



Australian Government

Australian Government Actuary

REPORTING OF HELP RECEIVABLE AT 30 JUNE 2021

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REPORTING OF HELP RECEIVABLE AT 30 JUNE 2021

1 Introduction

- 1.1 The Department of Education, Skills and Employment (Education) requires estimates of a number of financial measures related to the Higher Education Loan Program (HELP) receivable for their financial statements as at 30 June 2021. This includes an estimate of the debt that is not expected to be repaid (DNER) and the present value of repayments. The latter figure represents the value of the receivable.
- 1.2 Australian Government Actuary (AGA) has developed a microsimulation model that projects future income and repayments and thus allows us to estimate the various figures required by Education. This model is updated annually to reflect the latest Australian Taxation Office (ATO) data on income and transactions. However, the timing of data transmission means that our model is necessarily one year behind the reporting date for financial statements. That is, for the current report, we are using the model based on data to 30 June 2020.
- 1.3 As part of the 2020 model we have continued the practice, first introduced in the 2016 model, of modelling the repayment prospects of VET debtors separately to non-VET debtors, relying on their income profiles available to date. This year we have undertaken additional analysis of the potential DNER associated with the VET Student Loans (VSL) program which replaced VET FEE-HELP (VFH) effective from 1 January 2017. This work has expanded on the work we did in 2018 which was used last year. We have again updated our previous analysis of VFH debt that is likely to be irrecoverable due to past inappropriate behaviour in the sector, resulting in a further increase relative to previous allowances. I have again devoted a chapter to discussing this treatment of VSL debts as well as other relevant issues in the VET space.
- 1.4 In other respects, I have largely followed the structure of advice provided in previous years. The five subsequent chapters of the report therefore cover:
- background information;
 - VET issues;
 - results of the 2020 model including reconciliation with the advice provided in 2020 for financial statements that was derived from the 2019 model;
 - roll forward of the 2020 model to the position as at 30 June 2021; and
 - some comments on the results.
- 1.5 The figures included in this report have been prepared for financial statement purposes and should not be used for any other purpose without first checking their suitability with AGA. In line with previous practice, we will provide a more detailed report on the 2020 HELP model, including descriptive analysis of debt and debtors as at 30 June 2020, and the model structure and diagnostics later in the year.

- 1.6 For the purposes of this report, I advise that there have been no significant changes to the income modelling methodology or associated assumptions since the previous model update.
- 1.7 However, there were two minor refinements to the modelling process this year as follows:
- In prior years, we have not made use of the most recent year of income provided in our data, as for many debtors this information was not available or it was considered unreliable for modelling purposes. This year we have made full use of the current year income values that are available from those individuals who had lodged a tax return at 31 December 2020 (the date the data was provided). In addition, where an income had yet to be recorded, we have rolled forward the prior year income (if available) based on the income growth rates of individuals who have incomes in both years. Using this approach resulted in a projected level of compulsory payments for 2020-21 close to the amounts identified by the 2020-21 ATO Certificate.
 - The level of voluntary contributions over recent years has been growing at a faster rate than our modelling has projected. This year there was a significant increase in voluntary contributions, possibly due to assistance from family members in COVID-19 influenced economy. We have adjusted our modelling to allow for these recent increases.
- 1.8 In addition, there were two activities associated with this year's advice which involved the following:
- The removal from the data provided by the ATO of historical VFH debts from 2013-2016 for individuals who had been granted a re-credit under the VET Student Redress Scheme and had been processed by the ATO at 31 December 2020 (the effective date that the data was provided to us).
 - Separating the value of the HELP receivable into a value in relation to each of VSL debts issued since 1 July 2019, other VET related debts and non-VET related debts.
- 1.9 In line with last year's approach, we have retained the use of a single valuation discount rate for converting future projected repayments into a present or fair value. The single discount rate is intended to simulate the outcome of using a yield curve, while reducing the complexity associated with a yield curve. At the same time, we have also relied on Education estimates of the HELP debt balance at 30 June 2021 and likely repayments and new debt issued up to 30 June 2021.
- 1.10 The actuary responsible for this report is Stuart Mules, FIAA.

2 Background

- 2.1 For financial reporting purposes, Education is required to record the HELP receivable at fair value. That is, taking account of the debt that is not expected to be repaid (DNER) due to the income contingent nature of the program and the deferral adjustment, which is the result of indexing outstanding debt in line with movements in the CPI rather than the valuation discount rate.
- 2.2 In order to reach an estimate of the fair value, a projection of future repayments against the debt which is estimated to be outstanding as at 30 June 2021 (the balance date) is performed. Note that because of delays in data transfer between educational institutions and the ATO, primarily in relation to Semester 1 debt for 2021, the outstanding debt at the balance date (30 June 2021) will not be known with certainty. Changes in transfer processes occurring during 2019 had improved the situation compared to previous years but for this year a significant delay was again observed. Therefore, there remains some uncertainty about the amount of debt reported at the balance date.
- 2.3 The AGA HELP model generates simulated incomes at the individual level over a 45 year period for all those with an outstanding debt one year prior to the balance date. These incomes can then be used to calculate future repayments against the debt outstanding one year prior to the balance date (30 June 2020 for the current report). For the new debt which has been incurred over the financial year immediately preceding the balance date, we assume that the pattern of repayment observed for the final year of debt included in the model data can be applied. That is, we assume that the repayments projected by the 2020 model for debt incurred in 2019-20, can be pro-rated to estimate the repayments that will be made against debt incurred in 2020-21.
- 2.4 A number of principles regarding the estimation of the receivable have been adopted over time dealing with the timing of accounting for repayments, treatment of policy changes and the appropriate discounting basis. These are discussed in turn below.

Accounting for repayments

- 2.5 The AGA model is based on ATO transaction data. This data accounts for compulsory repayments at the time they are credited against outstanding debt and we do the same in our model. In practice, employers are required to deduct PAYG contributions for the salaries of employees with a HELP debt. These amounts are known as PAYG receipts and are effectively an estimate of what are expected to become the actual compulsory payments credited against the outstanding debt in the following year. ANAO have advised that, in order to be consistent with the methodology which the ATO uses to report on receipts, PAYG receipts over the year immediately preceding the balance date should be taken into account.
- 2.6 This methodology effectively brings forward compulsory payments by a year and this in turn has two partially offsetting impacts on the estimated fair value of the receivable.

Firstly, the amount due is reduced by the tax receipts which are estimated to have been collected in the year before the reporting date but not yet credited against individual debts. Secondly, the remaining projected compulsory payments are considered to be one year closer to payment and hence discounted by one year less. This second impact has the effect of increasing the value of the receivable. The net effect is a decrease in the value of the receivable.

Treatment of policy changes and current legislation

2.7 It has been agreed with ANAO that only measures that have been legislated should be incorporated into the estimates for financial statement purposes. While there were no new measures legislated over the last year that have an impact on our calculation process, it is useful to set out here a summary of the key legislation impacting debt repayments.

2.8 HELP repayment thresholds are indexed each year in line with the increase in the CPI over the year to the previous 31 December. As a result, the 2020-21 repayment thresholds were increased by 0.85%, being the CPI increase over the year to 31 December 2020, resulting in the following revised repayment thresholds for 2021-22:

HELP repayment thresholds from 2021-22	
Repayment rate%	Threshold amount
1.00%	\$47,014
2.00%	\$54,283
2.50%	\$57,539
3.00%	\$60,992
3.50%	\$64,652
4.00%	\$68,530
4.50%	\$72,642
5.00%	\$77,002
5.50%	\$81,621
6.00%	\$86,519
6.50%	\$91,710
7.00%	\$97,213
7.50%	\$103,046
8.00%	\$109,228
8.50%	\$115,782
9.00%	\$122,729
9.50%	\$130,093
10.00%	\$137,898

Wage Growth and CPI Assumptions

- 2.9 Changes in legislation in 2019 resulted in the indexation of repayment thresholds to CPI rather than average wages. This means that if wage increases outpace CPI growth, debtors can be expected to move up into higher repayment rates over time. The potential for higher repayments from this relationship has meant that it is more important to closely review these two assumptions.
- 2.10 For this year, we have retained the same long term assumptions as last year, while updating the shorter term assumptions in line with Treasury’s expectations. Where the assumptions last year were affected by the expected impact on the economy of COVID-19, these expectations have been replaced with more optimistic expectations this year. However, we recognise that making any assumptions about the impact of COVID-19 on the economy and future income levels is highly uncertain and will evolve over time.
- 2.11 The following assumptions have been adopted (with last year’s COVID assumptions shown in brackets):

Year	CPI Growth (pa)	Wages Growth (pa)
2020-21	0.6% (1.25%)	1.4% (1.2%)
2021-22	2.3% (1.5%)	1.9% (2.1%)
2022-23	2.1% (2.0%)	2.4% (2.1%)
2023-24	2.4% (2.3%)	2.6% (2.1%)
2024-25	2.5% (2.2%)	2.8% (2.5%)
2025-26	2.5% (2.4%)	3.0% (2.6%)
2026-27	2.6% (2.5%)	3.6% (3.0%)
2027-28	2.5% (2.5%)	3.9% (3.0%)
2028-29	2.5% (2.5%)	4.0% (3.5%)
2029-30 and thereafter	2.5% (2.5%)	4.0% (3.7%)

- 2.12 Our expectation last year was that the COVID assumptions would likely result in a 4% reduction in projected repayments from HELP debtors relative to our pre-COVID assumptions.

Overseas Debtors

- 2.13 Repayments of HELP debt from individuals living overseas commenced from 1 July 2017 based on the 2016-17 income year. HELP debtors who plan to live overseas for more than six months are required to register with the ATO and make repayments based on their self-assessed total income from foreign and Australian sources. Repayments of around \$41m were credited on the 2017-18 ATO Certificate in respect of this measure, \$52m were credited on the 2018-19 ATO certificate, along

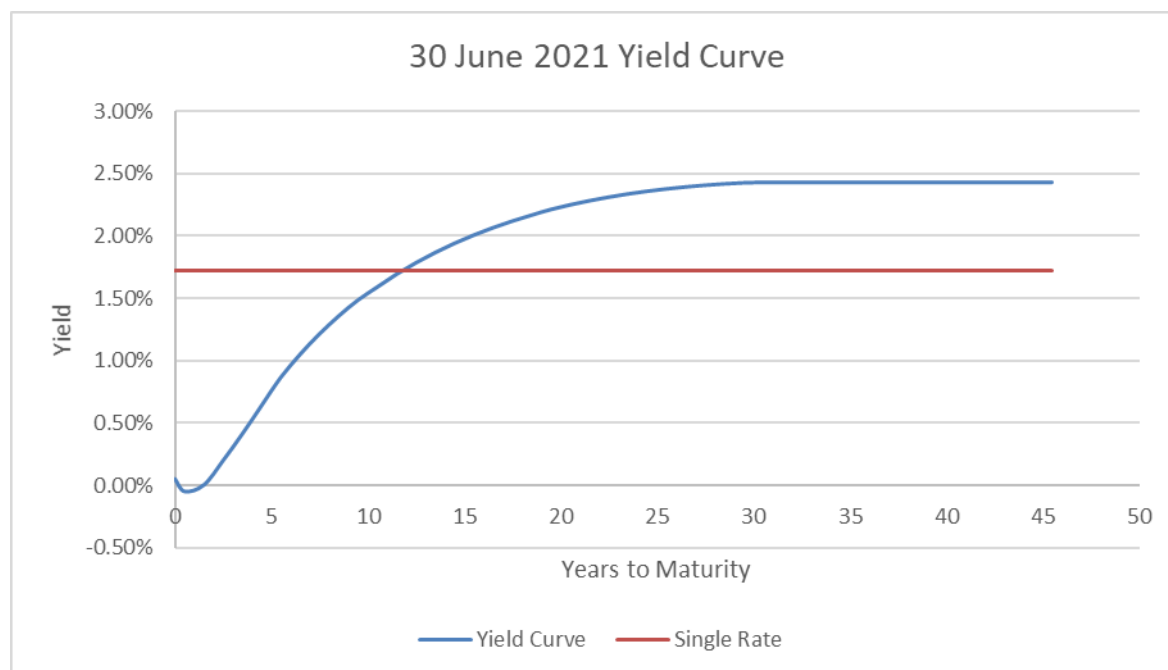
with \$71m credited on the 2019-20 ATO certificate. A further amount of around \$73m is estimated for the 2020-21 ATO certificate.

- 2.14 This is the third year that we have received unit record data (up to 30 June 2020) containing details of these transactions. Analysis of that data indicates that repayments in respect of the initial \$41m came from around 6,000 individuals from a wide range of completion years. Repayments in respect of the \$52m came from over 8,200 individuals, almost exclusively from HELP rather than VET debtors. We now have about 11,500 debtors registered with the ATO.
- 2.15 Our approach to modelling future repayments from this source has been to allow for three tranches of overseas debtors comprising the group represented by the 2018-19 PAYG payees (8,200), the additional 2019-20 PAYG payees (about 2,300) and another tranche of 2020-21 PAYG payees. Given the relatively modest increase in amounts received in the last year we have assumed only a small increase in future PAYG payees in 2020-21 of 2.5% (likely as a result of COVID travel restrictions).
- 2.16 Based on the level of payments received to date and having regard to the outstanding debts associated with these individuals, we have inferred a more realistic payment pattern. From this inferred series of payments, we have subtracted the projected repayments that we allowed for in the HELP Model for the current group of 11,500 debtors and inferred repayments from the subsequent tranches. This has generated a net increase in repayments which has been added to our total expected repayments.

Discounting

- 2.17 For several years now, we have used the yield curve derived from Commonwealth securities on issue as at the balance date for discounting future cashflows.
- 2.18 For the last two years, we have represented the present value of the HELP receivable based on the yield curve as at 30 June as being equivalent to the value using a single discount rate. The single discount rate adopted last year was 1.300% per annum (1.612% per annum in 2019). Further, we observed that the effective mean term of the repayments was about 9.4 years, noting that this is similar to the mean term of a 10 year Commonwealth government bond.
- 2.19 For this year's exercise, we have used the full details of the 30 June 2021 yield curve and represented it for disclosure purposes by reference to an equivalent single discount rate of 1.719% per annum, noting that the effective mean term has reduced to about 8.6 years.
- 2.20 Figure 1 compares the 30 June 2021 yield curve with the single discount rate derived of 1.719%. The increase in the single discount rate from that derived in 2020 reflects the general increase in yields observed over the latter part of the financial year, noting that yields remain particularly low by historical standards.

Figure 1: 30 June 2021 Yield Curve and associated single discount rate



2.21 I note that the timing of HELP repayments is very uncertain, perhaps more so than the eventual level of debt that will remain unpaid. The use of a yield curve (including an associated single discount rate) means that the reported impact of any changes in the assumed timing in repayments can be magnified or obscured by changes in the shape of the yield curve.

2.22 As a result, considerable care should be taken in interpreting the results calculated using the yield curve (including an associated single discount rate) when attempting to understand the underlying dynamics of the HELP receivable. In my view, the figures calculated on the long term constant discount rate basis provide a better guide to understanding the effect of changes in underlying repayment characteristics of HELP debts and the impacts of changes in the modelling approach.

2.23 In providing results under a constant discount rate basis, we have retained the approach adopted last year of a 5% per annum discount rate, which is the rate now used for the valuation of a number of long term cashflow items on the Commonwealth balance sheet including superannuation and military compensation liabilities.

Deferral Adjustment

2.24 There are three adjustments made to the face value of the HELP debt provided by the ATO in order to calculate a fair value of the receivable. The first is the debt that is not expected to be repaid (DNER). The second is the adjustment for PAYG receipts. The final adjustment is the deferral adjustment.

2.25 This adjustment allows for the fact that the debt is only indexed in line with the CPI rather than the various yields associated with the yield curve (represented by a single

valuation interest rate) which would be expected to be higher. Where a payment is made at a future date, the net impact of the indexation of the associated debt and the subsequent discounting of the payment to the present day, gives effect to a deferral adjustment.

- 2.26 Where fair value results are based on long term discount rates, the deferral adjustment reflects the 2.5 percentage point differential between the 5% per annum long term discount rate and the assumed long term indexation rate of 2.5% per annum (noting that there are short term variations). Where the fair value is based on the relevant yield curve and its associated single discount rate (see Figure 1), a much smaller difference between the 2.5% per annum indexation rate applies, resulting in a correspondingly reduced deferral adjustment. In some circumstances, such as in 2019, 2020 and now also in 2021, where the yield curve and associated single discount rate is below the assumed indexation rate, the deferral adjustment actually increases the value of the receivable in present value terms.
- 2.27 Throughout this report, the deferral adjustment is quantified as an additional impairment (or enhancement) that is applied against the projected future repayments.

Estimated and Provisional Data

- 2.28 This advice has been provided based on information set out in an estimated ATO HELP Certificate as at 30 June 2021 (based on a draft HELP Certificate and VSL Certificate provided by the ATO), along with estimated debts incurred and PAYG receipts for the remainder of 2020-21 provided by Education that were not included in the ATO certificate. In the past, it has been accepted that estimated values provided by Education are appropriate to use, however, it may be preferred that when updated values are available, these updated values can be reflected in a final advice.

3 VET Issues

- 3.1 The HELP program was expanded to cover VET students through the VET FEE-HELP (VFH) loan arrangements in 2009. In the early years of operation, VFH accounted for a relatively small component of the annual loans being taken out and is likely to have benefitted students engaging in genuine vocational training. However, starting in 2013-14, the amount of loans taken out began to grow rapidly, more than quadrupling over the two years to 2014-15. Investigations by the Australian Competition and Consumer Commission (ACCC) and Australian Skills Quality Authority (ASQA) exposed a range of problems in the VET sector, including illegal marketing and poor provider standards.
- 3.2 These problems have led to a large volume of debts that have very poor prospects of repayment. In 2016 we introduced an adjustment to account for the presence of debt that we believed should be treated as effectively not receivable. That is, for modelling purposes, we removed a proportion of debtors from scope of repayment. Each year since we have reviewed this approach following more detailed analysis of students likely to be affected and associated providers.
- 3.3 VFH was closed to new students on 31 December 2016, with a grandfathering provision for continuing students. Its replacement, the VET Student Loans (VSL) program, which came into effect on 1 January 2017 has additional checks and balances around the approval of providers and limits the annual loans that can be taken out. As such, it is intended to prevent the problems that arose with VFH.
- 3.4 In the absence of any specific VSL data for modelling purposes, in 2018 we undertook an analysis of the likely VSL debtor repayment experience based on the experience of early VFH completion cohorts. We believe that these cohorts, who completed prior to the large scale inappropriate provider behaviour, offer a good base indication of likely future repayment experience for VSL. We do, however, note the differences between the VSL and VFH programs. The results of the analysis of early VFH completion cohorts and an examination of the differences between the VSL and VFH programs have both informed our expectations in respect of VSL loans.
- 3.5 Further analysis was performed this year in relation to historical VET completion cohorts, this time with more focus on debt size, completion rates and the age of the debtors. This analysis also removed all of the debtors who have had their debt recredited to date.
- 3.6 Quite separately from the problems in the VET sector, we would have expected recoveries from VET debtors to be lower than those from university graduates, reflecting the lower incomes, on average, of those with vocational training qualifications. Prior to 2016, this was allowed for by an arbitrary adjustment of the model outcomes. In 2016, after considering the additional income data available, we came to the view that the divergences we were seeing between the incomes of VFH debtors and other HELP debtors were of such a magnitude to justify modelling VET

debtor incomes separately, notwithstanding the relatively short period for which we had income data for those who have incurred VET debts.

3.7 Each of these three issues is discussed in more depth below.

Non-receivable VFH debt

3.8 During 2019, we updated our earlier analysis in conjunction with staff at Education's VET Student Redress Unit, to generate a more reliable indicator of the likely irrecoverable debt. Broadly, that analysis was based on the following methodology:

- extract debt incurred for debtors who enrolled for the first time in either 2014, 2015 or 2016,
- based on 15 providers identified as acting inappropriately, examine the demographic characteristics of these debtors with a view to identifying other providers with a similar demographic mix, and
- with the assistance of Education staff, determine appropriate proportions of debt incurred by students enrolled with these providers that is likely to be irrecoverable.

3.9 Based on this approach, the estimate of irrecoverable VET debt increased to \$2.15b as at 30 June 2019. While this revised value also reflects an element of subjective judgement, we considered that at that time, it more accurately reflected the likely irrecoverable debt.

3.10 Last year, we were provided with details of debts that had been re-credited under the VET Student Redress Scheme amounting to about \$1.6bn up to 30 April 2020. By comparing the characteristics of debts from this re-credited dataset with all other debts incurred over the relevant period we determined that there could be up to an additional \$1.35bn (\$2.95bn in total) of potential debt re-credits. The results of this analysis are set out in our report dated 15 June 2020 "Report on Potential Re-credits Under the VET FEE-HELP Student Redress Measures".

3.11 However, we recognised that not all of the debts identified in this manner will be illegitimate, and so we adopted an amount of \$2.70bn as a more likely estimate of irrecoverable debt. The reason for the increase of \$0.55bn in the estimate of irrecoverable debt from that adopted in 2019 is mainly due to having more information available from the debts re-credited to date, which when combined with insight provided by Education staff, allowed us to further refine our process.

3.12 We have repeated this exercise this year, noting that the re-credits under the Redress Scheme amounted to about \$2.7bn as at April 2021.

3.13 The re-credited debt to date has been retrospectively removed from the system by the ATO, rather than being reflected as a current day adjustment. Further, new debt reported for the 2020-21 financial year has been reported net of the past re-credits which means that for the 30 June 2021 ATO Certificate an estimate has been required

in relation to the re-credits that have been processed for the current year. For the purposes of this advice, we have attempted to separately record the re-credited debt

3.14 Based on our reconciliation of the new debt advised by Education and the new debt from the 30 June 2021 ATO Certificate, we have assumed that a further \$0.2bn has been recredited between April and July 2021.

3.15 Our modelling, which was based on re-credits to April 2021, suggests that there is potentially another \$1.5bn of debt that has similar characteristics to the debts that have now been recredited. We have provided Education with our detailed analysis which is intended to assist it to determine whether these identified debts may lead to further re-credits. In lieu of that assessment process, we have allowed for a further \$1.5bn of recredits for this year's advice. Taking into account our estimate of re-credits between April and June 2021, this means that we expect a further \$1.3bn or re-credits to take place.

3.16 Rather than attempting to identify individual debtors who may be recredited, this year we have decided to make a global adjustment to the HELP Receivable by removing a further \$1.3bn from the outstanding debt balance as at 30 June 2021.

VET Student Loans

3.17 As noted above, VFH was closed to new students on 31 December 2016, with a grandfathering option in place for students active within the program at that time. VSL was established under the *VET Student Loans Act 2016* and commenced on 1 January 2017. In general terms, the intention of the new scheme is to address the problems which arose under VFH, including unsustainable growth, unscrupulous provider behaviour and poor student outcomes. Specific elements of VSL intended to promote improved outcomes include stricter limits on provider eligibility and a requirement for all providers to apply for approval as a VSL provider, a tightening of course eligibility and loan limits imposed on the amounts of debt able to be incurred under different courses of study to control course fee inflation.

3.18 In order to determine a likely receivable in relation to both VFH and VSL debts, it is important to understand the information that we have available at this time. Total VET debt incurred in the 2016-17 financial year was made up of both VFH debt from the grandfathering arrangements in place for VFH students in a continuing course as at 31 December 2016, along with VSL debt effective from 1 January 2017 (noting that many providers had not completed the mandatory re-approval process in time to issue loans under VSL from 1 January 2017). Over time, the proportion of VET debt associated with VSL loans can be expected to increase. Our understanding is that in respect of the 2020-21 financial year, VSL loans will constitute the vast majority of the total value of estimated VET loans issued.

3.19 At this stage, we do not have sufficient post completion incomes to separately model repayment outcomes for VSL loans. Given the relatively small volume of VSL loans issued to date, I do not believe there is any material error introduced into the estimate

of the receivable as at 30 June 2021 by choosing to again treat these VSL loans as having comparable outcomes to the early VFH experience.

- 3.20 To inform the assumption for the repayment of VSL loans, we issued a report in June 2018 which examined the repayment experience of VFH loans issued between 2010 and 2013, prior to the problems that occurred in the sector. The report also considered the likely impact of VSL characteristics including the application of loan caps and the better targeting of courses to industry demand. The outcome of the report was, after making allowance for the new repayment rates and thresholds from 1 July 2019, a best estimate DNER for VSL debtors of 35%.
- 3.21 Last year this assumption was reviewed to take into account the changed economic environment associated with COVID-19, with a revised DNER estimate of 38% in respect of VSL debt incurred up to 30 June 2019 (pre 2019 VSL).
- 3.22 As data relating to VSL debtors becomes available, it will be important to monitor the extent to which the experience accords with the assumptions under-pinning the revised DNER estimates applied to new debt. However, it will be some time before reliable analysis can be performed.
- 3.23 In rolling forward the estimate of the receivable to 30 June 2021, a key assumption is the DNER percentage and repayment pattern of new VSL debt incurred after 30 June 2019 (post 2019 VSL). It is not appropriate to retain the revised DNER estimate of 38% that applies to pre 2019 VSL debt for this tranche of new debt, as the repayment rules associated with this debt mean that it will not commence to be repaid until all other HELP, VFH and pre 1 July 2019 VSL debts have been repaid.
- 3.24 Last year, based on the composition of new debts issued for the 2018-19 year, including the size of other debts already incurred, we generated a sample of likely post 2019 VSL debtors in order to estimate the likely impact on the DNER of the lower ranking. We assumed that these post 2019 VSL debtors will not incur any additional higher ranking HELP debt through future or concurrent University studies. Our post COVID-19 analysis suggested that an appropriate DNER for this post 2019 VSL debt was 45%.
- 3.25 This year we performed further analysis for Education as part of a study around possible extension of the program to Certificate III and Certificate IV courses. This analysis was more targeted, focussing on appropriate debt sizes for VET courses, completion rates and age distributions. As such we modified our approach and made more use of the existing data (now with VET recredited debts fully removed). We also identified some areas of improvement in the modelling methodology relative to the 2018 exercise and included the experience of more recent VET debtors.
- 3.26 The result of this updated advice was to reduce our estimate of the likely DNER for new pre 2019 VSL debt to 25%. We have performed similar analysis to last year in relation to an estimated impact of the later ranking of post 2019 VSL debt and have adopted a likely DNER of 30%.

3.27 It is important to note that our analysis this year has been completed without access to the actual data in relation to VSL debts incurred for the year ending 30 June 2020, as agreement was not reached in time with the ATO regarding the transfer of this data to the VET area within Education. We have therefore relied on advice of aggregate VSL debts incurred for this period.

ATO Certificate for VSL

3.28 This is the first year that we were provided with a separate ATO Certificate in relation to post 1 July 2019 VSL debt. Our advice last year did not include the closing balance of the VSL Certificate at 30 June 2020 of \$307m. For this advice we have combined the value of each of the HELP and VSL certificates.

Modelling of incomes for VFH debtors

3.29 Our HELP model relies on longitudinal income data at an individual level to make a projection of what future incomes might look like. Because we are projecting incomes for up to 45 years, we ideally want an extended history.

3.30 For VFH debtors, our analysis had shown that the repayment prospects for VFH were poorer than for other HELP debtors. VFH debtors were taking longer to transition to repayment and when they did, their incomes and hence repayments were lower. As a result, from 2016-17 we moved to modelling VFH debtor incomes independently of other non-VFH debtors.

3.31 Making use of the extra data that we now have, the evidence of divergent experience between VFH and other debtors remains compelling. Our observations indicate that:

- differences in income reported for successive financial years between VFH and non-VFH debtors are both substantial and consistent across completion cohorts, and
- VFH debtors appear to have low income growth compared with HELP debtors more generally.

3.32 In summary, it is clear that VFH debt has poorer repayment prospects than HELP debts more generally and the data continues to justify the use of separate modelling for this group.

3.33 As indicated above, we expect that repayment prospects should be better for VSL debt compared to the early completion years for VFH debt. However, there is considerable uncertainty around actual future VSL repayment rates. While some earlier indications are suggesting that VSL debtors have higher post study incomes than VFH debtors, it will still be a number of years before we are able to carry out a detailed analysis of likely repayment prospects for VSL debt. The secondary ranking of the post 2019 VSL debts further complicates this analysis.

VET Split

- 3.34 With effect from 28 May 2019, the administration of the VET sector was transferred from the then Department of Education to the Department of Employment (Employment). For the purpose of the 2019 advice, we were requested to calculate the value of future repayments in respect of VSL debts only (i.e. debts incurred since 1 January 2017) and to reduce the HELP receivable recorded by Education by this amount. Appropriate values at both 28 May 2019 and 30 June 2019 for both Education and Employment were calculated.
- 3.35 With effect from 31 January 2020, Employment returned to the expanded Department of Education, Skills and Employment. To recognise this a full split of the total HELP receivable into HELP only related repayments, VET repayments and VSL repayments was performed. The resulting allocation at 31 January 2020 is set out below:
- HELP fair value : 89%
 - VET fair value : 10%
 - VSL fair value : 1%
- 3.36 For the HELP receivable as at 30 June 2020 (and again this year), we understand that it is a requirement to retain a notional split between the three debt types, but that the VSL fair value is only required in relation to the new VSL debt written from 1 July 2019.

4 Results of the 2020 Model

- 4.1 The output of the model is a projection of future repayment cashflows which allows the DNER and deferral adjustment to be calculated. These amounts are deducted from the nominal value of debt to give the present value of repayments. An adjustment has also been included for the VFH debt that was excluded from the model, as described in the previous chapter.
- 4.2 Table 1 shows the derivation of the fair value of the receivable using the AGA method of accounting for repayments when they are credited against an individual's debt. Note that throughout this letter totals may not add exactly due to rounding. Note also that while figures are quoted to the nearest \$1,000, this level of accuracy is not warranted given the uncertainties involved in the modelling process.

Table 1: Fair value of the receivable at 30 June 2020

		5% Discount Rate \$m	2020 Yield Curve \$m
	Outstanding Debt as at 30 June 2020 ¹	69,793.677	69,793.677
less	Nominal value of further VET FEE-HELP debt excluded from data provided	1,160.562	1,160.562
gives	Nominal Value of Debt considered to have repayment prospects	68,633.115	68,633.115
less	Nominal Value of Debt Not Expected to be Repaid (DNER)	15,498.921	15,498.921
gives	Face Value of Repayments	53,134.193	53,134.193
less	Deferral Adjustment	10,932.735	-4,050.224
gives	Discounted Repayments (Fair Value of Outstanding Debt)	42,201.458	57,184.417

¹ Note that this value includes debt of \$3,407m advised by Education as relating to Semester 1 2020, but not included in the ATO June 2020 HELP Certificate. This value also excludes an estimated amount of \$1,491m of VET re-credits that we believe were processed at 31 July 2020 when the certificate was produced.

- 4.3 These figures can then be adjusted to meet ANAO requirements by taking account of PAYG receipts as shown in Table 2. Note that the amount shown as the compulsory repayments is the value included in the AGA fair value estimate; that is, they are discounted by half a year.

Table 2: Derivation of the ANAO value of the receivable at 30 June 2020

		5% Discount Rate \$m	2020 Yield Curve \$m
	Discounted Repayments from AGA model	42,201.458	57,184.417
less	Discounted value of compulsory repayments in 2020-21 (assumed to be received in 2019-20)	3,705.999	3,767.281
plus	Allowance for all other compulsory repayments being received one year earlier	1,643.651	440.966
gives	Discounted Repayments (ANAO methodology)	40,139.111	53,858.103

4.4 Table 3 reconciles the outcomes under the two discount rate assumptions with the values we estimated in 2020.

Table 3: Reconciliation of fair value estimates at 30 June 2020

		5% Discount Rate \$m	2020 Yield Curve \$m
	2020 Estimate of Fair Value of Debt (based on 2019 model)	36,617.314	50,633.551
plus	<i>Adjustment for differences between actual and expected outcomes</i>		
	Higher than anticipated new debt in semester 1, 2020 ¹	160.128	229.613
	Higher than expected compulsory repayments relative to model estimate of 2019-20 PAYG receipts (including interest)	-355.992	-350.201
gives	Revised Estimate of Fair Value of Debt (based on 2019 model)	36,421.450	50,512.962
plus	<i>Impact of using 2020 model</i>	3,717.660	3,345.140
gives	Estimate of Fair Value of Debt (based on 2020 model)	40,139.111	53,858.103

¹ Note that this is the value of the reduction in new debt after applying the impairment ratio which adjusts for DNER and the deferral adjustment.

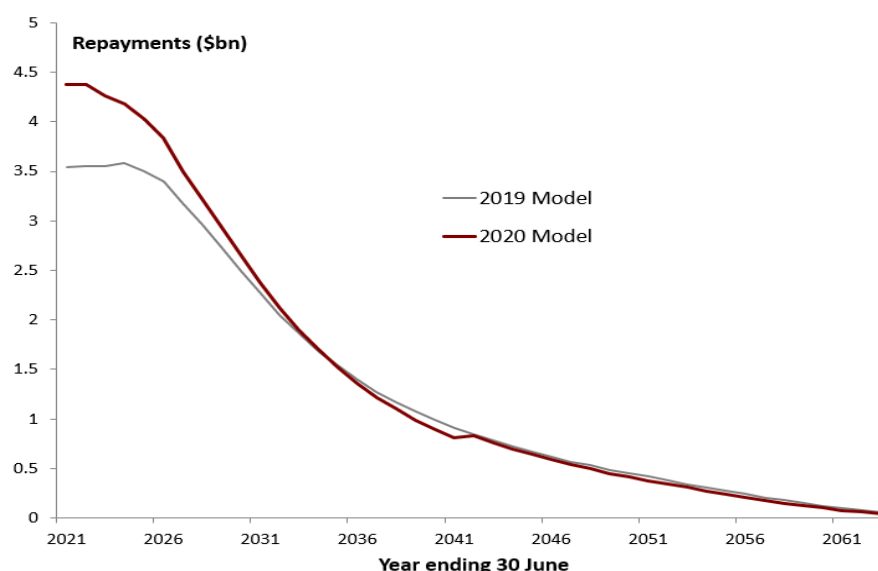
4.5 The impact of updating the model to 2020 is to increase the receivable by around \$3.5 billion when the receivable is calculated using a 5% p.a. discount rate and an increase of around \$3.2 billion when the 2020 yield curve is used for discounting. Most of this increase (\$2.1 billion using 5% discount rate) relates to the updated economic forecasts relative to the more conservative assumptions adopted following the July 2020 Economic and Fiscal Update.

4.6 In terms of the updating of the model, there have been significant changes which reflect a combination of the following positive influences:

- higher observed voluntary repayments,
- inclusion of current year incomes in the modelling process, and
- a general underestimation of incomes predicted by the 2019 model, with updated income data resulting in higher repayment expectations in the 2020 model.

4.7 Figure 2 compares the repayments projected from the 2019 and 2020 models against the outstanding debt as at 30 June 2020. Note that the cashflows in this chart are shown in nominal dollars (that is, they are undiscounted) and, for the 2019 model, take account of the new debt incurred in 2019-20. The impact of the more optimistic economic assumptions and the better than expected income data are the dominant causes of the increase in repayments shown for the two models.

Figure 2: Projected repayments under 2019 and 2020 models



4.8 The fair value of the HELP receivable is the sum of these repayments after discounting to get a present value. Overall, the move to the 2020 model has resulted in an increase in the estimated fair value of the receivable of 6.4% on the yield curve basis. On the 5% p.a. discount rate, the increase is higher at 9.6%. These

adjustments are quite significant in the context of the overall estimation process and largely reflect the updated economic impact of COVID-19 and changes in the operation and outcomes of the model.

5 Estimated Results as at 30 June 2021

5.1 In order to roll forward the 2020 model results to the balance date, a range of additional information is required, specifically:

- ATO aggregate data on debt incurred during 2020-21. This includes all of the debt for semester 2 of 2020 and most of the debt for semester 1 of 2021;
- an estimate of debt incurred during semester 1 of 2021 that was not included in the ATO HELP certificates provided by Education;
- a split of debt incurred in 2020-21 between VET and non-VET debtors;
- an estimate of PAYG receipts over the 2020-21 financial year also provided by Education;
- the indexation rate of 0.6% which applied to outstanding HELP debt as at 1 June 2021; and
- ATO aggregate data on indexation, write-offs, repayments and remissions over the 2020-21 financial year, taken from the draft June 2021 HELP certificate provided by the ATO.

5.2 The main assumption adopted in rolling forward the estimate is that new debts incurred over 2020-21 will have the same DNER percentages and repayment patterns associated with them as was estimated by our model for new debts incurred in 2018-19. Impairment assumptions for new VET debt in 2020-21 have been derived based on separate analysis of the potential repayment prospects of these new VSL debts and was discussed in greater detail in Chapter 3. You have provided information on the split of new HELP debt that is VET debt. Given the differences in repayment prospects, we have distinguished between VET debt and other HELP debt in estimating the impairment on the new debt incurred in 2020-21.

5.3 There are then three elements to the calculation: the estimation of the outstanding debt as at 30 June 2021 before allowance for PAYG receipts; the roll forward of the DNER from 30 June 2020 to the balance date; and the estimation of the fair value of the receivable at the balance date on both the yield curve (represented by a single discount rate) and 5% p.a. discount rate basis. Finally, we provide a reconciliation between the outstanding debt and the estimated fair value as at the balance date.

Calculation of Outstanding Debt as at 30 June 2021

5.4 The outstanding debt as at 30 June 2021 is calculated as follows:

	\$m
Outstanding debt from the ATO estimated June 2021 statement (including VSL)	\$69,233.991
Education estimate of debt incurred in semester 1 2021 yet to be reported by ATO in 2021-22	\$2,366.580
	<hr/>
Outstanding debt as at 30 June 2021	\$71,600.570

5.5 The transfer of debt from providers to Education and then to the ATO reflects a return to the significant delays that were observed prior to 2019. I understand that this reflects delays in the implementation of a new debt reporting system. This meant that almost all of the debt incurred in semester 1 2021 will not be reported until after 30 June 2021.

Calculation of DNER as at 30 June 2021

5.6 Table 4 shows the calculation of the DNER as at 30 June 2021 working forward from the DNER as at 30 June 2020 we advised last year based on the 2019 model.

5.7 It is important to recognise that the DNER percentage calculated below relates to the outstanding debt as at 30 June 2021, and any attempt to compare this value with values based on outstanding debt in prior years should be taken with care.

5.8 The DNER percentage at any time is a function of the following:

- the age of the relative tranches of debt, noting that the DNER of a certain pool of debt can be expected to increase over time due to the mathematical out-workings of an increasing proportion of non-recoverable debt relative to the reducing outstanding balance of a debt (referred to as “debt creep”),
- the weightings of debt in the relative tranches, including the amount of new debt entering the system each year relative to debt being repaid each year,
- the weighting of the debt between VET and non-VET debts (which exhibit significantly different repayment prospects),
- the assumptions incorporated into the AGA model each year, which reflect updated experience and modifications to previous assumptions, and
- the prevailing legislative environment.

5.9 Discussion around the calculation of DNER, changes in this value over time and different bases for measuring DNER are set out in more detail in our Report on HELP Debt as at 30 June 2018 issued in October 2020. An updated report as at 30 June 2019 will be issued later this year.

Table 4: Estimated DNER at 30 June 2021

	Outstanding Debt (\$'m)	DNER (\$'m)
Closing balance reported as at 30/6/20	69,462.653	17,635.862
plus Adjustment to closing balance of ATO Certificate	61.68	12.278
plus VSL ATO Certificate balance at 30 June 2020	306.69	112.855
plus Difference between actual ATO records and Department of Education estimates of debt in 2020	269.349	53.620
plus Removal of VFH debtors from model ¹ in excess of allowance at 30 June 2020	-	4.899
less Effect of HELP model changes for 2020	-	-1,148.997
gives Revised closing balance at 30/6/20 using data to 30/6/20	70,100.370	16,659.483
less Actual compulsory repayments in 2020-21	-3,723.762	-
less Voluntary repayments in 2020-21	-541.538	-
less Bonus on voluntary repayments in 2020-21	-0.001	-
less Reductions for selected courses	-0.029	-0.005
less Write-offs in 2020-21	0.000	0.000
less Remissions and waivers in 2020-21	-7.758	-7.758
plus New Debt	6,843.388	1,075.181
less Estimate of further VET debt re-credits processed to April 2021 removed from debtor data	-1,166.043	-1,166.043
less Estimate of further VET debt re-credits processed up to July 2021 implied by ATO Certificate ²	-239.214	
plus Actual indexation applied at 1 June 2021	387.457	99.910
less ATO adjustment for indexation and transfers	-52.298	-
gives Closing balance as at 30 June 2021	71,600.571	16,660.769
less Estimate of further VET re-credits (on certificate)	-1,260.79	-504.31
Adjusted Closing balance as at 30 June 2021	70,339.785	16,156.455

¹ This accounts for the difference in the DNER associated with debt captured in the VFH adjustment of \$2.71bn in the data provided relative to the previous \$2.7bn allowance.

² This represents an estimate of VET re-credits based on new debt advised by the ATO (which includes re-credits) and new debt advised by Education which excludes re-credits.

Based on these results, DNER represents 23.0% of the estimated outstanding debt as at 30 June 2021 based on the VET re-credits applied to date.

Estimate of fair value of HELP receivable as at 30 June 2021

5.10 The estimate of the fair value of the HELP receivable as at 30 June 2021 is derived from the fair value adjusted for the ANAO methodology as at 30 June 2020. I have shown the calculation at the long term interest rate (Table 5) separately from that using the yield curve (Table 7).

5.11 Note that in presenting the yield curve figures (represented this year by a single discount rate of 1.72% per annum using the yield curve as at 30 June 2021), I have followed what I believe to be standard accounting practice in that I have included the effect of the change in the discount rate assumption (that is, the 2020 yield curve to the 2021 yield curve) as a separate component in the derivation. The interest charge and calculation of the deferral adjustment associated with new debt is based on the equivalent single discount rate of 1.30% per annum which was determined based on the 30 June 2020 yield curve.

Table 5: Estimate of Fair Value at Long Term Discount Rate

	\$m
Opening balance at fair value (revised balance as at 30/6/20)	40,139.111
less Education estimate of 2020-21 PAYG receipts on opening balance	-3,931.566
less Actual voluntary repayments in 2020-21	-541.538
plus New debt incurred in 2020-21	6,843.388
less Estimated 2020-21 PAYG receipts on new debt	-250.935
less Fair value adjustment on new debt	-2,342.867
plus Difference between AGA and Education estimate of 2020-21 PAYG receipts	3.066
plus Interest at 5% per annum	1,890.371
plus Actuarial gains	0.000
less Impact of further VET recredits assumed	-330.64
gives Closing 5.0% per annum balance at fair value (as at 30 June 2021)	41,478.393

5.12 An explanation of the various items in the table follows.

Estimated split of 2020-21 PAYG between opening balance and new debt

- 5.13 It is possible to estimate the proportion of compulsory repayments that relate to debt in existence a year before the balance date and the residual that relates to new debt incurred during the year. Based on the 2020 model, about 6% of compulsory repayments in 2020-21 were expected to be in respect of new debt, with the remaining 94% of repayments relating to debt in existence at 1 July 2020. These percentages have been applied to the Education estimate of PAYG receipts for 2020-21 of \$4,182.5m.

Voluntary repayments

- 5.14 Voluntary repayments for 2020-21 are taken from the estimated ATO Certificate as at 30 June 2021.

New debt incurred in 2020-21

- 5.15 The new debt has been calculated by combining the debt reported on the ATO certificate for 2020-21 (adjusted for the first semester 2020 debt that was still to be reported last year but was included in our calculation at that time) with the Education estimate of debt (including VSL) incurred in the first semester of 2021 that was still to be reported to the ATO for this year.

Fair value adjustment on new debt

- 5.16 The adjustment for the fair value has been determined by comparing the present value of all estimated repayments projected by the 2020 model against the face value of the debt incurred in 2019-20. These estimates have been applied to the figures we have been advised for new debt incurred in 2020-21, split by VET and non-VET debt. This resulted in an overall fair value adjustment of -34.2%, under the 5% discount rate basis.
- 5.17 The split between the components of the adjustment is shown in Table 6 together with the percentage of new debt each component equates to in brackets. Given the difference in outcomes, these results are reported separately for VET and other debt. The amount of new debt the adjustments relate to is also provided.

Table 6: Split of fair value adjustment (5% discount rate)

	VET	non-VET	Total
Estimated new debt in 2020-21 (\$m)	293.814	6,549.574	6,843.388
Face value of DNER (\$m)	88.144	987.037	1,075.181
DNER as a % of new debt	30.00%	15.07%	15.71%
Deferral adjustment (\$m)	58.787	1,208.900	1,267.686
Deferral adjustment as a % of new debt	20.01%	18.46%	18.52%
Fair value adjustment on new debt (\$m)	146.931	2,195.936	2,342.867
Total impairment percentage	50.01%	33.53%	34.24%

Difference between AGA and Education estimates of PAYG receipts

- 5.18 Although our practice is to recognise the estimate of PAYG receipts generated by our model, for disclosure purposes we have continued the practice of showing the difference between the estimate provided by Education and the estimate generated by the model as an explicit item in the roll forward. By including this adjustment, we are increasing the value of the receivable by the difference and ensuring that the resulting estimate corresponds to the present value of projected repayments after 30 June 2021.

Interest

- 5.19 In moving forward from the estimated fair value of the HELP receivable as at 30 June 2020 to the 2021 estimate, the discount rate used to derive the present value of repayments needs to be unwound to reflect the fact that projected payments are one year closer to being received. Hence, the interest rate used in deriving the opening balance is applied to bring the estimate up to 2021 dollars. Cashflows occurring during the year are assumed to be spread evenly over the year and accordingly six months interest is assumed on voluntary repayments and PAYG receipts (including the AGA adjustment mentioned above).

Actuarial gains/losses

- 5.20 The AGA model assumes that the CPI will grow by 0.6% per annum in 2020-21 and this is the rate of indexation applied to outstanding debt by our model. If inflation is higher than expected, the outstanding debt will be subject to a higher level of indexation and expected repayments will also increase. In 2020-21, the applicable indexation rate applied to outstanding HELP was 0.6% and accordingly there has

been no actuarial gain which impacts on the value of the HELP receivable. Note that this is normally calculated from the discounted value of repayments before adjustment for PAYG amounts because PAYG receipts do not affect the amount recorded by the ATO as outstanding at the indexation date of 1 June 2021.

Impact of further VET recredits

- 5.21 We have estimated that there will be a further \$1.5 billion of VET recredits on top of the \$2.7 billion that had been processed by April 2021. Our expectation is that the DNER generated by our model on this debt is about 60%. A further 18% of this amount relates to the deferral adjustment on a 5% discount rate, leaving only 22% of the face value to be removed from the fair value.

Value of post 1 July 2019 VSL debt

- 5.22 Advice received from Education was that a total of \$293.8m of VSL debt has been incurred between 1 July 2020 and 30 June 2021 under the lower ranked repayment arrangement, along with \$297.1m incurred in the year to 30 June 2020. As it is a requirement to separately calculate and report the fair value of future expected repayments associated with this debt, this value has been determined to be \$284.145m based on a discount rate of 5% p.a. The value of the post 1 July 2019 VSL debt is included in the total value of the receivable referred to above.

Yield curve results

- 5.23 Table 7 below sets out the estimate of the fair value using the 2021 yield curve.

Table 7: Estimate of Fair Value using the 2021 Yield Curve

	\$m
Opening balance at fair value (revised balance as at 30/6/20)	53,858.103
less Estimated 2020-21 PAYG receipts on opening balance	-3,931.566
less Actual voluntary repayments in 2020-21	-541.538
plus New debt incurred in 2020-21	6,843.388
less Estimated 2020-21 PAYG receipts on new debt	-250.935
less Fair value adjustment on new debt	-295.481
plus Difference between AGA and Education estimate of 2020-21 PAYG receipts	3.066
plus Interest at 1.30% per annum (unwinding of the discount) ¹	669.393
plus Actuarial gains	0.000
gives Closing balance at fair value using 2020 yield curve	56,354.429

		\$m
plus	Movement from the 2020 yield curve to the 2021 yield curve	-2,069.900
less	Impact of further VET recredits assumed	-708.47
gives	Closing balance at fair value (as at 30 June 2021)	53,576.056

¹ This is represented by a 0.6% indexation component of \$309.031m and a net discount component of \$360.362m.

5.24 For reporting purposes, we have been requested to determine the proportion of future repayments that are attributable to interest on the outstanding debt balance. The proportion in relation to the fair value as at 30 June 2021 of \$53.576bn is 18.2%.

5.25 When calculating results based on the 2021 yield curve, the only changes from the calculation at the long term interest rate are the impairment ratio applied to the new debt which is calculated using the 2020 yield curve, the calculation of interest, which is based on the 2020 yield curve (represented by a single discount rate), and the impact of the change from the 2020 to the 2021 yield curve on the overall value.

5.26 The split between the components of the fair value adjustment on the new debt based on the 2020 yield curve is shown in Table 8.

Table 8: Split of fair value adjustment (2020 yield curve, \$m)

	VET	non-VET	Total
Estimated new debt in 2020-21 (\$m)	293.814	6,549.574	6,843.388
Face value of DNER (\$m)	88.144	987.037	1,075.181
DNER as a % of new debt	30.00%	15.07%	15.71%
Deferral adjustment (\$m)	-36.727	-742.973	-779.700
Deferral adjustment as a % of new debt	-12.50%	-11.34%	-11.39%
Fair value adjustment on new debt (\$m)	51.417	244.063	295.481
Total impairment percentage	17.50%	3.73%	4.32%

5.27 For the purposes of advising on the impairment that should be applied to new debt incurred in 2021-22 in your forward estimates model, you require the equivalent figures estimated using the 2021 yield curve. Since the amount of debt incurred will be different, I have shown only the percentages in Table 9. Note that this implicitly

assumes that the mix between VET and non-VET debt will be the same in 2021-22 as the 2020-21 estimates used in the tables above.

- 5.28 It is important to recognise that due to the historically low 2021 yield curve, represented by a single discount rate of 1.72% per annum, being lower than the assumed rate of future CPI growth, the deferral adjustment reduces the total impairment percentage.

Table 9: Split of fair value adjustment (2021 yield curve)

	VET	non-VET	Total
DNER as a % of new debt	30.00%	15.07%	15.71%
Deferral adjustment as a % of new debt	-3.42%	-6.90%	-6.75%
Total impairment percentage	26.58%	8.17%	8.96%

Value of post 1 July 2019 VSL debt

- 5.29 The fair value of future expected repayments associated with this debt has been determined to be \$429.858m based on the 2021 yield curve which is equivalent to a discount rate of 2.01% p.a. A different and higher discount rate has been used for the new VSL debt to recognise that it represents a separately calculated and reported fair value with a different repayment pattern to other debts. The value of the post 1 July 2019 VSL debt is included in the total value of the receivable referred to above.

Estimate of fair value of HELP receivable as at 30 June 2021

- 5.30 Table 10 reconciles the ATO certified amount of outstanding debt to the fair value calculated using the ANAO preferred approach.

Table 10: Reconciliation between outstanding debt and fair value

		5.0% Discount Rate (\$m)	2021 Yield Curve (\$m)
	ATO estimate of amount of outstanding debt as at 30 June 2021	69,233.991	69,233.991
plus	Estimated debt incurred in semester 1 of 2021 to be reported in 2021-22	2,366.580	2,366.580
less	Estimate of further VET recredits	-1,260.786	-1,260.786
gives	Face value of outstanding debt as at 30 June 2021	70,339.785	70,339.785

		5.0% Discount Rate (\$m)	2021 Yield Curve (\$m)
less	estimated 2020-21 PAYG receipts	-4,182.501	-4,182.501
gives	Nominal value of outstanding debt after PAYG	66,157.284	66,157.284
less	Estimate of remaining VET debtors to be removed (including a 0.6% adjustment for June indexation)	-5.514	-5.514
less	Modelled face value of debt not expected to be repaid (DNER)	-16,161.969	-16,161.969
gives	Face value of debt expected to be repaid	50,000.829	50,000.829
less	Deferral adjustment	-8,522.436	3,575.226
gives	Closing balance at fair value	41,478.393	53,576.056

5.31 Finally, by combining the results from chapters 4 and 5, we can reconcile the fair value of the receivable reported in 2020 with the current estimate, as shown in Table 11.

Table 11: Reconciliation between 2020 and 2021 yield curve estimates

		(\$m)
	Reported fair value of HELP receivable as at 30 June 2020	50,633.551
plus	Fair value adjustment for existing debt	3,224.552
gives	Revised fair value of HELP receivable as at 30 June 2020	53,858.103
less	AGA estimated 2020-21 PAYG receipts and actual voluntary repayments	-4,720.973
plus	Estimated new debt incurred in 2020-21	6,843.388
less	Fair value adjustment for new debt (comprising DNER of \$1,075.181m and a deferral adjustment of \$779.700m)	-295.481
plus	Unwinding of the discount	669.393

		(\$m)
plus	Fair value adjustment for actuarial losses	0.000
plus	Fair value adjustment for change in discount rates	-2,069.900
less	Fair value adjustment for further VET recredits	-708.47
gives	Reported fair value of HELP receivable as at 30 June 2021	53,576.056

- 5.32 In total, the various fair value adjustments amount to an increase in the estimated value of the receivable of around \$0.2bn. Although estimated repayments over the year have also reduced the value of the receivable by \$4.7bn, this has been more than offset by the estimated \$6.8bn in new loans issued over the year and \$0.7bn arising from the unwinding of the discount. The net effect is an increase of around \$2.9bn relative to the value reported in the 2020 financial statements.
- 5.33 For your reference, I have also provided a table in the Appendix (Table 12) to this report in a slightly different format to the reconciliation above in a structure which I understand you use for inclusion in financial statement disclosures.
- 5.34 Also included in the Appendix (Table 13) is a split of the fair value of the receivable into a current value (representing the face value of expected repayments in the coming year) and a non-current value (representing the remainder of the fair value). Values for the total receivable and in respect of post 1 July 2019 VSL debt are provided.

6 Comments on Results

6.1 On a 5% discount rate basis, the closing balance of the receivable is around \$4.9 billion higher than the estimate of the receivable provided in 2020. While an increase would normally be expected due to the additional debt incurred over the course of the year, the value has also increased due to the upgraded wage growth and CPI assumptions offset by a further increase in irrecoverable VET debt. The incorporation of an additional year of income data in our 2020 model has had a positive impact on the receivable relative to what we were projecting based on the 2019 model using the 5% discount rate.

6.2 For non-VET debtors, the impairment on new debt relating to DNER is estimated to have increased slightly from what it's pre COVID-19 adjusted level in 2020 (15.1% in 2021 and 14.7% in 2020).

VET

6.3 The VET system continues to transition from VFH to VSL with new debts now all coming from the new VSL program. The take-up of loans continues to be lower since the closure of VFH to new students and the introduction of VSL.

6.4 Last year we chose to adopt a DNER assumption of 45% for new VET debt from 2019-20. This assumption recognised the different design elements of the VSL program relative to VFH, drawing on work we undertook previously looking at the experience of early VFH completion cohorts to infer potential VSL outcomes. It also recognised that the repayment of this debt does not take place until all other HELP and VET debts have been repaid.

6.5 As described earlier, we have reduced this value to 30% this year, recognising the improved economic outlook and updated modelling, including the use of more recent VSL income data.

6.6 I note that there is significant uncertainty around how VSL might ultimately play out and that we do not yet have sufficient post completion income data to support associated DNER assumptions. As such, it will likely be a number of years before sufficient data exists to further refine this assumption.

Legislation

6.7 There were no changes to legislation over the past year that have impacted on our calculations, following the significant changes adopted in 2019 involving a widening of the repayment thresholds as well as indexing thresholds in line with movements in CPI.

Yield Curve

- 6.8 Yields on Commonwealth bonds were higher in June 2021 compared to 30 June 2020. This year we have again chosen to represent the respective yield curves by calculating equivalent single discount rates. The increase in the 2020 rate of 1.30% per annum to the current rate of 1.72% per annum has resulted in a \$2.1 billion increase in the receivable.
- 6.9 As always, I would emphasise the uncertainty associated with estimates based on projecting incomes up to 45 years into the future. The higher debts that are now being incurred mean that repayments span an increasingly longer period and the results are therefore more sensitive to income projections further into the future, which are inherently subject to greater uncertainty. The margin of error around the results is therefore substantial. Nonetheless, I consider that the value of the receivable reported here falls within the range of reasonable estimates.



Stuart Mules
Senior Actuary

29 July 2021

APPENDIX

Table 12: Accounting Disclosures Table

	(\$m)
Opening Balance as at 1 July 2020	50,633.551
less Higher than estimated semester 1 2020 new debt	229.613
less Higher than expected PAYG repayments	-350.201
plus Methodology adjustment (including initial COVID-19 changes to assumptions)	3,345.140
	<hr/>
gives Revised Opening Balance as at 1 July 2020	53,858.103
less Education estimate of 2020-21 PAYG receipts on opening balance	-3,931.566
less Actual voluntary repayments in 2020-21	-541.538
plus New debt incurred in 2020-21	6,843.388
less Estimated 2020-21 PAYG receipts on new debt	-250.935
less Fair value adjustment on new debt	-295.481
plus Difference between AGA and Education estimate of PAYG 2020-21 receipts	3.066
plus Interest at 1.30% p.a. (unwind the discount)	669.393
plus Actuarial gains	0.000
plus Movement in yield curve from 2020 to 2021	-2,069.900
less Impact of further VET recredits	-708.47
	<hr/>
gives Closing Balance as at 30 June 2021	53,576.056

Table 13: Current and Non-current split (\$m)

Fair Value of Receivable	Current	Non-Current	Total
Post 2019 VSL	\$8.925	\$420.933	\$429.858
All other debts	\$4,473.283	\$48,672.914	\$53,146.198
Total debts	\$4,482.208	\$49,093.848	\$53,576.056