ | $14 \%$ |
|  | RSA | $16 \%$ | $6 \%$ |
|  | NVQ/SVQ | $10 \%$ | $15 \%$ |
| Level 2 | Intermediate Apprenticeship | $12 \%$ | $10 \%$ |
|  | BTEC | City and Guilds | $12 \%$ |
|  | RSA | $7 \%$ | $9 \%$ |
|  | NVQ/SVQ | $14 \%$ | $12 \%$ |

Source: London Economics (2011) - 'BIS Research Paper Number 53, Returns to Intermediate and Low Level Vocational Qualifications, September 2011.'

The preferred option therefore readdresses the balance in terms of who pays for FE. Individuals at L3 and above experience significant future wage benefits, and should therefore be expected to contribute towards the costs of their learning to a greater extent. However, the provision of income-contingent loans will help them to access the funds they need to afford upfront contributions and ultimately gain intermediate and higher-level skills. Loans therefore overcome credit market constraints and people's inability to borrow against future human capital. Furthermore, because repayment will be dependent on borrowers earning above a certain threshold (unlike a standard commercial bank loan), this essentially insures against the risk of low or no returns, thus also helping to overcome the market failure relating to risk aversion.

## Summary

Market failures - which would lead to underinvestment in adult learning - are most pronounced for younger and lower-skilled individuals. As discussed previously, the evidence suggests that lower-qualified individuals face greater barriers to learning, including information barriers and financial constraints. International evidence also suggests that the 19-25 age range is where the UK falls behind its competitors, thus suggesting that a particular market or cultural failure is affecting this age group in the UK. For these reasons, Government has decided to target support at these groups.

The introduction of 24+ Advanced Learning Loans strikes an appropriate balance between achieving an appropriate reduction in government spending while supporting as many learners as possible. The evidence suggests that individuals realise significant wage benefits from L3 qualifications, and economic theory would therefore suggest that the costs they incur should reflect this.

## Policy objective

In the context of reductions in public spending in the Spending Review 2010 compared to previous Spending Reviews, and the high wage returns at Level 3 and above, the preferred option reassesses the contribution which learners make towards the cost of their learning, compared to the level of subsidy. The proposed changes therefore prioritise available grant funding on young people, those without basic skills, and those seeking work; and remove grant funding for learners aged 24 and over, at Level 3 and above, whilst supporting these learners to finance qualifications through an easy-to-access, low-burden, income contingent loan system, providing borrowing on commercially competitive terms. This is in line with the Coalition's principles of fairness and shared responsibility. It is only fair for those who benefit the most from training to make a greater contribution to the cost of their courses and also only fair for them to make this contribution when they are realising those benefits.

## One in One Out

The preferred option in this impact assessment is in scope for 'One in, One out' rules, because it imposes direct costs on businesses. The scope of these costs is discussed in more detail later on.

## Options

The options considered are the same as those in the consultation-stage Impact Assessment, published in July 2011. However, this final-stage Impact Assessment contains the Department's latest modelling of the number of learners who can be supported under the different options, and includes the results of new research with potential learners on their attitudes towards loans, and therefore potential levels of take-up under the preferred option.

Although Option 1 is used as the starting point for the analysis in this Impact Assessment, in practice it is not itself an option, because of the reduced level of funding available for FE and Skills as a result of the 2010 Comprehensive Spending Review. A more appropriate baseline i.e. what we might reasonably consider to be the 'do nothing' option, is maintaining the current system but with a reduced level of funding. This is considered in option 2 - where we invest the same amount, net of learner repayments, as we do in a system of loans, given assumptions about take-up. We are therefore comparing like-for-like i.e. economic returns under the two different systems for the same level of government investment.

As before, the options have been considered for learners aged 24 and over, undertaking courses at level 3 and above.

## Option 1: Grant funding according to pre-Spending Review position

Continue grant funding provision according to the position prior to the Spending Review 2010. In light of the resulting reductions in public spending, this is not itself an option and is therefore not considered further. However, it is used as a starting point for our analysis, in particular as a basis for assessing the take-up of loans under the preferred option.

Option 2: Same system but with reduced funding
Continue grant funding to the same amount that the government spends through loans under Option 4. In other words, under this option, the amount which is spent on loans under the preferred option - net of learners' repayments - is spent on grant-funding instead. This is the most appropriate benchmark against which to assess the other possible options, because it takes into account the reduction in the FE and Skills budget, and we are comparing like-with-like
i.e. economic returns under the two systems for the same level of government investment. This option is therefore used as the baseline for this assessment. However, this option has ultimately been ruled out because it delivers lower value for money compared to the preferred option in terms of the number of learners who can be supported for a given level of public funding (for reasons outlined in more detail in the following analysis).

Option 3: No grant funding or loans
Stop grant funding provision for new learners from the 2013/14 academic year. This option has been ruled out on the basis that it would lead to a considerable reduction in learner numbers and associated loss of economic value.

## Option 4: Income contingent HE-style loans (preferred option)

Replace grant funding with income contingent HE-style loans. This option would enable support to be provided to learners at the point of access. Loans would only become repayable when the learner had reached the prescribed earnings threshold. This is the preferred option, because relative to Option 2, which is the most appropriate baseline given reductions in funding for FE and Skills, more learners are supported for a given amount of government funding. It therefore delivers a greater economic return on government investment.

24+ Advanced Learning Loans will be made available for new learners from the 2013/14 academic year, with the first full year expected to be the 2014/15 academic year. The Government has made £129m available for 24+ Advanced Learning Loans in 2013-14 and £398m in 2014-15.

24+ Advanced Learning Loans will operate according to the following principles:

- Loans will be available for learners aged 24 and over, studying at Level 3 or above. This will include those in receipt of active benefits (Job Seekers' Allowance and Employment and \& Support Allowance (Work-Related Activity Group)).
- Loans will be available to meet the upfront fee costs of training and will only be repaid once the learner has completed their course and is earning above the prescribed earnings threshold.
- 24+ Advanced Learning Loans will operate on the same basis as HE student loans, with repayments on an income contingent basis and any outstanding loan amount written off after 30 years.
- Loans will be available for learners on Apprenticeships and other work based training as well as college-based training.
- The amount of loan available will be up to the equivalent of the fully funded rate for that qualification set by the Skills Funding Agency, where the learner is expected to meet of the cost of the course. Where the learner and employer are expected to jointly meet the costs; the loan available will be up to half of the fully funded rate.

The features of this loan system are summarised in table 2 :

Table 2: Summary of 24+ Advanced Learning Loans system

| Category | Policy |
| :---: | :---: |
| Loan amounts | Amount of loan will reflect funding rate for course |
|  | Maximum amount of loan will be equal to highest funding rate for a Level 3 or Level 4 Diploma |
|  | Fees will not be regulated, but college/training provider fee charging policy will be reviewed after 1 year of operation |
| Learner eligibility | Loans available to those aged 24 and over at beginning of course |
|  | Prisoners in custody will be eligible for loans (provided they meet other eligibility criteria) |
|  | Graduates will be able to access an FE loan |
| Course eligibility | Loans available for Level 3 courses and above, including college based, work based and Apprenticeships |
|  | Loan will be the same for full or part time courses but spread over the number of months the training takes place |
|  | Loans will be available at $100 \%$ of the fully funded rate for Level 3 and above qualifications at Certificate and Diploma level |
|  | Loans for work based learning and Apprenticeships will be 50\% of the fully funded rate |
|  | Loans will not be available for a different qualification at the same level; these will need to be self-funded |
|  | Loans can fund a package of Qualifications and Credit Framework units that combine to give a full Level 3 qualification (or above) |
| Period of study | The maximum period allowable for loan support will be 2 years for a Level 3 Certificate, 3 years for a Level 3 Diploma, 2 years for a Level 3 Apprenticeship framework |
|  | [Period to be set for Level 4 Certificates and Diplomas and Level 4 Apprenticeship frameworks] |
|  | Learners who have gained a Certificate funded by a loan can progress to a Diploma in 1 year or 2 years depending on whether the Certificate was completed in 2 years or 1 year, assuming that the progression is in a similar subject area |
|  | Any learning falling outside the maximum period will be self-funded |
| Repeat study | Learners who have used a loan to fund study at Level 3 can take out a further loan to study at Level 4 |
|  | Learners can access loans for a period of repeat study provided the study aim was unchanged and the repeat study period can be completed within the maximum loan period |
|  | Learners on an Apprenticeships framework at Level 3 or 4 can receive a loan for more than one Certificate or Diploma at the same level (studied either sequentially or concurrently depending on the framework) |
| Completing study | Learners unable to complete a Level 3 or 4 Apprenticeship framework because they are made unemployed can receive a loan for a further Level 3 Apprenticeship with a new employer; those unable to gain new employment can receive a loan to study for a Level 3 or 4 Certificate or Diploma |
| Terms of loan | 24+ Advanced Learning Loans will be repaid on the same basis as HE loans |
|  | £21,000 repayment threshold |
|  | Threshold growth yearly with earnings |
|  | Threshold applies from 2016/17 |
|  | Repayment rate at 9\% of earnings above threshold |

## Option 5: PCDL-style loans

Replace grant funding with Professional Career and Development (PCDL) style loans, where loans would be provided by commercial organisations at the market rate. This option has been ruled out on the basis of the likely low levels of take-up and a reluctance of banks to lend to this group, thus leading to higher default charges. Bearing in mind proportionality, this option has not been worked up further (nor a summary sheet provided).

The PCDL system would need a rapid expansion of more than 10 fold to support the same number of learners that can be supported through some of the other options. This would not be feasible for learners at Level 3 in particular, as these loans have primarily been used for postgraduate learners and both the banks and the learners themselves have been reluctant to take them out for lower level provision.

In addition to the reluctance of both banks and learners to expand this loan product, there would also be the issue of access: eligibility for the loans would be determined by the individual banks rather than according to the national eligibility criteria. This could mean that even if a learner was willing to agree to the terms of this loan, they may not be eligible if they do not meet the bank's criteria.

## Evidence Underpinning Costs and Benefits

The costs and benefits associated with adult learning can be summarised as follows:
Table 3: Costs and Benefits of Adult Learning

| Costs | Benefits |
| :--- | :--- |
| Government funding costs | Increased wages and improved <br> employment prospects for learners |
| Contributions paid by individuals <br> and their employers | Increased profits and competitiveness <br> for their employers |
| Output foregone whilst learning <br> takes place | 'Spillover' benefits |

These are all assessed and monetised in our analysis of the different options, and are considered in turn below:

## Costs

## i. Government Funding Costs / Contributions Paid by Individuals and their Employers

The options considered assess different balances between the extent to which course fees are funded by the government and privately i.e. by individuals and their employers, as well as the extent to which the government should provide loans to support individuals in covering up-front contributions. The total course costs - which will be funded either publicly or privately - are summarised in table 4. In-year course costs reflect the costs per learner per year, but many courses either last more than one year or straddle two financial years, and therefore the second column converts to a total course cost, based on analysis of average course lengths.

|  | In-year Course <br> Cost (£) | Total Course Cost <br> $(£)$ |
| :--- | :--- | :--- |
| Level 3 |  |  |
| Classroom- and work-based L3 | $£ 2,500$ | $£ 2,900$ |
| Apprenticeships* | $£ 2,100$ | $£ 3,700$ |
|  |  |  |
| Level 4 |  |  |
| Classroom- and work-based L4 | $£ 600$ | $£ 800$ |

* Please note that all apprenticeships are co-funded under the current system i.e. the state pays half of the total course cost, with an expectation that employers will pay the remainder to providers. Under the preferred option, loans will only be available for the amount which individuals will have to pay (i.e. the part which is currently funded by the state).


## ii. Foregone Output

Whilst learning is taking place, there is a potential loss of output i.e. because individuals are not working in productive employment. Two assumptions are made in order to calculate this:

- In the absence of learning, individuals would have earned the wage associated with their previous highest qualification. For example, if an individual is undertaking a L3 qualification, we assume they would have earned the average wage of individuals whose highest qualification is at L2. This information is derived from the Labour Force Survey, and we use it as a proxy for productivity;
- Output would only have been foregone during Guided Learning Hours. Based on analysis of the Individualised Learner Record, we assume that, on average, guided learning hours amount to $31 \%$ of an FTE for L3. For simplicity, we assume that this is invariant across different learning streams, and that individuals produce nothing during their guided learning hours.

This implies that the average foregone output is around $£ 7,000$ per qualification at L 3 . This is potentially an overestimate of economic output foregone for two reasons:

- Some learners might undertake learning during their leisure time, which means that no productive output is sacrificed while learning takes place;
- It is possible that some output would be produced during guided learning hours in the case of work-based learning, when some learning is done on-the-job.

On the other hand, wages may underestimate foregone output to the extent that some of the value of an individual's output is captured by their employer e.g. in terms of higher profits. Therefore, on balance, we believe that the proxy outlined above is the most sensible measure of foregone output to adopt for the purpose of this analysis.

## Benefits

As previously outlined, there are a number of benefits of learning which need to be considered in this assessment. These are all captured in a report commissioned by BIS to measure the economic impact of further education ${ }^{6}$ :
i. Wage returns: The benefits to individuals in terms of increased wages over the course of their working lives. London Economics (2011) ${ }^{7}$ report substantial positive wage returns associated with the successful completion of different vocational qualifications. For example, individuals with a particular qualification earn $x \%$ more than similar individuals at the qualification level below (see table 1).
ii. Employment returns: Not only could qualifications increase the wages which individuals earn in employment, but they could also increase the probability of being in employment over the course of their lifetime. This literature is less well-developed compared to that on wage returns, but London Economics (2011) suggests substantial employment-enhancing effects of vocational qualifications (again, see table 1).
iii. Benefits for Employers and 'Spillovers': At present, there is less evidence on these benefits, but Dearden, Reed and Van Reenen (2005) ${ }^{8}$ suggest that the increase in productivity from training is double the increase in wages. Dearden et al (2005) consider only productivity spillovers at an industry level, but it is the only source that has attempted to quantify benefits to employers and spillovers in this way.

There is also evidence of a number of 'wider' social benefits to adult learning, but it is more difficult to assign monetary values to such benefits. Evidence of these benefits is provided below, but we do not attempt to monetise them for the purposes of this assessment. Instead, the model simply assumes that the increase in total productivity is double the increase in wages, in line with Dearden et al (2005).

- Cancer Prevention: Sabates and Feinstein (2004) find that for every 100,000 women enrolled in adult learning, an estimated 116-134 cancers could be prevented due to increased take-up of cervical smear tests. ${ }^{9}$
- Depression: For women, moving from no qualifications to an academic Level 1 was found to reduce the probability of being depressed by between 6 and 10 percentage points. A smaller benefit was found amongst younger men (Feinstein, 2002) ${ }^{10}$.
- Reduced Crime: Although not specific to adult learning, Machin, Marie and Vujic (2010) ${ }^{11}$ estimate that a $1 \%$ reduction in the population with no qualifications would reduce property crime committed by 16-64 year-olds by at least $1.1 \%$.
- Social and Civic Engagement: A survey of over 600 learners in Scotland showed behavioural changes over time such as increases in the proportion going out regularly,

[^2]and the proportion who could identify someone they could turn to for help (Tett and Maclachan, 2007). ${ }^{12}$

- Improved Parenting Skills: A survey undertaken by Ofsted suggested that adults engaging in family learning became more involved in school life, benefited from an increased social network and improved their parenting skills, in terms of communicating with their children and managing their behaviour. ${ }^{13}$ This is backed up by information from NALS (2005), suggesting that learning adults are more likely to engage with their children, leading to improved life chances.

The total benefits per start for an apprenticeship and NVQ at L3 are summarised in table 5, both in current prices and discounted over the course of the learner's lifetime. It should be noted that these differ from the headline findings in the report, in the sense that those provided in the report are net of the costs (i.e. of government funding, individual / employer contributions and foregone output). The figures in table 5 purely consider the benefits of different learning streams.

It is important to stress that these benefits will accrue over the rest of the learner's working life, and have therefore been discounted (in the third column) to account for the fact that benefits realised in the future are less valuable than those realised now. In line with Green Book methodology ${ }^{14}$, a discount rate of $3.5 \%$ for the first thirty years is adopted, and $3 \%$ thereafter. Also, the average age of individuals undertaking these qualifications is taken into account, and thus their average time left in the workforce, based on a retirement age of 60 for women and 65 for men (which was the case when these estimate were derived).

Table 5: Lifetime benefits of FE programmes at L3

|  | Lifetime Benefit per Qualification <br> Started |  | Average years <br> left in workforce |
| :--- | :--- | :--- | :--- |
|  | Current Prices | Discounted |  |
| Apprenticeship L3 | $£ 184,000$ | $£ 95,000$ | 36 |
| NVQ L3 (provider-based) | $£ 132,000$ | $£ 73,000$ | 32 |

* The consultation stage Impact Assessment included a breakdown between L3 qualifications undertaken in provider and workplace settings. In our latest modelling, we do not distinguish the two, as they will no longer attract different funding rates. For the purpose of the comparative assessment in this IA, we therefore adopt the NPV figures for provider-based qualifications. In any case, such figures were derived using wage returns for all NVQs (irrespective of acquisition route), so it is more accurate to use these than those relating to work-based qualifications.


## Options Considered

For each option considered, we look at the learner numbers that can be supported through government funding, which is highest under the position prior to the Spending Review (option 1). All other options entail a reduction in publicly-funded learners, but this will be offset to some extent by an increase in (wholly) privately-funded learners, due to the removal of publiclyfunded provision which was not additional to what individuals and employers would have funded in its absence. This is therefore also considered.

[^3]We then calculate the costs and benefits, as discussed above, for each option. The benefits refer to the cohort of learners beginning their courses in a particular year, but will be realised over the rest of their working life.

Our analysis initially focuses on 2014-15 - for the purposes of this Impact Assessment, we are assuming that we will have reached a 'steady state' where all learners, in the specified age group and at the particular levels, will be supported through loans under the preferred option ${ }^{15}$. In practice, future levels of funding for loans will depend on future spending settlements. 201314 will be a transitional year in the sense that learners beginning their courses prior to the start of the academic year would still be eligible for grant funding. We therefore consider 2013-14 later on in this assessment.

## Costs and Benefits in 2014-15

It should be noted that for ease of presentation, we use 2014-15 as the base year for any NPV calculations in this analysis e.g. when considering the benefits of learning in terms of value added over the rest of the learner's working life. However, in tables 40-44, this is converted to a base year of 2013-14 for the purposes of inclusion in the summary sheets at the front of this Impact Assessment.

## Option 1: Continue grant funding according to pre-Spending Review position

This option continues to provide grant funding in line with the position assumed prior to the previous Spending Review. Internal BIS modelling suggests that from 2014-15 onwards, around 359,000 learners would be funded in each year, with government investment totalling $£ 410 \mathrm{~m}$. A further breakdown is provided in table 6.

Given the reduction in the FE budget as a result of the Spending Review, this option is not feasible. Furthermore, it does not meet the Coalition's objectives of shared responsibility and freedom. However, this option provides a useful starting point for our analysis, particularly in providing a basis from which to assess the likely take-up of loans under the preferred option.

## Costs

## i. Funding Costs

Table 6 summarises the costs to the government under this option. In this table, and all subsequent ones of this type, the individual rows may not sum to the totals because of rounding. However, all calculations have been performed on unrounded figures.

[^4]Table 6: Levels of government funding in 2014-15 - Option 1

|  |  | Learners | Government <br> Funding Costs <br> $(£ \mathbf{m})$ |
| :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |
| Classroom- and work-based* | Co-funded | 94,000 | 88 |
|  | Fully-funded | 94,000 | 175 |
| Apprenticeships** | Co-funded | 135,000 | 136 |
| Total at L3 |  | 322,000 | 399 |
|  |  |  |  |
| Level 4 |  |  |  |
| Classroom- and work-based* | Co-funded | 18,000 | 4 |
|  | Fully-funded | 18,000 | 8 |
| Total at L4 |  | 37,000 | 11 |
|  |  |  |  |
| Total at L3 and L4 |  | 359,000 | 410 |

* In the consultation stage IA, we provided separate figures for classroom- and work-based qualifications at L3 and L4. However, because these will no longer attract different funding rates, we now consider them as one group. ** It should be noted that for the purposes of this analysis, all apprenticeships are assumed to be at L3, as the precise breakdown between L3 and L4 apprenticeships going forward is difficult to forecast. Furthermore, there is a lack of evidence on the benefits of L4 apprenticeships given their relative infancy, so in the analysis to follow, we assume the same benefits apply to these qualifications.


## ii. Contributions paid by individuals and their employers

Table 6 demonstrates that some courses are fully funded by the government and some are cofunded. In other words, the government funds half of the course fees, with an expectation that the individual or their employer will fund the remainder. Therefore, for co-funded courses, we would expect the total private contribution to be approximately equal to the public contribution. Using the figures in Table 6, we estimate the total private costs - in terms of contributions paid by learners and employers - to be around $£ 228$ million per year.

However, analysis presented in the Independent Review of Fees and Co-Funding in Further Education in England ${ }^{16}$ suggests that colleges do not always collect the expected contribution for co-funded qualifications - they absorb the additional costs rather than passing them on to learners and employers. Fee collection is estimated to be around half of the expected contribution for provision funded through the previous Adult Learner Responsive (now providerbased learning) budget. There is no evidence for employer-based courses, although it is believed that it may be significantly less than $50 \%$. However, in the absence of quantitative evidence, we assume that half of the expected contributions are collected here as well. Therefore overall, we would expect total contributions collected to be around $£ 114 \mathrm{~m}$ per year.

## iii. Foregone Output

As discussed previously, there will be economic output foregone while learning takes place, estimated to be around $£ 7,000$ per course at L3. However, the figures in the table above refer to
learner numbers and not to starts. Converting to starts - described in more detail in the next section - implies a total of around 207,000 starts at L3, and therefore total foregone output of around $£ 1.45$ bn.
The course costs shown in table 4 are lower at L4 compared to L3. This implies that the courses are shorter, and therefore foregone output is likely to be lower. For classroom- and work-based qualifications at L4, costs are about $30 \%$ of those at L3; we therefore reduce output foregone by $70 \%$ for L4 courses (in line with the assumptions made in relation to the benefits - see next section). This implies foregone output of $£ 2,000$ per start and $£ 38 \mathrm{~m}$ per year overall.

## Total Costs

The total costs per year can be summarised as follows:
Table 7: Total costs in 2014-15 - Option 1

|  | Cost per year from 2014-15 (£m) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |
| Government funding costs | 399 | 11 | 410 |
| Contributions by individuals / employers | 112 | 2 | 114 |
| Foregone output | 1,454 | 38 | 1,493 |
| Total | $\mathbf{1 , 9 6 5}$ | 52 | $\mathbf{2 , 0 1 6}$ |

## Benefits

Table 6 shows the total number of learners per year from 2014-15 onwards. However, the estimates of economic benefits in table 5 are for each qualification started. We therefore need to convert learner numbers to starts before multiplying by the estimates in table 5 .

We do not have comparable estimates of the benefits resulting from L4 qualifications. As discussed above, for classroom- and work-based qualifications at L4, costs are around 30\% of those at L3. Therefore, in the interests of being conservative, we scale down the benefits by around $70 \%$ for L4 qualifications. This is somewhat ad hoc, but is necessary (and indeed conservative) given the lack of evidence. Due to the relatively low number of individuals taking such qualifications to-date, and therefore the small samples of such learners within the existing data sources used to measure the impact of qualifications, it would not be cost-effective to undertake detailed analysis at the current time.

Furthermore, given that over $90 \%$ of the learners under consideration here are at L3, and thus account for the majority of the economic value generated by each cohort, our results are not particularly sensitive to the assumptions made about the returns to L4 qualifications. For example, even in the extreme case where L4 qualifications generate no economic benefits, this would reduce the total in table 8 by $£ 384 \mathrm{~m}$, a reduction of just over $2 \%$.

Table 8: Total benefits for 2014-15 cohort - Option 1
\(\left.$$
\begin{array}{|l|l|l|l|l|}\hline & & & \begin{array}{l}\text { Learner } \\
\text { Numbers } \\
\text { Lifetime } \\
\text { Benefits } \\
\text { per Start } \\
(\mathbf{£})\end{array} & \text { Starts }\end{array}
$$ \begin{array}{l}Total <br>
Discounted <br>
Lifetime <br>
Benefits per <br>
Cohort <br>

(£ \mathbf{£})\end{array}\right]\)| Level 3 |  |  |  |
| :--- | :--- | :--- | :--- |
| Classroom- and work-based | 187,000 | 138,000 | 73,000 |
| Apprenticeships | 135,000 | 69,000 | 95,000 |
| Total at L3 | 322,000 | 207,000 |  |
|  |  |  | 6,591 |
| Level 4 |  |  | 16,691 |
| Classroom- and work-based | 37,000 | 19,000 | 20,000 |
|  |  |  |  |
| Total at L3 and L4 | $\mathbf{3 5 9 , 0 0 0}$ | $\mathbf{2 2 7 , 0 0 0}$ |  |

Each cohort of learners from 2014-15 would therefore generate total (discounted) economic benefits of around $£ 17.1$ bn over the rest of the learners' time in the workforce. The average time left in the workforce varies between different learning streams, but this value added would be realised in a period of around 36 years.

## Net Benefits

To summarise, this option leads to:

- Total economic costs of $£ 2.02$ billion per year;
- Total economic benefits of $£ 17.08$ billion over the rest of their working lives (and therefore discounted) for each annual cohort of learners from 2014-15 onwards;
- Net economic benefits of $£ 15.06$ billion over the rest of the learners' working lives (discounted to a base year of 2014-15).


## Option 2: Continue grant funding to the same amount we spend through loans

The cost/benefit analysis under this option follows the same methodology described in Option 1, but the following considerations have been made:
i. Lower amount of grant funding: This option considers the number of learners whom could be supported through grant funding, with approximately the same level of government investment as through the income contingent loan system, net of individuals' repayments (see Option 4 for more detail). It should be noted that this is the amount of money which is actually spent on loans, given the assumptions about take-up used in our central estimate, rather than the notional amount of money which is available to spend on loans. From a value for money perspective, we believe it is correct to assess learner numbers for the same level of government funding in the two systems. It should also be
noted that this is a simplified, illustrative example with the aim of demonstrating the order of magnitude of the figures involved.

Under our central estimate for Option 4, there would be an initial investment of $£ 278$ million in loans in 2014-15 and BIS internal analysis suggests around 40\% of that will be repaid (allowing for both discounting and interest). Option 2 is therefore based on providing grant funding equivalent to $60 \%$ of the initial investment in option 4 - around $£ 167$ million. For both options, there would be an additional $£ 44 \mathrm{~m}$ required to fund continuing aims, which started prior to the introduction of loans.

Assuming this grant funding would be distributed across learning streams (including cofunded and fully-funded aims) in the same way as in option 1, there will be around 193,000 publicly funded learners. This implies a significantly lower number of learners receiving public funding compared to option 1 . The table below summarises the availability of government funding and learner numbers across all learning streams:

Table 9: Levels of government funding in 2014-15 - Option 2

|  |  | Publicly- <br> Funded <br> Learners | Government <br> Funding Costs <br> (£m) |
| :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |
| Classroom-and work-based | Co-funded | 46,000 | 40 |
|  | Fully-funded | 46,000 | 81 |
| Apprenticeships | Co-funded | 80,000 | 84 |
| Total at L3 |  | 173,000 | 206 |
|  |  |  |  |
| Level 4 |  |  |  |
| Classroom-and work-based | Co-funded | 10,000 | 2 |
|  | Fully-funded | 10,000 | 4 |
| Total at L4 |  | 20,000 | 5 |
|  |  |  |  |
| Total at L3 and L4 |  | $\mathbf{1 9 3 , 0 0 0}$ | $\mathbf{2 1 1}$ |

ii. Increased level of privately funded qualifications

The lower number of publicly-funded qualifications undertaken, compared to option 1, will be partly offset by more learning being funded entirely by individuals and employers. In other words, we need to ask to what extent was grant funding 'deadweight', and upon its removal, learning will still go ahead, wholly funded by either individuals or employers?

There is limited evidence in this area, but the evaluation of the previous Train-to-Gain programme ${ }^{17}$ found that deadweight was of the order of $10 \%$ on average. In other words, $10 \%$ of the qualifications supported through the programme would still have been achieved in the absence of government funding.

[^5]This finding of relatively low levels of deadweight is backed up by current evidence from the National Employer Skills Survey. Although NESS (2009) suggests employer investment in onand off-the-job training was around $£ 39.2$ bn in the 12 months prior to the survey, the majority of this was accounted for by labour costs. Only around $£ 3$ bn was spent on fees, with around one quarter of expenditure estimated to be on qualification-bearing learning. This suggests a relatively low level of employer investment in skills, and evidence from the rest of the EU suggests that the UK ranks well below average in terms of expenditure as a proportion of labour costs. ${ }^{18}$

There is less evidence on deadweight for non work-based learning, but the National Adult Learning Survey ${ }^{19}$ (NALS, 2005) suggests that around $23 \%$ of learners with L2 qualifications found that cost was an obstacle to undertaking learning under the current system, with $88 \%$ of these saying that payment of tuition fees in full would be very likely or fairly likely to encourage them to do some learning. Although the evidence presented later in this paper suggests a willingness amongst learners to pay higher fees for their courses, there is clearly a considerable difference between increasing fees, and removing government support altogether. For this reason, we expect deadweight to be of a similar order of magnitude amongst learning funded by individuals (as by employers).

Therefore, on balance, we believe that the $10 \%$ estimate of deadweight is the best indication of the likely increase in privately-funded qualifications as a result of reducing grant funding relative to option 1, amongst learning funded by both employers and individuals. However, Skills for Sustainable Growth - published in November 2010 - outlines a number of other measures to lever in private investment in learning. These measures are not within the scope of this Impact Assessment, but imply that even in the absence of loans, there may be a larger number of wholly privately-funded qualifications than this analysis assumes.

## Costs

Table 10 summarises the costs of this proposal, in terms of government funding costs, contributions paid by individuals and their employers (both for co-funded and wholly privatelyfunded aims), and foregone output. The methodology for estimating the latter is the same as in Option 1, with the section above describing the new considerations accounted for in estimating government funding costs and the level of contributions paid by individuals/employers.

Table 10: Total costs in 2014-15 - Option 2

|  | Costs per year from 2014-15 (£m) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |
| Government funding costs | 206 | 5 | 211 |
| Contributions by individuals / employers | 88 | 2 | 90 |
| Foregone output | 673 | 19 | $\mathbf{6 9 2}$ |
| Total | 967 | $\mathbf{2 6}$ | $\mathbf{9 9 3}$ |

## Benefits

The same methodology as in option 1 has been used to estimate total benefits under this proposal, which are summarised in table 11:

[^6]Table 11: Total benefits for the 2014-15 cohort - Option 2

|  | Learner <br> Numbers | Starts | Discounted <br> Lifetime <br> Benefits per <br> Start (£) | Total Discounted <br> Lifetime Benefits <br> per Cohort <br> $(£$ million) |
| :--- | :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |  |
| Classroom-Based | 102,000 | 69,000 | 73,000 | 5,010 |
| Apprenticeships | 82,000 | 28,000 | 95,000 | 2,617 |
| Total at L3 | 184,000 | 96,000 |  | 7,626 |
|  |  |  |  |  |
| Level 4 |  |  |  |  |
| Classroom-based | 22,000 | 10,000 | 20,000 | 191 |
|  |  |  |  | $\mathbf{7 , 8 1 7}$ |
| Total at L3 and L4 | $\mathbf{2 0 5 , 0 0 0}$ | $\mathbf{1 0 6 , 0 0 0}$ |  |  |

The total economic value generated under this proposal is around $£ 7.8$ billion over the lifetime of the cohort of learners beginning their courses in each year from 2014-15 onwards. This is significantly lower than under option 1, which is explained by the reduction in learner starts.

## Net Benefits

The net benefits of this option are summarised in table 12, and compared to those previously derived under option 1. Going forward, it is this option which will form the baseline against which the other options are assessed.

Table 12: Costs and benefits of option 2 for 2014-15 cohort, relative to option 1 (£bn)

|  | Option 2 | Relative to option 1 |
| :--- | :--- | :--- |
| Total Costs | 0.99 | -1.02 |
| Total Benefits | 7.82 | -9.26 |
| Net Benefits | 6.82 | -8.24 |

## Option 3: Stop grant funding

Under this option, there would be no public investment in Level 3 and higher learning for those aged 24 and over, and there would be no government-supported loans to provide access to finance - to help learners to afford upfront contributions. This option will result in a large reduction in learner numbers, thus generating substantially lower future economic value added compared to both options 1 and 2 . There will be no co-funded learning undertaken and any learning that does take place amongst this cohort will be wholly privately funded. The same methodology has been employed as in the previous option to estimate both the costs and benefits.

## Costs

Table 13 below summarises the costs under this proposal:
Table 13: Total costs in 2014-15 - Option 3

|  | Costs per year from 2014-15 (£m) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |
| Government funding costs | $44^{\star}$ | 0 | 44 |
| Contributions paid by individuals / employers | $66^{\star \star}$ | 1 | 67 |
| Foregone output | 145 | 4 | 149 |
| Total | 255 | $\mathbf{5}$ | $\mathbf{2 6 0}$ |

* This is funding required for continuing aims - which started in 2012-13 and prior to the removal of grant funding in 2013-14. This would become (practically) zero from 2015-16 onwards.
** For the same reason as above, this would fall to (practically) $£ 44 \mathrm{~m}$ from 2015-16 onwards.
Therefore, under this option the only government funding requirement in 2014-15 would be for aims which started prior to the removal of grant funding at the start of the 2013/14 academic year. From 2015-16 onwards, these costs would fall to zero, and there would also be no individual or employer contributions towards co-funded aims. There would however continue be some aims which are wholly privately-funded, but the relatively low levels of learning mean that individual / employer contributions and foregone output would both be lower than under the baseline of option 2.


## Benefits

In the absence of government funding, there will thus still be some privately funded-learning. As discussed previously, we continue to adopt a position where $10 \%$ of the learning which would have gone ahead under option 1 still goes ahead, but on a wholly privately-funded basis - either by individuals or their employers. This implies that there will be a $90 \%$ reduction in learner starts relative to option 1. The table below summarises the total benefits under this option:

Table 14: Total benefits for 2014-15 cohort - Option 3

|  | Learner <br> Numbers | Starts | Discounted <br> Lifetime <br> Benefits per <br> Start (£) | Discounted Total <br> Lifetime Benefits <br> per Cohort <br> $(\mathbf{( m )}$ |
| :--- | :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |  |
| Classroom- and work- <br> based | 19,000 | 14,000 | 73,000 | 1,010 |
| Apprenticeships | $48,000^{\star}$ | 7,000 | 95,000 | 659 |
| Total at L3 | 67,000 | 21,000 |  | 1,669 |
|  |  |  |  |  |
| Level 4 |  |  |  | 38 |
| Classroom- and work- <br> based | 4,000 | 2,000 | 20,000 |  |
|  |  |  |  | $\mathbf{1 , 7 0 8}$ |
| Total at L3 and L4 | $\mathbf{3 2 , 0 0 0}$ | $\mathbf{2 3 , 0 0 0}$ |  |  |

* Includes 41,000 continuing apprentices - who started before the removal of grant funding at the start of the 2013/14 academic year. This figure will therefore become (practically) 9,000 from 2015-16 onwards.

This implies that the total benefits generated by the 2014-15 cohort over the rest of their working life amount to around $£ 1.7$ bn.

## Net Benefits

The net benefits of this option are summarised in table 15, also showing how they compare with our baseline in option 2 . This suggests that although costs are around $£ 0.73$ bn lower than under the baseline, the benefits are substantially lower too. This implies that the net (lifetime) benefit is around $£ 5.38$ bn lower than under the baseline.

Table 15: Costs and benefits of option 3 for 2014-15 cohort, relative to option 2 (£bn)

|  | Option 3 | Relative to option 2 |
| :--- | :--- | :--- |
| Total Costs | 0.26 | -0.73 |
| Total Benefits | 1.71 | -6.11 |
| Net Benefits | 1.45 | -5.38 |

## Option 4: Provide income contingent loans

This option would provide loans to individuals, which would cover the learner contribution - up to the unit cost of the course in the case of classroom- and work-based learning, and up to half of the unit cost in the case of apprenticeships. The proposed system is summarised in more detail in table 2. This proposal strikes a balance between reducing the level of public expenditure in line with the Spending Review 2010, whilst providing individuals with the
necessary access to finance in order to afford contributions upfront, thus overcoming the credit market constraints described previously. Individuals would have to earn at least $£ 21,000$ before they start repaying their loans. To some extent, this insures against the risk of no or low returns, thus helping to overcome the risk aversion issue earlier. The main features of the loan system relevant to this modelling are summarised in the table below:

Table 16: Summary of key elements of loan proposal relevant to modelling

| Repayment Threshold | $£ 21,000$ |
| :--- | :--- |
| Threshold Growth | Yearly with earnings |
| Year when threshold applies | $2016 / 17$ |
| Repayment period | 30 years |
| Repayment Rate | $9 \%$ of earnings >threshold |
| Cost of loan to government | RPI + 2.2\%* |
| Interest rate for below threshold | RPI |
| Interest rate for threshold to $£ 41 \mathrm{k}$ | Between RPI \& RPI +3\% |
| Interest rate for $£ 41 \mathrm{k}+$ | RPI + 3\% |
| RAB charge** | $60 \%$ |

* This represents the Government's long-term cost of borrowing (as directed by HM Treasury).
** As explained in more detail later on, this is the proportion of the initial outlay on loans which is not subsequently repaid by the learner, taking into account interest and also discounting future repayments.

In 2014-15, there is a budget of $£ 398$ m available for loans, in terms of the potential initial outlay, and this would allow us to support 204,000 learner starts. This is based on the assumption that $40 \%$ will be repaid (given a RAB charge of $60 \%$ ) and therefore if all of this was taken up, net government investment would ultimately be around $£ 240 \mathrm{~m}$. Although this initial outlay would be around the same as that spent under option 1 (however, when taking account of subsequent learner repayments, total investment will be considerably lower), fewer learners could be supported under this option, given that for all classroom- and work-based qualifications, we have assumed the government will provide a loan equal to the full cost of the course - whereas under the current system, some of these qualifications are only co-funded (see later section on value for money considerations). However, the question is to what extent learners will choose to take out loans and go ahead with learning under this option, and therefore how much of this funding will be taken up?

Take-Up
This section reiterates the evidence outlined in the consultation-stage Impact Assessment, and then discusses the findings of some bespoke research carried out since its publication.

## Published Evidence

As outlined in the previous Impact Assessment, there are two elements here, which we consider in turn:
A) The extent to which individuals are prepared to make higher contributions towards the cost of their learning;
B) The extent to which individuals are prepared to take out loans to fund their learning.
i. Willingness to make higher contributions

A study undertaken by London Economics ${ }^{20}$ estimated the price elasticity of demand for FE by individuals. This study used the Individualised Learner Record (ILR) and found that the average elasticity of demand was between -0.1 and -0.2 i.e. a $10 \%$ increase in fees would reduce enrolment by between $1 \%$ and $2 \%$. This suggests that the demand is relatively inelastic and points towards a willingness amongst learners to pay higher contributions. It thus implies that the reduction in learners may be relatively small if they were asked to make higher contributions.

However, this study may understate the elasticity of demand in this context for a number of reasons, and the findings should be considered in this light:

- The estimates were derived from data over which there was relatively small variation in fees. The reduction in enrolment following a non-marginal increase could be a lot greater than implied by the elasticity estimates above;
- The data used does not include learners who are currently in receipt of full fee remission. We would expect these learners to be more sensitive to price;
- Fees (the measure of price used) only constitute a proportion of even the direct costs of studying, which also include books, travel, childcare etc.

Other evidence on learners' willingness to pay can be gleaned from the longitudinal evaluation of Level 3 FE learning, commissioned by the former Learning and Skills Council (LSC) ${ }^{21}$. This asked whether learners would have gone ahead with their course if they had to pay (more) fees. About 50\% of the respondents indicated they would have been prepared to pay (more), with a further 10-20\% saying it would depend upon how much more. The findings are summarised in table 17:

Table 17: Whether learners would have gone ahead with their course if they had to pay (more) fees

|  | Already pay <br> somelall fees | Do not already <br> pay fees |
| :--- | :--- | :--- |
| Yes | $53 \%$ | $55 \%$ |
| No | $27 \%$ | $34 \%$ |
| Depends How Much | $18 \%$ | $9 \%$ |
| Don't know / No answer | $2 \%$ | $2 \%$ |

Although a substantial proportion of the respondents said they would have paid more, it is important to note that the survey was conducted after learning had been undertaken. This could have influenced their responses, as learners would have been more aware of the benefits to them, in terms of knowledge gained and potentially positive employment outcomes.

[^7]Therefore, although the econometric and survey evidence should be treated with caution, it does suggest a certain willingness of learners to make higher contributions. Furthermore, evidence from the National Adult Learning Survey (2012, forthcoming) suggests that cost is not seen as the most important factor in the decision to undertake learning. Discrete choice analysis, used to simulate real decision-making, found that the benefits of learning were the main factor in choosing whether to learn, followed by the time commitment. The cost of learning held less weight.

## ii. Willingness to take out loans

A report commissioned by the Learning and Skills Research Centre (2006) ${ }^{22}$ suggested a reluctance amongst FE learners to take out loans for the purposes of learning:

- Two-thirds of FE learners would not consider taking out a loan to fund their learning under any circumstances;
- $13 \%$ said they would consider it if they could delay repayment until their income reached a certain level;
- 6\% said they would do so if they could wait until they had completed their training;
- Only 7\% would consider taking out a commercial loan for this purpose;
- The reluctance to take out loans was slightly higher at Level 2 and below.

This evidence suggests a reluctance to take out loans for the purposes of learning, although it does indicate that income contingent loans appear to be the most viable option. Effectively, the income contingent nature insures individuals against the risk of no or low returns, which we would expect to reduce uncertainty and encourage take-up. It should also be borne in mind that this evidence was collected five years ago - attitudes towards loans could conceivably have changed since then.

Furthermore, evidence suggests that people are more accepting of loans when they are given the context, in terms of reasons and benefits. Focus groups ${ }^{23}$ with adults found that people had a poor understanding of how learning was funded. While there was a preference for grants and free tuition, they were aware that funds were scarce and felt that funding should focus on the low-skilled. There was a strong view that adults should contribute to learning and given the context, loans were preferable to nothing. As suggested above, their preference was for an income contingent loan - particularly for those who are debt averse.

Much of this evidence is 'hypothetical' i.e. asking individuals what they would do in the event that loans were introduced. There is a lack of evidence to demonstrate how learners especially the particular group under consideration here - actually behave when faced with loans. We therefore draw on the limited evidence from the UK, and the slightly broader international evidence base, which suggests a willingness to take out loans when faced with increases in the financial contributions which they are expected to make.

A small-scale trial by Kent TEC in $1999^{24}$ found that loans for FE increased the quantity of learning and quality of outcomes for those motivated to learn, but without the finance to pay for

[^8]a course. Learners using this loan system had not considered other forms of finance such as commercial loans or Career Development Loans due to fear of rejection. The evaluation found that all starters completed their courses and felt their learning had achieved the predicted benefits, possibly suggesting loan users had enhanced motivation and understanding of the benefits. However, this effect is difficult to quantify, and has therefore only been included as a non-monetised benefit for the purposes of this Impact Assessment.

Although one must be cautious when interpreting evidence relating to Higher Education (HE) because of the differences in the characteristics of the learning population - the UK's experience of HE fees and loans shows that loans help to mitigate the impact of rising fees and are as effective as grants. Econometric modelling undertaken by IFS ${ }^{25}$ on the impact of grants, fees and loans, 1992-2007, shows that:

- A $£ 1,000$ increase in fees leads to a $4.4 \%$ drop in participation;
- A $£ 1,000$ increase in loans leads to a $3.2 \%$ rise in participation;
- A $£ 1,000$ increase in grants leads to a $2.1 \%$ rise in participation.

This implies that loans will not cover the full impact of rising fees, particularly as there will not be $100 \%$ take-up, but it does suggest that individuals are willing to take up loans for the purposes of learning.

International evidence also suggests that participation rates have not fallen substantially following increases in fees combined with the introduction of loans ${ }^{26}$ :

- New Zealand's post-secondary loans (available to HE and FE) were introduced to address commercial market failures to lend, thereby helping to encourage participation. Participation rates and rates of return have risen in line with trends, and minority group participation rates have also risen.
- Analysis of Canada's experience of rising fees and loans found that while elasticity increased initially, it fell back to pre-fee rise levels, as loans increased to compensate for fee rises. ${ }^{27}$
- Other countries, such as Russia and China, have not seen participation rates decline with fees or loans.


## Bespoke research into this proposal

Since the Department published the consultation-stage Impact Assessment in July 2011, it has commissioned additional research into potential learners' attitudes towards loans in FE and the likely levels of take-up. This consisted of qualitative research in the form of focus groups, and an online survey of learners. The research was published on 11 May 2012, and the headline findings are summarised below.

## Qualitative Research into Learners' Attitudes Towards Loans

This research involved 18 mini-groups of four people, each lasting 90 minutes, with the groups stratified by age, gender, social grade and location, qualification level and ethnicity.

[^9]These groups first assessed people's initial reactions towards the concept of loans, and found that the term was heavily associated with the rigid and potentially threatening characteristics of bank loans and credit. Most respondents were averse to this type of loan and would only consider it in order to purchase something with tangible and lasting benefits. In terms of their motivations for studying FE, these were not always linked to income, and views of the tangibility and certainty of the benefits varied considerably amongst respondents.

However, these negative attitudes were overturned in most cases when respondents understood that repayment was linked to income and not capital. This effectively mitigated the perceived financial and emotional costs of the loan, reducing the impact of the uncertainty around the financial benefits of FE. As a result, the 'cost-benefit calculation' which many will make when considering the loans proposition becomes more acceptable.

The exception to this is people who continue to find the 'costs' of a loan of any type too high and/or the financial benefits of FE too uncertain - particularly the long-term unemployed who have a more pessimistic outlook than most, and to a lesser extent those looking to consolidate rather than improve their position.

In summary, this research concluded that provided facts around the link to income are communicated effectively, the implications for course take-up would not be significant although a minority of potential learners may decide not to take up learning, and courses which seem more likely to bring financial benefits may become more popular. However, if the proposition is allowed to be associated with bank loans, there could be a wider and more considerable impact on participation. Communication of the true nature of the proposition will therefore be crucial in managing the transition effectively.

## Online Quantitative Survey

This survey was based on a sample of learners from the Individualised Learner Record (ILR) who were aged 23 or over and who had completed a Level 2 course in the 2010/11 academic year. Level 2 completers were selected as they were believed most likely to go on to undertake a Level 3 course, and they were than asked some screening questions to check that they were already doing, or considering doing, further learning. This would help to ensure that the research covered learners who were as close as possible to those who would have done so under option 1. The selected sample were then sent a letter inviting them to take part in a web survey. Fieldwork took place between November 2011 and January 2012, and 405 individuals completed the survey.

As found in the qualitative research, the initial reaction to fees and loans is one of negative association with banks loans and credit. The most important factors in respondents' decisions about whether or not to take a course under a system of loans and fees were the benefits of the course in terms of employment, and the level of interest added to the loan. Courses with employment related benefits were much more appealing than those just done for personal interest, and interest free loans were far more appealing than those that accrued interest at a low rate.

Once individuals fully understood the details of the proposed loan system, their responses as to whether they would a) go ahead with learning and b) take out a loan, are summarised in the table below. Overall, the research shows that $74 \%$ of those likely to study at Level 3 aged 24+ said that they at least might take a course, and just over half (58\%) at least might take out a loan to do this.

Table 18: Proportion that would probably, definitely etc. take a course/take out a loan under the intended loan conditions (and with their preferred course benefits: employment or personal interest)

| Would they take a course / take | Take a course | Take out a loan |
| :--- | :--- | :--- |
|  | $(n=351)$ | $(n=316)$ |
| Definitely | $11 \%$ | $10 \%$ |
| Probably | $26 \%$ | $19 \%$ |
| Might | $37 \%$ | $29 \%$ |
| Probably would not | $23 \%$ | $33 \%$ |
| Definitely would not | $3 \%$ | $9 \%$ |
| Total | $\mathbf{1 0 0 \%}$ | $\mathbf{1 0 0 \%}$ |

## Summary on expected take-up of loans

Given its particular focus on the policy in question, we believe that the bespoke research undertaken on potential learners' attitudes towards 24+ Advanced Learning Loans should be used as the basis for our assumptions about take-up, bearing in mind the other available evidence where appropriate. The question is therefore, of the 227,000 starts which would have occurred under Option 1, how many would still go ahead under a system of loans? We believe that Option 1 is the most suitable starting point against which to assess take-up, since this is closest to the current funding position, and the research was designed to capture the views of those individuals most likely to undertake Level 3 qualifications under the current system and funding levels.

We have derived estimates by making assumptions about how people's attitudes, outlined in the table above, translate into actual take-up rates. Given that the economic costs and benefits which form the basis of this impact assessment are based on the number of learners, we use the figures showing the proportion who would take a course. The table suggests that some of these may not take out a loan, and fund the course themselves (these would correspond to the allowance made for deadweight in options 2 and 3 ). However, they are likely to be small in number, and if they do so, it would transfer the cost from government (to the extent that any loan which they would have taken out would not ultimately have been repaid) to a cost to individuals. We should also bear in mind that this group will achieve relatively low incomes on average (see figures 1 and 2), which could affect the extent to which they can make upfront contributions.

We present two estimates, which are derived as follows:
i) Central estimate: All of those who say they would 'definitely' go ahead with learning do so, compared to $75 \%$ of those who would 'probably' do so, $50 \%$ of those who 'might', $25 \%$ of those who would 'probably not', and none of those who 'definitely would not'.
ii) Upper bound estimate: This assumes that all of the funding available for loans would be taken up. It is equivalent to assuming a take-up rate of $90 \%$, and would amount to all of those who said they would 'definitely', 'probably' and 'might' go ahead with learning actually doing so, and the majority of those who say they would 'probably not'. This scenario also draws on the qualitative research which suggests that provided the features of the loan system are conveyed to and understood by learners, then the impact on participation would not be significant.

Table 19: Take-up rates under different assumptions about how attitudes convert into actual take-up

|  | Responses <br> from survey | Main <br> estimate | Upper Bound <br> Estimate |
| :--- | :--- | :--- | :--- |
| Definitely | $11 \%$ | $11 \%$ | $11 \%$ |
| Probably | $26 \%$ | $20 \%$ | $26 \%$ |
| Might | $37 \%$ | $19 \%$ | $37 \%$ |
| Probably would not | $23 \%$ | $6 \%$ | $16 \%$ |
| Definitely would not | $3 \%$ | $0 \%$ | $0 \%$ |
| Total take-up | $100 \%$ | $55 \%$ | $90 \%$ |
| Rounded take-up rate |  | $55 \%$ | $90 \%$ |
| Number of learners |  | $\mathbf{1 2 5 , 0 0 0}$ | $\mathbf{2 0 4 , 0 0 0}$ |

Our central estimate is that around 125,000 learners (starts) will go ahead with learning under this option in 2014-15. This represents $55 \%$ of the learners who would have been supported under option 1, and take-up of around $70 \%$ of available funding for loans. Our upper bound estimate would increase this to 204,000 starts, which would see all of the available funding for loans taken up.

Although the system was thoroughly explained to participants in the survey, and therefore they should have given an informed judgement about whether they would go ahead with learning, a full programme of management action will be taken to maximise people's awareness and understanding of the system. These include:

- Messages and communications materials for potential learners, informed by the aforementioned research, to raise awareness and ensure they can make an informed choice;
- Activity to raise awareness and understanding among colleges, training organisations and employers;
- Clear guidance to colleges, training organisations, and the National Careers Service so they have the information they need in working with learners;
- A programme of support to be delivered by the Learning and Skills Improvement Service (LSIS) to help colleges and training organisations prepare for the business change that loans represent;
- Engagement with the FE and training sector to develop the operational systems and processes to deliver loans.

Our aim is that this action raises the take-up rate above the central estimate, such that all the available funding for loans is taken up.

## Comparison with learner numbers in consultation-stage Impact Assessment

According to the consultation-stage Impact Assessment, 171,000 learners aged 24+ would begin courses at Level 3 and 4 in the 2014-15 cohort (and each cohort thereafter) under a system of loans. The central estimate in this final-stage Impact Assessment is therefore around 46,000 lower - at 125,000 starts.

Based on our assessment of the evidence available when completing the consultation-stage Impact Assessment, we believed that it was reasonable to assume that all of the funding available for loans would be taken up, implying that around $80 \%$ of the learners who would have been supported under option 1 would go ahead with learning under this option.

Given the research undertaken since then, our central estimate is that $55 \%$ of the learners who would have been supported under option 1 now go ahead with learning. This implies that around $70 \%$ of the available funding for loans would be taken up. (It should also be noted that more learners are now supported under option 1, given the revisions to the modelling since the consultation-stage IA.) However, as set out above, we will use management action to maximise people's awareness and understanding of the system, such that all the funding for loans is taken up.

## Loan Repayment

As explained above, individuals will pay back their loan as and when their annual earnings exceed $£ 21,000$, when they will pay it back at a rate equal to $9 \%$ of their earnings above this threshold. Any loans not paid back within 30 years will be written off.

In considering the extent to and the speed at which loans would be repaid, we need to consider the earnings of the population. Figures 1 and 2 show average annual earnings for males and females respectively - aged 24+, in full-time employment and with L3 qualifications:

Figure 1: Full-time incomes of men aged 24+ with L3 qualifications, Labour Force Survey - Q3 $\underline{2010}$


Annual Income

Q3 2010


These graphs suggest that, even amongst those working full-time, around 17\% of males earn less than $£ 20,000$, with the corresponding figure for females being around $46 \%$. Therefore, looking at people of different ages at a single point in time, a significant proportion are below the £21,000 threshold.

However, these findings are not broken down by age, and the change in an individual's earnings over the years following the completion of their qualification, and over the rest of their working life, will determine the extent to which they repay the loan and the period over which they do so. We therefore provide an illustrative example, based on econometric analysis of the Labour Force Survey, to demonstrate the repayment profile for a 'typical' individual working fulltime who completes an NVQ L3 qualification at the age of 25:

- Analysis suggests that the average earnings of individuals aged 25 with a Level 2 qualification are around $£ 16,700$. Even in the absence of further qualification-bearing learning, this would increase in real terms, as the individual becomes older and increases their stock of human capital (e.g. through experience and knowledge acquired).
- Individuals with NVQs at L3 earn, on average, 10\% more than similar individuals with L2 qualifications (see table 1).

Figure 3 therefore shows how this typical individual's income may grow over time, and how they repay the loan accordingly:

- This individual reaches the income threshold in the fifth year after they complete their qualification;
- It will then take around fifteen years in order to pay off the loan (including interest).
- Without the earnings return on the qualification, then they would not have reached the threshold until four years later.

Figure 3: Repayment profile of a typical Individual, who ends their course on a salary of $£ 16,700$


This is an example to demonstrate the principle of repayment. In reality, individuals who take out loans will face a range of different circumstances. Some will never reach the income threshold, and others will reach it more quickly and pay off the loan sooner.

Internal BIS modelling has therefore been undertaken to calculate the extent to which individuals repay their loans. This is referred to as the Resource Accounting and Budgeting (RAB) charge. It depends on the number of learners who are unable to repay their loan in full, multiplied by the amount left unpaid, and also on the interest charges for periods when people are not paying the full interest rate. To calculate the RAB charge, BIS have built a simulation model which generates the employment activities and earnings of 20,000 simulated learners over the next 30 years. These are based on historical distributions derived from Labour Force Survey data. The current estimate of the RAB charge from the model is $60 \%$, implying that $40 \%$ of funding for loans is repaid. The RAB charge is therefore higher than for Higher Education loans because of the lower average income of FE learners. The following graph - based on the simulation - provides an illustration of how the loan is repaid over the 30-year period. This demonstrates that around $35 \%$ of the original government outlay (the vast majority of the total repayments) is made within ten years of the cohort completing their qualification.

Figure 4: Aggregate repayment of loans for a cohort of learners after course completion


It should also be noted that because they are ultimately funding more of the costs themselves under this option, learners may be more likely to choose courses with higher and more certain economic value, which therefore has the potential to reduce the RAB charge.

## Value for Money Considerations

Alongside the net economic benefit of this option - presented below - we have considered the value for money of the cost to government of funding learning using income contingent loans, as compared with the current system. This takes account of the fact that the RAB charge is 60\% - implying that $40 \%$ of any initial outlay is recovered through learner repayments. The value for money will depend upon how government funds different types of qualifications under the current system, and what the net government funding costs would be under the system of loans. Broadly speaking, there are three types of aims:
i. Classroom- and work-based qualifications, fully funded under the current system: Under the current system, the Government is effectively funding $100 \%$ of the unit cost; under a system of loans, the government would provide a loan equal to the unit cost, but $40 \%$ is ultimately repaid by learners over a period of up to 30 years. The net funding cost of these qualifications therefore equals $60 \%$ of the unit cost under a system of loans, and thus the cost to government is lower than under the current system.
ii. Classroom- and work-based qualifications, co-funded under the current system: Under the current system, the Government is effectively funding $50 \%$ of the unit cost; under a system of loans, the Government would provide a loan equal to the unit cost, but $40 \%$ of this is ultimately repaid by learners over a period of up to 30 years. The net funding cost of these qualifications therefore equals $60 \%$ of the unit cost under a system of loans, and thus the cost to government is higher than under the current system.
iii. Apprenticeships (all co-funded under the current system): Under the current system, the Government is effectively funding $50 \%$ of the unit cost; under a system of loans, the Government would provide them with a loan equal to $50 \%$ the unit cost, but $40 \%$ of this is ultimately repaid by learners over a period of up to 30 years. The net funding cost of these aims therefore equals $30 \%$ of the unit cost under a system of loans, and thus the cost to government is lower than under the current system.

This is summarised in the table below:
Table 20: Value for money considerations under current system and loans

|  | Learning type | Net funding cost as a proportion of <br> the course cost |  | Better or <br> worse vfm to <br> Level of <br> funding |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Net funding cost <br> under loans | under loans? |  |
| Classroom- and work-based | Fully-funded | $100 \%$ | $60 \%$ | Better |
| Classroom- and work-based | Co-funded | $50 \%$ | $60 \%$ | Worse |
| Apprenticeships | Co-funded | $50 \%$ | $30 \%$ | Better |

This analysis implies that overall, for a given level of public investment, more learners can be supported under 24+ Advanced Learning Loans compared to investing the same amount (net of learner repayments) under a system of grant funding. This assessment can also take account of two further assumptions concerning the level of fee charged and the amount of loan taken out both of which are considered below.

These issues aside, to deliver improved value for money for all three learning types in the table above would mean differentiating the loan amount available, based upon the amount of grant funding that would be available to the individual under the current system (i.e. depending on whether they are currently fully-funded or co-funded). This would have been both complicated to understand and operationally complex to implement. Therefore, this option ensures a consistent, fair and transparent system that is simple to administer and still offers better value for money overall than current grant funding - adopting a differential funding approach for these aims would have been administratively complex and would likely have an adverse impact on take-up.

The two further assumptions referred to above are:
A) Providers charge the full unit cost for the course

The following modelling is based on providers all charging a fee equal to the unit cost of the course under the current system - detailed in table 4. It is conceivable that colleges will charge lower fees, as they face competition for learners - not only from other colleges, but also the possibility that potential learners will not undertake learning at all if fees are perceived to be too high. So, a college may charge lower fees to reduce the risk of losing learners to other colleges, but also to reduce the risk that they do not learn at all.

If providers charge less than the unit cost under the current system, this is likely to increase the number of learners who undertake learning. This is therefore another reason why take-up may well be higher than the central estimate of 125,000 starts per year, presented in the following sections. There is also a potential risk that under the loan system, providers will find it easier to recover the full unit cost of courses that have previously been co-funded due to the easy access of loans for learners, leading to effective price inflation of these courses and unintended
incentives on providers to deliver these courses. However, given that any attempts to estimate the fees which providers would actually charge under the new system would be speculative, and would add an unnecessary level of complexity to our modelling, we do not attempt to factor this into the analysis below. However, it should be borne in mind when interpreting the results.

## B) Learners take out a loan for the full amount

In addition to providers charging a fee equal to the full unit cost of the course under the current system, we also assume that learners take out a loan for the full amount i.e. they do not pay any fees upfront themselves. If learners opt not to take out a loan for the full amount, or not at all, then this will have the effect of reducing the net cost to government, to the extent that loans are not repaid, and transferring this cost to individuals. Therefore, it only serves to affect the distribution of the economic costs between government and individuals, rather than changing their total magnitude.

However, evidence from the bespoke research into the impact of loans suggested that a relatively small proportion of learners would actually undertake a course without taking out such a loan. This is demonstrated in table 18 (e.g. 11\% of learners 'definitely would' go ahead with a course under the current system, whilst $10 \%$ would 'definitely would' take out a loan).

In summary, for the purposes of the modelling of costs and benefits which follows, we assume:

- A RAB charge of $60 \%$ - i.e. $40 \%$ of loans are ultimately repaid by learners;
- $55 \%$ of the learners who would be supported under option 1 will go ahead with learning under loans (i.e. $70 \%$ of available funding for loans is taken up) - and we undertake sensitivity analysis using an upper bound estimate (equivalent to all of the available funding for loans being taken up);
- On average, providers charge a fee equal to the unit cost of the course under the current system;
- Learners take out a loan for the full amount;
- For apprenticeships, we assume no change to the current extent of fee collection from employers.


## Total costs under option 4

Table 21 shows the various costs incurred under this option, given the assumptions summarised above. Initial funding provided by the government in the form of loans will be $£ 278 \mathrm{~m}$ in $2014-15$, and there will be an additional $£ 44 \mathrm{~m}$ to cover continuing grant-funded qualifications which started prior to the introduction of loans. However, a significant proportion of the initial outlay on loans will be repaid by individuals over the next thirty years, thus the net government contribution amounts to $£ 167 \mathrm{~m}$. To this, we must add the additional $£ 44 \mathrm{~m}$ to arrive at total government funding of $£ 211 \mathrm{~m}$. Additional economic costs include the $£ 111 \mathrm{~m}$ of the initial government outlay which is paid by learner, $£ 55 \mathrm{~m}$ paid by employers towards co-funded apprenticeships and $£ 821 \mathrm{~m}$ in output foregone while learning takes place.

Table 21: Total costs in 2014-15 - option 4

|  | Discounted Costs per year from <br> $2014-15(£$ million) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |


|  | Discounted Costs per year from <br> 2014-15 (£ million) |  |  |
| :--- | :--- | :--- | :--- |
| Loan repayments (private)* | 108 | 4 | 111 |
| Net government funding | 206 | 5 | 211 |
| Other contributions by employers** | 55 | 0 | 55 |
| Foregone output | 800 | 21 | 821 |
| Total | $\mathbf{1 , 1 6 8}$ | $\mathbf{3 0}$ | $\mathbf{1 , 1 9 9}$ |

* Note that these are discounted, as loans are paid back over the years following completion of the course.
** These represent employers' contributions to co-funded apprenticeships.
We estimate total discounted lifetime benefits to be around $£ 9.4$ billion for the cohort of learners starting their course in 2014-15, as shown below:

Table 22: Total benefits for 2014-15 cohort - Option 4

|  | Learner <br> Numbers | Starts | Discounted <br> Lifetime <br> Benefits per <br> Start (£) | Total Discounted <br> Lifetime Benefits <br> per Cohort <br> $\mathbf{( £ m})$ |
| :--- | :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |  |
| Classroom-and work-based | 116,000 | 76,000 | 73,000 | 5,555 |
| Apprenticeships | 106,000 | 38,000 | 95,000 | 3,625 |
| Total at L3 | 222,000 | 114,000 |  | 9,180 |
|  |  |  |  |  |
| Level 4 |  |  |  | 211 |
| Classroom- and work-based | 25,000 | $\mathbf{1 1 , 0 0 0}$ | 20,000 |  |
|  |  |  |  | $\mathbf{9 , 3 9 2}$ |
| Total at L3 and L4 | $\mathbf{2 4 7 , 0 0 0}$ | $\mathbf{1 2 5 , 0 0 0}$ |  |  |

## Costs to business

There are direct costs to businesses relative to the baseline in terms of the costs of regulation i.e. in terms of administering repayments of 24+ Advanced Learning Loans. These are in-scope for One-In One-Out purposes, and are analysed in more detail below. There are also benefits to businesses stemming from an increased number of learners compared to the baseline. To the extent that employers would capture some of the productivity-enhancing benefits of this learning in the form of higher profits, then this represents a benefit to them. However, these are indirect benefits and are therefore not in-scope for OIOO; in any case even if such impacts were considered to be direct, then this would constitute a 'zero net in'.

The systems that will be required to collect the loans for FE will be exactly the same as those used for the repayment of Higher Education (HE) student loans. Unlike HE there will only be a single threshold of $£ 21,000$ that will apply to $24+$ Advanced Learning Loans.

In line with the explanation set out in the HE impact assessment - 'Higher Education: Students at the Heart of the System' - compliance costs to collect repayment for loans would be incurred in the 2014-15 financial year in preparation for the first cohort under the proposed reforms, due to enter repayment in 2016. It is assumed that all companies use commercial software packages and any necessary updates to that software would be possible through inclusion in
regular software updates, thereby presenting no additional cost to employers. The compliance cost therefore falls on payroll administrators in terms of familiarisation with the changes, and for those firms who insource their Pay As You Earn (PAYE) systems, some time from IT technicians to ensure software implementation. For those companies that employ both graduates and those accessing 24+ Advanced Learning Loans, we would expect minimal additional costs, as the processes involved will be the same. However, it is possible that some employers who do not employ graduates will employ individuals who have accessed 24+ Advanced Learning Loans and therefore will collect repayments for the first time.

In order to assess these compliance costs for 24+ Advanced Learning Loans, we have adopted the same methodology as in the Impact Assessment relating to the HE reforms - which uses information on the number of enterprises employing graduates, in order to calculate the total costs to businesses. However, there is no such evidence on the number of enterprises employing the learners specifically affected by the subject of this IA. In light of this, we believe it is prudent to adopt a conservative approach - starting from an extreme upper bound estimate, and refining this accordingly.

According to Business Population statistics published by BIS, the distribution of UK employment across different enterprise sizes is shown in table 23:

Table 23: Number of Enterprises and Employment, by Enterprise Size ${ }^{28}$

|  | Enterprises | Employment <br> (thousands) | Employment <br> (\%) |
| :--- | :--- | :--- | :--- |
| Micro: $1-9$ employees | 968,545 | 3,651 | 19 |
| Small: $10-49$ employees | 173,405 | 3,469 | 18 |
| Medium: $50-249$ employees | 30,475 | 2,957 | 15 |
| Large: $250+$ employees | 6,320 | 9,631 | 49 |

Table 24 below assumes that the 125,000 starts in the 2014-15 cohort all move into employment, and are distributed across enterprises in the same way as shown in column 4 above. It also shows the maximum number of enterprises which could employ these learners, after completion of their qualification, by assuming that:
$>$ All micro / small / medium-sized enterprises only employ one of these learners i.e. no learner is employed by the same enterprise;
> Every large enterprise employs at least one of these learners, so all large enterprises are affected by the proposal.

Table 24: Distribution of learners, by establishment size, and maximum number of enterprises affected

|  | Learners | Maximum Number of <br> Enterprises |
| :--- | :--- | :--- |
| Micro: $1-9$ employees | 23,000 | 23,000 |
| Small: $10-49$ employees | 22,000 | 22,000 |
| Medium: $50-249$ employees | 19,000 | 19,000 |
| Large: $250+$ employees | 61,000 | 6,320 |
| Total | $\mathbf{1 2 5 , 0 0 0}$ | $\mathbf{7 0 , 0 0 0}$ |

[^10]It therefore implies a maximum of around 70,000 enterprises employing the learners in any given cohort. Table 25 shows the total costs - calculated on the same basis as in the HE impact assessment. It also assumes the same distribution of enterprises who have insourced and outsourced payroll functions.

Table 25: Total costs to businesses of option 4 - 'Extreme' upper bound estimate for further refinement.

| Firm type | Number of <br> enterprises | Mean hourly <br> cost of <br> personnel <br> officer in 2014 | Familiarisation <br> time (hours) | Mean <br> hourly cost <br> of IT <br> technician <br> in 2014 | Average <br> time (hours) | Total Cost |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Micro: Insourced | 11,000 | 15.3 | 1 | 18.4 | 1 | $£ 370,000$ |
| Micro: Outsourced | 12,000 | 15.3 | 0.5 | 18.4 | 0 | $£ 90,000$ |
| Small: Insourced | 14,000 | 15.3 | 2 | 18.4 | 2 | $£ 970,000$ |
| Small: Outsourced | 8,000 | 15.3 | 1 | 18.4 | 0 | $£ 120,000$ |
| Medium: Insourced | 15,000 | 15.3 | 15.3 | 2 | 18.4 | 3 |
| Medium: Outsourced | 4,000 | 15.3 | 4 | 18.4 | 0 | $£ 1,460,000$ |
| Large: Insourced | 5,000 | 15.3 | 2 | 18.4 | 4 | $£ 670,000$ |
| Large: Outsourced | 1,000 |  |  | 18.4 | 0 | $£ 40,000$ |
| Total | 70,000 |  |  |  |  | $£ 3,890,000$ |

This therefore suggests that the compliance costs will be around $£ 3.9 \mathrm{~m}$ - based on the number of learners starting the affected courses in 2014-15. However, this makes a number of extreme assumptions and therefore acts as a starting point for further refinement below:
i) It assumes that all learners working in micro / small / medium-sized enterprises will be employed by a different employer, and that all large enterprises employ at least one of these individuals.

This is clearly an extreme assumption, but we lack information on the extent to which these learners will be distributed across enterprises. We therefore use evidence from the National Employer Skills Survey (2009) showing the average number of apprentices employed by establishments of different sizes. This is used as an indication of the extent to which these individuals may be distributed across different enterprises when they have completed their learning. This reduces the number of enterprises affected from 70,000 to around 55,000 , and the compliance costs to businesses to around $£ 3 \mathrm{~m}$.
ii) It assumes that all of the learners will be in employment and will pay back their loan

It is clear that not all learners will move into employment, and of those who do, many will not reach the required income threshold of $£ 21,000$ for repayments. This is reflected in the RAB charge of $60 \%$. Therefore if, for example, only around a half of learners pay back some money
at some stage ${ }^{29}$, this will reduce the total compliance cost to businesses to around $£ 1.2 \mathrm{~m}$, when scored in 2009 prices for OIOO purposes (deflated from 2014 figures ${ }^{30}$ ). The findings are not particularly sensitive to this assumption; for example, if $60 \%$ of learners paid back some of their loan at some stage, this would raise the cost to around $£ 1.5 \mathrm{~m}$. Under our central estimate of take-up, the costs to businesses would then be within the range presented at the end of this section.
iii) It assumes that none of these enterprises also employ graduates

If, for example, as few as one third also employed graduates, then this would reduce the costs to only $£ 0.8 \mathrm{~m}$. We therefore believe that a more realistic estimate of the compliance costs is around $£ 0.8 \mathrm{~m}$ for 2014-15 (in the relevant price base year). (However, for the purposes of the tables which follow, we round this up to $£ 1 \mathrm{~m}$ for ease of presentation.) This would amount to around $£ 1.2$ million under our upper bound estimate of take-up.

Ongoing costs would commence from 2015-16, the first year in which those who have accessed loans for FE would enter repayment (the same year as the first HE cohort that will have access to the new student support arrangements from 2012-13). There are two obligations for employers in the current student loan repayment system, which will apply equally to loans for FE:

- To make the necessary salary deductions each month;
- To submit returns to HMRC annually, on the repayments deducted by the employer.

The potential additional costs relating to the additional threshold and risk of increased errors, relevant to HE, will not apply to 24+ Advanced Learning Loans, as there will only be a single threshold. The introduction of 24+ Advanced Learning Loans would increase the number of learners repaying, which could increase the amount of resource required in payroll administration, although the number of additional learners will be relatively small. Any impacts would disproportionately affect small businesses, who are less likely to benefit from economies of scale. The extent of these additional costs is unclear because businesses do already have systems in place and an understanding of the regulations for HE, which are broadly unchanged and will be the same for 24+ Advanced Learning Loans. Therefore, it may be possible to build upon existing structures, reducing the potential for new administrative costs.

The HE impact assessment based its costs on HMRC analysis, which suggested ongoing additional costs could be between $£ 1-2.5 \mathrm{~m}$ per year for 125,000 businesses affected.
Therefore, for the estimated 55,000 enterprises affected for $24+$ Advanced Learning Loans, the appropriate range might be $£ 0.5-1.1 \mathrm{~m}$. Our central estimate for ongoing costs is therefore around $£ 0.8 \mathrm{~m}$. (However, for the purposes of the tables which follow, where we incorporate this with other costs and benefits, we round this up to $£ 1 \mathrm{~m}$ for ease of presentation.) For our upper bound estimate of take-up, this cost would be around $£ 1.2 \mathrm{~m}$.

## Microbusinesses

The analysis above suggests that there will be costs to microbusinesses resulting from this regulation. The regulation needs to apply to all businesses employing individuals who have

[^11]undertaken these qualifications and are repaying such loans. Administratively, it would be too costly and complex to have a different system of repayment for those employed by microbusinesses. We will not be applying for a microbusiness waiver at the current time, because such costs will not be incurred until after the microbusiness moratorium ends on $31^{\text {st }}$ March 2014.

## Net Benefits

The net benefits of this option are summarised in table 26, also showing how they compare with our baseline in option 2. This suggests that costs - in terms of government funding, individual / employer contributions, output foregone and direct costs to businesses in terms of administering Ioan repayments - are around $£ 0.21$ bn higher than under option 2 , whilst the (lifetime) benefits are around $£ 1.58$ bn higher, thus implying net benefits are $£ 1.37$ bn higher than the baseline. This option provides the most appropriate balance between readdressing the balance of who pays for learning - particularly in light of the reductions in public spending announced at the Spending Review 2010 - whilst minimising the reduction in learner numbers as a result of this reduction in spending.

Table 26: Costs and benefits of option 4 for the 2014-15 cohort, relative to option 2 (£bn)

|  | Option 4 | Relative to option 2 |
| :--- | :--- | :--- |
| Total Costs | 1.20 | +0.21 |
| Total Benefits | 9.39 | +1.58 |
| Net Benefits | 8.19 | +1.37 |

Sensitivity Analysis on Loans Take-up
As discussed earlier in this section, the figures in the cost-benefit analysis above are based on the assumption that around 55\% of the learners who would have been supported under option 1 will go ahead with learning under a system of income-contingent loans. This implies that around $70 \%$ of the funding available for loans is taken up.

Table 27 outlines the findings of our sensitivity analysis, using the additional assumption that around $90 \%$ (upper bound) of the learners who would have undertaken learning under option 1 would do so under such a system of loans. The latter is the take-up rate under which all of the funding available for loans would be taken up.

The table also compares the net benefits of these estimates with option 2 . In order to compare the options on the basis of the same amount of government investment - net of learner repayments in the case of loans - the amount of grant funding available under option 2 has been scaled up when comparing it with the upper bound estimate of take-up.

Table 27: Cost and benefits of option 4 for 2014-15 cohort, adopting different assumptions about take-up

| Take up <br> \% | Learner <br> Starts | Total <br> Costs <br> $(\mathbf{( m )})$ | Total <br> Benefits <br> $(£ \mathbf{m})$ | Net <br> Benefit <br> $(£ \mathbf{m})$ | Net Benefits <br> relative to <br> option 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $90 \%$ | 204,000 | 1,864 | 15,716 | 13,852 | $+3,525$ |
| $55 \%$ | 125,000 | 1,199 | 9,392 | 8,192 | $+1,368$ |

For the reasons outlined previously, this option will always (i.e. irrespective of the take-up rate of loans) offer better value for money - in terms of the learners supported for each pound of government investment (net of learner repayments) - than spending the same amount through grant funding under option 2, given the provision mix adopted in this Impact Assessment. The table also suggests that the total net economic benefit increases as the take-up of loans increases (there is a benefit for the average learner, so the more learners, the greater the total economic benefit will be).

## Non-Monetised Benefits

There could be a range of other benefits from placing more financial responsibility on individual learners, which have not been monetised for the purposes of this assessment. The introduction of loan provision could result in behavioural change, which could have significant effects on the outcomes of learning, such as:

- Learners may be more likely to undertake courses with greater and more certain economic value - in other words, learning which generates higher and more certain wage and employment returns;
- Learners may place greater focus on quality and the practical relevance of the course undertaken, which could improve the overall quality of courses, and thus the associated economic returns.

In general, greater involvement of learners with the FE system could improve the economic outcomes of FE courses, as suggested by the aforementioned pilot undertaken at Kent TEC. This could potentially increase the level of loan repayment and increase private investment in learning. However, it is not possible to quantify these effects given the existing evidence base, so we do not attempt to monetise them for the purposes of this Impact Assessment.

## Option 5: Professional Career Development (PCDL) Loans

The features of the current PCDL scheme are outlined below:

- The interest rate is typically $9.9 \%$
- The average loan is just over $£ 7,000$
- The banks charge government for interest costs (fairly small) and for defaults (currently £15m per year).
- There is an administration charge of $£ 50$ - mainly for low value loans of less than $£ 500$, which are expensive to administer compared with higher value loans.
- Repayment is due within a month of course completion. This can be deferred by up to 18 months, but only in exceptional circumstances with the bank's agreement and over three stages i.e. six monthly periods.
- The default rate is currently $13 \%$ and has been agreed with banks at $15 \%$.
- Banks select who is eligible for loans.

This is not an option which has been modelled in detail; it was ruled out for a number of reasons, outlined below:
i. If the new client group applied for loans on the PCDL method, then the default charge is likely to be higher. Historically, when we have tried to extend the PCDL to lower levels of learning, the banks have resisted, as they consider the learners to be too high a risk.
ii. The evidence presented in relation to option 4 suggests that such loans - which are not income contingent - are likely to be less attractive to learners. For example, the aforementioned report commissioned by the Learning and Skills Research Centre
(2006) ${ }^{31}$ found that FE learners are only half as likely to take out a commercial loan to pay for their courses, compared to an income contingent loan. Evidence from the bespoke research into 24+ Advanced Learning Loans also suggested that the incomecontingent nature of the loans was an important factor, with the qualitative study suggesting that some of the negative attitudes towards loans were overturned when they understood they would only pay it back when their income exceeded a certain level. Income contingent loans essentially insure learners against the risk of no or low returns from qualifications, in a way that PCDL-style loans do not. Therefore, this option is likely to lead to a much lower number of learners compared to option 4, and therefore does not meet policy objectives in terms of access.
Therefore, this is not a realistic option and is not considered further. For this reason, and bearing in mind proportionality, we have not worked up the costs and benefits of this option in detail.

## Summary

The key findings of our analysis are summarised in table 28 below.
Table 28: Total costs and benefits of each option for the 2014-15 cohort

| Policy Option | Number of learners (starts) | Costs (£m) - Discounted where they are realised over more than one year |  |  |  | Discounted Lifetime benefits (£m) | Discounted <br> Net Lifetime <br> Benefit <br> (£m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public Funding | Private contributions | Foregone output | Total |  |  |
| Option 2: Continue grant funding equivalent to amount spent under option 4 | 106,000 | 211 | 90 | 692 | 993 | 7,817 | 6,824 |
| Option 3: Stop grant funding* | 23,000 | 44 | 67 | 149 | 260 | 1,708 | 1,447 |
| Option 4: Income contingent loans (central estimate) | 125,000 | 211 | 167 | 821 | 1,199 | 9,392 | 8,192 |
| Option 4a: Income contingent loans (upper bound estimate) | 204,000 | 283 | 231 | 1,349 | 1,864 | 15,716 | 13,852 |
| Option 1: Continue grant funding according to pre-SR position (not itself an option because of reductions in funding) | 227,000 | 410 | 114 | 1,493 | 2,016 | 17,076 | 15,059 |

* From 2015-16 onwards, public funding costs fall to (practically) zero and private contributions to $£ 44 \mathrm{~m}$.
** Represents public funding, net of loan repayments.
*** Includes loan repayments and co-funding for work-based learning, including apprenticeships.
**** This includes additional compliance costs to businesses (described in detail previously).
As previously discussed, Option 1 is not itself an option given the reduction in public funding following the Spending Review 2010. The table above shows that government investment is the same under both options 2 and 4 (net of learner repayments in the case of option 4), but under option 4, there will be a greater number of learners (around 19,000 more starts) because of the greater financial responsibility being placed on learners themselves, rather than the government. This suggests that the costs to government of supporting the average learner - for the mix of provision adopted in this Impact Assessment - will be lower under a system of loans, than under the current system of grant funding. For every $£ 1$ invested through grant funding, we would only need to invest around 85p through loan funding in order to allow the same number of

[^12]learners (under our central estimate of take-up in 2014-15 ${ }^{32}$ ). Our analysis therefore demonstrates that from all options under consideration (excepting Option 1 which is not itself an option), the introduction of income contingent loans will not only result in a better balance between public and private funding, but will also yield the greatest economic benefit for a given level of government funding.

The table below summarises the marginal costs and benefits from all proposals in relation to our baseline option:

Table 29: Costs and benefits of each option, relative to Option 2, for the 2014-15 cohort

| Policy Option | Number of learners (starts) | Costs (£m) - Discounted where they are realised over more than one year |  |  |  | Discounted lifetime benefits (£m) | Discounted net lifetime benefit (£m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public Funding | Private contributions | Foregone output | Total |  |  |
| Option 2: Continue grant funding equivalent to amount spent under option 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Option 3: Stop grant funding | -83,000 | -167 | -23 | -543 | -733 | -6,109 | -5,377 |
| Option 4: Income contingent loans | +19,000 | 0 | +77 | +129 | +206 | +1,575 | +1,368 |
| Option 4a: Income contingent loans (upper bound estimate) | +48,000 | 0 | +134 | +324 | +458 | +3,983 | +3,525 |
| Option 1: Continue grant funding according to the pre-SR level position (not itself an option because of reductions in funding) | +121,000 | +199 | +24 | +800 | +1,023 | +9,259 | +8,235 |

Therefore, considering the preferred option relative to the baseline, with our central estimate that take-up is such that $55 \%$ of those who would have been supported under option 1 go ahead with learning under a system of loans (i.e. $70 \%$ of available funding for loans is taken up):

- Total public funding costs, net of individuals' repayment of loans, are the same as under the baseline of option 2 (by the way in which the two options have been defined).
- Contributions paid by individuals and employers are $£ 77 \mathrm{~m}$ higher for each cohort of learners from 2014-15 onwards - thus representing a net economic cost of the proposal.
- Output foregone whilst learning takes place is $£ 129 \mathrm{~m}$ higher for each cohort of learners from 2014-15 onwards - thus representing a net economic cost.
- Economic value added over the course of the learners' lifetimes is $£ 1.58$ billion higher for each annual cohort of learners from 2014-15 onwards - thus representing a net economic benefit.


## Costs and benefits in 2013-14

As previously discussed, our analysis so far has focussed on 2014-15 onwards, since the preferred option will be fully operational by then; 2013-14 will be a transition year since grant funded starts will still be a feature prior to the start of the academic year. We now turn to analyse the impact of the different options on learner numbers, and the costs and benefits in

[^13]this year. We assume that option 1 is the same as in 2014-15, and we use this as a starting point for our analysis.

## Option 2: Maintain current system but with a reduced level of funding

Government funding costs - net of individuals' repayments in the case of qualifications funded by loans - for the preferred option, given our central assumptions about take-up, amount to around $£ 203 \mathrm{~m}$ in 2013-14 (see later). We therefore consider the respective costs and benefits if this was all spent on grant funding, assuming that it was distributed across learning streams, and fully- and co-funded provision, in the same way as under option 1.

Table 30 summarises the total costs for 2013-14 under this proposal. It suggests that on top of the $£ 203 \mathrm{~m}$ of government funding, contributions paid by individuals / employers and foregone output would amount to $£ 103 \mathrm{~m}$ and $£ 640 \mathrm{~m}$ respectively. This means that costs total $£ 0.95$ bn.

Table 30: Total costs in 2013-14 - Option 2 (£m)

|  | Costs for 2013-14 (£m) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |
| Government Funding Costs | 196 | 7 | 203 |
| Contributions paid by individuals/employers | 101 | 2 | 103 |
| Foregone output | 613 | 28 | 640 |
| Total | $\mathbf{9 1 0}$ | $\mathbf{3 6}$ | $\mathbf{9 4 6}$ |

Table 31 summarises the total benefits for the 2013-14 cohort of learners over their lifetime. Given the available funding, there will be around 101,000 learner starts, which would generate lifetime benefits of $£ 7.56$ bn.

Table 31: Total benefits for 2013/14 cohort - Option 2

|  | Learner <br> Numbers | Starts | Discounted <br> Lifetime <br> Benefits per <br> Start (£) | Total Discounted <br> Lifetime Benefits <br> per Cohort <br> $(\mathbf{£ m})$ |
| :--- | :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |  |
| Classroom-Based | 59,000 | 47,000 | 73,000 | 3,426 |
| Apprenticeships | 113,000 | 41,000 | 95,000 | 3,855 |
| Total at L3 | 173,000 | 88,000 |  | 7,281 |
|  |  |  |  |  |
| Level 4 |  |  |  |  |
| Provider-based | 18,000 | 14,000 | 20,000 | 277 |
|  |  |  |  | $\mathbf{7 , 5 5 8}$ |
| Total at L3 and L4 | $\mathbf{1 9 1 , 0 0 0}$ | $\mathbf{1 0 1 , 0 0 0}$ |  |  |

Net economic benefits for the 2013-14 cohort would therefore amount to around $£ 6.61$ bn, which we use as a baseline against which to assess the other options:

Table 32: Net benefits of option 2, relative to option 1, for 2013-14 cohort (£bn)

|  | Option 2 | Relative to option 1 |
| :--- | :--- | :--- |
| Total Costs | 0.95 | -1.07 |
| Total Benefits | 7.56 | -9.52 |
| Net Benefits | 6.61 | -8.45 |

## Option 3: Remove grant-funding for this group of learners

This option entails the complete removal of grant funding from the start of the 2013/14 academic year onwards. However, in line with the preferred option, we assume that there would still be grant funding for starts in the first half of the financial year i.e. prior to September, as well as for qualifications continuing from the previous year. This means that some public funding would still be required for this group of learners during 2013-14. Table 33 implies that total government funding costs amount to around $£ 126 \mathrm{~m}$, and total economic costs, including contributions paid by individuals and their employers, as well as output foregone while learning takes place, amount to around $£ 538$ m.

Table 33: Total Costs in 2013-14 - Option 3

|  | Costs for 2013-14 (£m) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |
| Government Funding Costs | 123 | 2 | 126 |
| Contributions paid by individuals/employers | 96 | 2 | 97 |
| Foregone output | 308 | 7 | 315 |
| Total | $\mathbf{5 2 8}$ | $\mathbf{1 0}$ | $\mathbf{5 3 8}$ |

Table 34 summarises the total benefits for the 2013-14 cohort of learners over their lifetime. Given the available funding, there will be around 47,000 learner starts (around 54,000 fewer than under the baseline), which would generate lifetime benefits of $£ 3.86 \mathrm{bn}$.

Table 34: Total benefits for 2013-14 cohort - Option 3

|  | Learner <br> Numbers | Starts | Discounted <br> Lifetime <br> Benefits per <br> Start (£) | Total Discounted <br> Lifetime Benefits <br> per Cohort <br> $(£ \mathbf{m})$ |
| :--- | :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |  |
| Classroom-Based | 26,000 | 18,000 | 73,000 | 1,303 |
| Apprenticeships | 104,000 | 26,000 | 95,000 | 2,489 |
| Total at L3 | 131,000 | 44,000 |  | 3,792 |
|  |  |  |  |  |
| Level 4 |  |  |  | 68 |
| Provider-based | 6,000 | 3,000 | 20,000 |  |
|  |  |  |  | $\mathbf{3 , 8 6 0}$ |
| Total at L3 and L4 | $\mathbf{1 3 7 , 0 0 0}$ | $\mathbf{4 7 , 0 0 0}$ |  |  |

Net economic benefits for the 2013-14 cohort would therefore amount to around $£ 3.32$ bn, which is $£ 3.29$ bn lower than under our baseline of option 2 :

Table 35: Net benefits of option 3, relative to the baseline, for 2013-14 cohort (£bn)

|  | Option 3 | Relative to option 2 |
| :--- | :--- | :--- |
| Total Costs | 0.54 | -0.41 |
| Total Benefits | 3.86 | -3.70 |
| Net Benefits | 3.32 | -3.29 |

## Option 4: Income-contingent loans

As discussed above, 2013-14 will be a transition year, as loan provision will not commence until the start of the academic year - September 2013 - which is midway through the financial year. Before that, grant funding will still be a feature for this group. In 2013-14, there will be $£ 129 \mathrm{~m}$ available for loans, which would allow us to support around 82,000 starts. There will also be £126m for grant funding - both to fund learners continuing from 2012-13, and any starts prior to the start of the academic year in 2013-14. BIS modelling suggests that this would support around 27,000 starts in 2013-14 prior to the start of the academic year.

For our central estimate in 2014-15, we assumed that take-up of loans was such that $55 \%$ of the learners who would have been supported under option 1 would go ahead with learning under a system of loans. This implied a total of 125,000 starts. The previous paragraph suggests that the budget will support 82,000 starts through loans and 27,000 through grant funding, totalling 109,000 starts. We therefore believe it is reasonable to assume that all of the funding will be taken up in 2013-14 for the purposes of our central estimate. Indeed, it is possible that there could be more learners who wish to take out such loans than the available funding will allow, but we must remember that this the first time when learners in Further Education will have access to such loans. In practice therefore, we might see a measured initial take-up of loans, which then increases over time.

The table below summarises the total costs for 2013-14 under this proposal. Total costs will be $£ 998$ m, which is $£ 52$ m higher than under the baseline.

Table 36: Total costs for 2013/14 cohort - Option 4

|  | Costs for 2013-14 cohort (£m) |  |  |
| :--- | :--- | :--- | :--- |
|  | Level 3 | Level 4 | Total |
| Loan repayments (private) | 48 | 3 | 52 |
| Net government funding | 196 | 7 | 203 |
| Other contributions by employers | 61 | 0 | 61 |
| Foregone output | 650 | 32 | 682 |
| Total | $\mathbf{9 5 6}$ | $\mathbf{4 2}$ | 998 |

Table 37 calculates the total benefits for the 2013-14 cohort of learners over the rest of their working lives. Given the available funding, there will be around 109,000 learner starts, including those through grant funding prior to the start of the academic year and through loans thereafter, which would generate economic benefits of $£ 8.16$ bn over their lifetime.

Table 37: Total benefits for 2013-14 cohort: Option 4

|  | Learner <br> Numbers | Starts | Discounted <br> Lifetime <br> Benefits <br> per Start <br> $(£)$ | Total Discounted <br> Lifetime Benefits <br> per Cohort <br> $(£ \mathrm{~m})$ |
| :--- | :--- | :--- | :--- | :--- |
| Level 3 |  |  |  |  |
| Classroom- and work- <br> based | 53,000 | 45,000 | 73,000 | 3,274 |
| Apprenticeships | 126,000 | 48,000 | 95,000 | 4,563 |
| Total at L3 | 179,000 | 93,000 |  | 7,837 |
|  |  |  |  |  |
| Level 4 |  |  |  | 323 |
| Classroom- and work- <br> based | 19,000 | 16,000 | 20,000 |  |
|  |  |  |  | $\mathbf{8 , 1 6 0}$ |
| Total at L3 and L4 | $\mathbf{1 9 9 , 0 0 0}$ | $\mathbf{1 0 9 , 0 0 0}$ |  |  |

Net economic benefits for the 2013-14 cohort would therefore amount to around $£ 7.16$ bn, which is $£ 0.55$ bn higher than under our baseline.

Table 38: Net benefits of option 4, relative to option 2, for 2013-14 cohort

|  | Option 4 | Relative to option 2 |
| :--- | :--- | :--- |
| Total Costs | 1.00 | +0.05 |
| Total Benefits | 8.16 | +0.60 |
| Net Benefits | 7.16 | +0.55 |

For 2014-15, we performed some sensitivity analysis - in order to demonstrate how the central estimate would change if take-up of loans was such that $90 \%$ of the learners, supported under the pre-Spending Review position, undertook learning under a system of income-contingent loans. Because all of the funding for loans is taken up under our central estimate for 2013-14 (unlike for 2014-15), then the upper bound estimate is the same as the central estimate. In the interests of brevity, this analysis is not reported in full here, but is summarised in table 39.

To summarise the findings of this section, the costs and benefits under each option, compared to the baseline, for both the 2013-14 and 2014-15 cohorts of learners, are summarised in table 39.

Table 39: Costs and benefits of each option relative to option 2-2013-14 and 2014-15 cohorts

| Option and Cohort | Number of learners (starts) | Costs (£ million) - Discounted where they are realised over more than one year |  |  |  | Discounted Lifetime benefits (£m) | Discounted Net Lifetime Benefit (£m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Public Funding | Individuals | Foregone output | Total |  |  |
| Option 2: 2013-14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Option 2: 2014-15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Option 3: 2013-14 | -54,000 | -77 | -5 | -325 | -408 | -3,698 | -3,290 |
| Option 3: 2014-15 | -83,000 | -167 | -23 | -543 | -733 | -6,109 | -5,377 |
| Option 4: 2013-14 | +8,000 | 0 | +10 | +42 | +52 | +602 | +551 |
| Option 4: 2014-15* | +19,000 | 0 | +77 | +129 | +206 | +1,575 | +1,368 |
| Option 4: 2013-14 - Upper bound | +8,000 | 0 | +10 | +42 | +52 | +602 | +551 |
| Option 4: 2014-15 - Upper bound* | +48,000 | 0 | +134 | +324 | +458 | +3,983 | +3,525 |
| Option 1: 2013-14 | 126,000 | +207 | +11 | +852 | +1,070 | +9,518 | +8,448 |
| Option 1: 2014-15 | 121,000 | +199 | +24 | +800 | +1,023 | +9,259 | +8,235 |

* Although not shown in the table, there is an additional $£ 1 \mathrm{~m}$ cost to businesses - in terms of administering loan repayments - for these options in 2014-15, and each year thereafter.

Therefore, considering our central estimate of the impact of the preferred option, relative to the baseline (Option 2), for both 2013-14 and 2014-15:

- Total government funding costs, net of individuals' repayments of loans, are the same as under the baseline (by the way in which the two options have been defined)
- Contributions paid by individuals and employers are $£ 10 \mathrm{~m}$ higher for the 2013-14 cohort, and $£ 77 \mathrm{~m}$ higher for each cohort from 2014-15 onwards - thus representing a net economic cost of the proposal, relative to the baseline.
- Output foregone whilst learning takes place is $£ 42 \mathrm{~m}$ higher for the 2013-14 cohort, and £129m higher for each cohort from 2014-15 onwards - thus representing a net economic cost relative to the baseline.
- Economic value added over the course of the learners’ lifetimes is $£ 0.60$ billion higher for the 2013-14 cohort, and $£ 1.58$ billion higher for each annual cohort from 2014-15 onwards - thus representing a net economic benefit relative to the baseline.

The summary sheets of this Impact Assessment consider the impact of the different options on ten annual cohorts of learners relative to the baseline; in other words, the 2013-14 cohort, the 2014-15 cohort and eight cohorts thereafter - with the same learner numbers, costs and benefits as for the 2014-15 cohort:

- For the purposes of calculating the Net Present Value for all ten cohorts, the costs and benefits for the 2014-15 cohort, and subsequent cohorts, have been further discounted to reflect the fact that they 'start' from a later point than the base year i.e. 2013-14.
- For the purposes of calculating the average annual costs and benefits, constant price figures have been used. This includes using the figures showing the non-discounted benefits of qualifications in table 5 . In order to avoid confusion, and because they are less meaningful, these figures have not been presented in the preceding detailed analysis.

The tables on the following pages summarise the marginal benefits and costs of each option relative to the baseline for the ten cohorts of learners beginning their courses in each year from 2013-14 onwards. They demonstrate how the NPV figures in the summary sheets at the front of this Impact Assessment are derived. The tables are as follows:

- Table 40: Option 1
- Table 41: Option 2 (baseline)
- Table 42: Option 3
- Table 43: Option 4
- Table 44: Option 4a - As option 4, but assuming that take-up is such that $90 \%$ of the learners, who would have been supported under option 1, undertake learning in 2014-15. This is equivalent to all of the funding available for loans being taken up in 2013-14, 2014-15 and each subsequent cohort.

Table 40: Marginal costs and benefits of option 1: 2013-14-2023-24 cohorts

| Year | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6 / 1 7}$ | $\mathbf{2 0 1 7 / 1 8}$ | $\mathbf{2 0 1 8 / 1 9}$ | $\mathbf{2 0 1 9 / 2 0}$ | $\mathbf{2 0 2 1 / 2 2}$ | $\mathbf{2 0 2 2 / 2 3}$ | $\mathbf{2 0 2 3 / 2 4}$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Benefits |  |  |  |  |  |  |  |  |  |  |  |
| Increased <br> economic value <br> added | 9,518 | 8,981 | 8,712 | 8,450 | 8,197 | 7,951 | 7,712 | 7,481 | 7,256 | 7,039 | 81,296 |
| Total Benefits | 9,518 | 8,981 | 8,712 | 8,450 | 8,197 | 7,951 | 7,712 | 7,481 | 7,256 | 7,039 | 81,296 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Costs |  |  |  |  |  |  |  |  |  |  |  |
| Increased <br> government <br> funding | 207 | 192 | 185 | 179 | 172 | 166 | 161 | 155 | 150 | 144 | 1,711 |
| Increased output <br> foregone while <br> learning | 852 | 772 | 745 | 719 | 694 | 670 | 646 | 624 | 602 | 581 | 6,906 |
| Increased <br> contributions by <br> individuals / <br> employers | 11 | 22 | 22 | 21 | 20 | 19 | 19 | 18 | 17 | 24 | 194 |
| Total Costs | 1,070 | 987 | 952 | 919 | 887 | 856 | 826 | 797 | 769 | 749 | 8,811 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Net Benefit | 8,448 | 7,994 | 7,759 | 7,531 | 7,310 | 7,095 | 6,887 | 6,684 | 6,488 | 6,290 | 72,485 |

Table 41: Marginal costs and benefits of option 2: 2013-14-2023-24 cohorts

| Year | $\mathbf{2 0 1 3 / 1 4}$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ | $2017 / 18$ | $2018 / 19$ | $2019 / 20$ | $2021 / 22$ | $2022 / 23$ | $2023 / 24$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Benefits |  |  |  |  |  |  |  |  |  |  |  |
| Increased <br> economic value <br> added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Benefits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Costs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Increased <br> government <br> funding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Increased output <br> foregone while <br> learning | 0 | 0 | 0 |  |  |  |  |  |  |  |  |
| Increased <br> contributions by <br> individuals / <br> employers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Costs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |


| Year | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ | $2017 / 18$ | $2018 / 19$ | $2019 / 20$ | $2021 / 22$ | $2022 / 23$ | $2023 / 24$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |
| N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table 42: Marginal costs and benefits of option 3: 2013-14-2023-24 cohorts

| Year | $\mathbf{2 0 1 3 / 1 4}$ | $\mathbf{2 0 1 4 / 1 5}$ | $\mathbf{2 0 1 5 / 1 6}$ | $\mathbf{2 0 1 6 / 1 7}$ | $\mathbf{2 0 1 7 / 1 8}$ | $\mathbf{2 0 1 8 / 1 9}$ | $\mathbf{2 0 1 9 / 2 0}$ | $\mathbf{2 0 2 1 / 2 2}$ | $\mathbf{2 0 2 2 / 2 3}$ | $\mathbf{2 0 2 3 / 2 4}$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Benefits |  |  |  |  |  |  |  |  |  |  |  |
| Reduced <br> government funding | 77 | 161 | 197 | 190 | 183 | 177 | 170 | 165 | 159 | 153 | 1,632 |
| Reduced output <br> foregone while <br> learning |  |  |  |  |  |  |  |  |  |  |  |
| Reduced <br> contributions by <br> individuals / <br> employers | 325 | 524 | 506 | 488 | 471 | 454 | 438 | 423 | 408 | 394 | 4,432 |
| T | 5 | 22 | 42 | 40 | 39 | 37 | 36 | 35 | 34 | 32 | 323 |
|  | 408 | 707 | 744 | 718 | 693 | 668 | 645 | 623 | 601 | 580 | 6,386 |
| C |  |  |  |  |  |  |  |  |  |  |  |
| Reduced economic <br> value added | 3,698 | 5,926 | 5,748 | 5,576 | 5,409 | 5,246 | 5,089 | 4,936 | 4,788 | 4,645 | 51,062 |
| T | $\mathbf{3 , 6 9 8}$ | 5,926 | 5,748 | 5,576 | 5,409 | 5,246 | 5,089 | 4,936 | 4,788 | 4,645 | 51,062 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| N | $-3,290$ | $-5,219$ | $-5,004$ | $-4,858$ | $-4,716$ | $-4,578$ | $-4,444$ | $-4,314$ | $-4,188$ | $-4,065$ | $-44,675$ |

Table 43: Marginal costs and benefits of option 4: 2013-14-2023-24 cohorts - CENTRAL ESTIMATE

| Year | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017118 | 2018/19 | 2019/20 | 2021/22 | 2022/23 | 2023/24 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefits |  |  |  |  |  |  |  |  |  |  |  |
| Increased economic value added | 602 | 1,527 | 1,482 | 1,437 | 1,394 | 1,352 | 1,312 | 1,272 | 1,234 | 1,197 | 12,810 |
| Total Benefits | 602 | 1,527 | 1,482 | 1,437 | 1,394 | 1,352 | 1,312 | 1,272 | 1,234 | 1,197 | 12,810 |
| Costs |  |  |  |  |  |  |  |  |  |  |  |
| Increased government funding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Increased output foregone while learning | 42 | 124 | 120 | 116 | 112 | 108 | 104 | 100 | 97 | 93 | 1,015 |
| Increased contributions by individuals / employers | 10 | 74 | 72 | 69 | 67 | 64 | 62 | 60 | 58 | 56 | 591 |
| Direct costs to businesses | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| Total Costs | 52 | 199 | 192 | 185 | 179 | 173 | 167 | 161 | 155 | 150 | 1,613 |


| Year | $2013 / 14$ | $2014 / 15$ | $2015 / 16$ | $2016 / 17$ | $2017 / 18$ | $2018 / 19$ | $2019 / 20$ | $2021 / 22$ | $2022 / 23$ | $2023 / 24$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Net Benefit | 551 | 1,328 | 1,289 | 1,252 | 1,215 | 1,179 | 1,145 | 1,111 | 1,079 | 1,047 | 11,197 |

Table 44: Marginal costs and benefits of option 4: 2013-14-2023-24 cohorts - UPPER BOUND ESTIMATE

| Year | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2021/22 | 2022/23 | 2023/24 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefits |  |  |  |  |  |  |  |  |  |  |  |
| Increased economic value added | 602 | 3,863 | 3,747 | 3,635 | 3,526 | 3,420 | 3,318 | 3,218 | 3,121 | 3,028 | 31,479 |
| Total Benefits | 602 | 3,863 | 3,747 | 3,635 | 3,526 | 3,420 | 3,318 | 3,218 | 3,121 | 3,028 | 31,479 |
| Costs |  |  |  |  |  |  |  |  |  |  |  |
| Increased government funding | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Increased output foregone while learning | 42 | 312 | 301 | 291 | 281 | 271 | 261 | 252 | 243 | 235 | 2,489 |
| Increased contributions by individuals / employers | 10 | 129 | 125 | 120 | 116 | 112 | 108 | 104 | 101 | 97 | 1,021 |
| Direct costs to businesses | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 |
| Total Costs | 52 | 442 | 427 | 412 | 398 | 384 | 370 | 357 | 345 | 333 | 3,520 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Net Benefit | 551 | 3,421 | 3,320 | 3,223 | 3,128 | 3,036 | 2,947 | 2,861 | 2,777 | 2,695 | 27,959 |

Notes to tables 40-44

1. The benefits (costs in the case of Option 3) in terms of 'future value added' refer to the increased value added over their lifetime, for the increased number of learners in the cohort beginning their courses within that year. These benefits will therefore be realised over a period of 36 years for each cohort (and therefore 46 years for all cohorts), and not all in the year to which they are assigned in the tables above (refer to the spreadsheet embedded at Annex 2 for an illustrative breakdown of how the benefits are realised across years).
2. The figures for 2014-15 differ from those in the preceding 'evidence base' section. (As explained previously,) for simplicity, that analysis uses 2014-15 as the base year, as it is easier to demonstrate how the relevant figures have been derived. The above tables discount the costs and benefits by a further year so that they are consistent with the 2013-14 base year, which is used in the summary sheets. The various costs and benefits are discounted by a further $3.5 \%$, with the exception of future economic value added, which is discounted by a further $3 \%$. This reflects the fact that the benefits are evenly distributed across years for a particular cohort, and they already extend beyond the thirty year period after which the $3 \%$ discount rate is applied.

## Annex 1: Post Implementation Review (PIR) Plan

A full Benefits Realisation Plan and evaluation strategy are being developed for the introduction of loans. The Benefits Realisation Plan will detail the benefits associated with the introduction of loans and will include input from external stakeholders. The plan will also set out how and when the benefits will be measured, which will depend on the type of benefit, as some benefits will be measured by applications and take-up that can be measured from the first year of operation, whereas others will depend on repayment information that will take several years. The evaluation strategy will set out the activities that will be undertaken in order to evaluate the policy, drawing on management information collected through the loans system, as well as research that is commissioned in order to measure the benefits.

The main source of data available for evaluation will be learner participation statistics collected through the loans system. These statistics, alongside other management information on the operation of the system will be used by Government to assess the impact of the introduction of 24+ Advanced Learning Loans, including assessing whether benefits have been achieved and how policy or operations can be developed to realise benefits more effectively. The loan application process will provide the systematic collection of information which will allow for future policy review.

We are working with the Major Projects Authority to agree the timing of a Gateway 5 Review, following the implementation of loans that will assess impact and whether policy objectives have been achieved and benefits realised.

## Annex 2

## Annual profile of monetised costs and benefits* - (£m) constant prices (see attached spreadsheet)

|  | $Y_{0}$ | $Y_{1}$ | $Y_{2}$ | $Y_{3}$ | $Y_{4}$ | $Y_{5}$ | $Y_{6}$ | $Y_{7}$ | $Y_{8}$ | $Y_{9}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Transition costs |  |  |  |  |  |  |  |  |  |  |
| Annual recurring cost |  |  |  |  |  |  |  |  |  |  |
| Total annual costs |  |  |  |  |  |  |  |  |  |  |
| Transition benefits |  |  |  |  |  |  |  |  |  |  |
| Annual recurring benefits |  |  |  |  |  |  |  |  |  |  |
| Total annual benefits |  |  |  |  |  |  |  |  |  |  |

For non-monetised benefits please see summary pages and main evidence base section
Please see the attached spreadsheet for an illustration of how the benefits and costs are distributed over the time period. When considering the benefits of the economic value added over individuals' working lifetimes, this is a simplified illustration. This does not take into account the fact that individuals undertaking different courses are of different ages, and thus remain in the workforce for different lengths of time. We have not allowed for this level of sophistication in this breakdown, but it is accounted for in the derivation of the total estimates in the preceding summary pages.


[^0]:    1 OECD (2011), 'Education at a Glance 2010: OECD Indicators', OECD.
    2 Machin, S., Marie, O. and Vujic, S. (2010), 'The Crime Effect of Reducing Education', IZA DP No. 5000, Institute for the Study of Labor.
    3 Feinstein, L. and C. Hammond (2004), 'The contribution of adult learning to health and social capital', Centre for Research on the Wider Benefits of Learning, Research Report No. 8.

[^1]:    4 National Centre for Social Research (2005), 'National Adult Learning Survey (NALS) 2005' available at: http://www.education.gov.uk/research/data/uploadfiles/RR815.pdf
    ${ }^{5}$ Steedman, McIntosh and Green, (2004) 'International comparisons of qualifications: skills audit update.' Centre for Economic Performance, London School of Economics and Political Science

[^2]:    6 Cambridge Econometrics (2011), 'Measuring the Economic Impact of Further Education', BIS Research Paper 38.
    ${ }^{7}$ London Economics (2011), 'BIS Research Paper Number 53, Returns to Intermediate and Low Level Vocational Qualifications'.
    8 Dearden, L, Reed, H, \& Van Reenen, J (2005), 'Estimated Effect of Training on Earnings and Productivity, 198399.' CEP Discussion Papers dp0674, Centre for Economic Performance, LSE.

    9 Sabates, R. and L. Feinstein (2004), 'Education, Training and the take-up of preventative health care', Centre for Research on the Wider Benefits of Learning, Research Report No. 12.
    ${ }^{10}$ Feinstein, L. (2002) Quantitative Estimates of the social benefits of learning, 2: health (depression and obesity), Centre for Research on the Wider Benefits of Learning, Research Report 6.
    ${ }^{11}$ Machin, S., Marie, O. and Vujic, S. (2010), 'The Crime Effect of Reducing Education', IZA DP No. 5000, Institute for the Study of Labour.

[^3]:    12 Tett, L and K. Maclachlan (2007), 'Adult Literacy and Numeracy, Social Capital, Learner Identities and Self Confidence', Studies in the Education of Adults, 39, 2 pp150-167.
    13 Ofsted (2009) 'Family Learning: An Evaluation of Family Learning for Participants, their Families and the Wider Community', Ofsted.
    14 HM Treasury (2003), 'The Green Book: Appraisal and Evaluation in Central Government', available at: http://www.hm-treasury.gov.uk/d/green_book_complete.pdf

[^4]:    ${ }^{15}$ Strictly speaking this is not the case, because in 2014-15 there will be a small number of continuing aims from 2012-13 and 2013-14 i.e. which started prior to the introduction of loans, and will therefore continue to be grant funded. This means that a 'steady state' will not be reached until 2015-16 (or possibly even 2016-17). However, for most options, 2014-15 will be so close to a 'steady state' from a cost-benefit perspective, that we make this simplifying assumption for ease of presentation. It is only really in option 3 - where government support will be removed completely - where the difference between 2014-15 and the 'steady state' will be non-trivial, and we draw this out when discussing that option.

[^5]:    ${ }^{17}$ Learning and Skills Council (2010), 'Train to Gain Employer Evaluation: Sweep 5 Research Report', Evaluation conducted by IFF Research Limited and the Institute for Employment Research.

[^6]:    18 BMG Research (2008), 'Continuing Vocational Training Survey 2005 (CVTS3)', DIUS Research Report 08-17.
    ${ }^{19}$ National Adult Learning Survey (2005)
    https://www.education.gov.uk/publications/eOrderingDownload/RR815.pdf

[^7]:    ${ }^{20}$ London Economics 'Estimating the Effect of Raising Private Contributions to Further Education Fees on Participation and Funding' BIS 2009, Research Paper No 1.
    ${ }^{21}$ Ipsos MORI (2010), 'Evaluation of Level 3 - Final Report', Report prepared for Learning and Skills Council.

[^8]:    ${ }^{22}$ Ivins \& Callender (2006), 'Paying for Learning. Learners, Tuition Fees and the New Skills Strategy' Report Prepared for Learning and Skills Development Agency.
    ${ }^{23}$ MC Consulting (1999), Quoted in "Loans for Lifelong Learning", Mick Fletcher (editor), LSDA 2002
    ${ }^{24}$ Fletcher (2002), 'Loans for Lifelong Learning' Learning and Skills Development Agency.

[^9]:    ${ }^{25}$ Dearden, Fitzsimmons and Wyness (2010), 'The Impact of Higher Education Finance on University Participation in the UK' BIS Research Paper Number 11.
    ${ }^{26}$ Foskett, Roberts and Maringe (2006), 'Changing Fee Regimes and their Impact on Student Attitudes to HE' Higher Education Academy
    ${ }^{27}$ Family Income and Participation in Post Secondary Education, Miles Corak, Garth Lipps, John Zao (IZA discussion paper, January 2004)

[^10]:    28 'UK Business Population Estimates for the UK and Regions' http://www.bis.gov.uk/assets/biscore/statistics/docs/b/bpe 2011 stats release.pdf

[^11]:    ${ }^{29}$ The RAB charge is $60 \%$, implying that $40 \%$ of the initial government outlay will ultimately be repaid by learners. However, some learners will pay some money back, but just not the full amount. In this sense, we may expect more than $40 \%$ of learners to pay some money back at some stage; therefore we adopt an estimate of half for the purposes of this estimate.
    ${ }^{30}$ Using actual RPI figures for 2009, 2010 and 2011, and average of independent forecasts for 2012 and 2013, as published by HM Treasury at:
    http://www.hm-treasury.gov.uk/d/201203forcomp.pdf

[^12]:    ${ }^{31}$ Ivins \& Callender (2006), 'Paying for Learning. Learners, Tuition Fees and the New Skills Strategy' Report Prepared for Learning and Skills Development Agency.

[^13]:    ${ }^{32}$ This considers the funding which falls within the 2014-15 financial year, for qualifications starting within that year. It also takes into account learning which would go ahead on a privately-funded basis under option 2, following the reduction in grant funding relative to the baseline.

