MINISTRY OF EDUCATION
TE TĀHUHU O TE MĀTAURANGA

Briefing Note: Student Loan Scheme Forecast Valuation 2021

To:	Hon Chris Hipkins, Minister of Education Hon David Parker, Minister of Revenue		
Date:	30 March 2021	**Priority:**	Medium
Security Level:	In Confidence	**METIS No:**	1252157 IR - BN2021/130
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Messaging seen by Communications team:	No	**Round Robin:**	No

Purpose of Report

1. This report summarises the results of the forecast valuation of the Student Loan Scheme (the Scheme) for 30 June 2021.
2. The results of the forecast valuation will be made public through Budget 2021 documents.
3. It also informs you on issues with the preparation of data for the forecast valuation, related to Inland Revenue (IR) system changes.

Summary

4. Each year the Scheme is valued by actuaries contracted by the Ministry of Education. The results of the valuation are used for the Government's financial statements. In March the contracted actuaries (PwC) produce a forecast valuation to indicate what the year-end value will be.
5. The fair value of the Scheme is forecast to be **$10.858 billion** at 30 June 2021, an increase of **$643 million**.
6. This year there are three key changes in value:
   - The repayments received in the first half of the year and the HYEFU 2020 forecasted repayments for the second half of the year are higher than was expected at the 2020 valuation **(+64 million)**
   - Updated macroeconomic forecasts (related to CPI and Average Weekly Earnings) **(+42 Million)**
   - Changes to the discount rate **(+$537 million)**, due to forecast lower risk-free interest rates, and a decrease to the risk premium.

7. The forecast valuation includes the same adjustments to reflect the economic impacts of COVID-19 as last year's valuation. Better than expected economic forecasts may decrease these adjustments in this year's final valuation. These adjustments reduced the Scheme's value by **$376 million** in the 2020 valuation.

8. PwC have identified significant differences in the IDI (Integrated Data Infrastructure) loan data compared to data provided in previous years. Because of this, they were not able to update their models for 2021 in time for this forecast valuation.

9. IR and the Ministry are working with PwC to better understand the new IDI data. Gaps in the data supply have been identified and corrected with new data loads into the IDI. Work is continuing to test the robustness of this data and may identify further issues. We will still be able to prepare a final valuation that will meet audit expectations even if some issues are not fully resolved.

10. There are no impacts on the Scheme's value from policy changes for the 2020/21 financial year.

11. Changes in value beyond government's control (e.g. due to macroeconomic forecasts) are accounted for as a remeasurement and do not affect appropriations. Decreases in the Scheme's value that are not remeasurements (like updates to the model) need additional funding to be appropriated to Vote Revenue.

12. We do not anticipate additional funding will be required for changes in the Scheme's value for 2021.

Recommended Actions

The Ministry of Education recommends that the Minister of Education:

a. **forward** this report to the Minister of Finance for his information

b. **agree** that this report be proactively released following Budget 2021.

Agree / **Disagree**

Katrina Sutich
Group Manager Tertiary
Te Ara Kaimanawa

30/03/2021

Hon Chris Hipkins
Minister of Education

23/4/2021
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Valuation of the Student Loan Scheme

1. The Student Loan Scheme (the Scheme) is valued by actuaries contracted by the Ministry of Education. The results of the valuation are reflected in the financial statements of the Government and are made public in Inland Revenue's annual report and the Student Loan Scheme Annual Report.

2. The contracted actuaries (PwC) produce a forecast valuation in March to provide an indication of the Scheme's value for the upcoming 30 June Valuation. The forecast valuation will become public through the release of Budget 2021 documents. They then produce a final valuation which is completed in August.

Valuation results

3. The fair value of the Scheme as at 30 June 2021 is forecast to be is **$10.858 billion**, an increase of **$643 million**. Before considering discount rate effects ($537 million) the Scheme's value has increased by **$106 million**. The causes of this change in value ('sources of impairment') are summarised below.

Table one: Classification of sources of change in fair value

Change in fair value source	Appropriation or remeasurement	COVID related	Total ($m)
Experience variance	Appropriation		+64
Macroeconomic effects, Consumer Price Index and loan interest	Remeasurement		+9
Macroeconomic effects, Average Weekly Earnings (ie COVID-19)	Remeasurement	Yes	+33
COVID-19 model changes	Remeasurement	Yes	0
COVID-19 provision	Remeasurement	Yes	0
Data and modelling changes	Appropriation		0
Other impacts	Appropriation		0
Total before discount rates			**+106**
Discount rates, AvE unwind rate	Remeasurement	Yes	+40
Discount rates, risk-free rate	Remeasurement	Yes	-105
Discount rates, risk premium	Remeasurement	Yes	+602
Total appropriation ($m)			**+64**
Total remeasurement ($m)			**+579**
Total change in fair ($m)			**+643**

- *Experience variance* (**increase of $64 million**): The repayments received in the first half of the financial year and the repayments forecast for the second half of the financial year in the 2020 HYEFU are higher than was expected in the 2020 valuation. This has increased the Scheme's value.

- *Policy changes* (**no change**): There are no impacts on the Scheme's value's value from policy changes this year.

- *Data and modelling changes* (**no change**): The models used to value the Scheme have not been updated due to the issues with the updated IDI data. This is discussed below.

- *Macroeconomic effects* (**increase of $42 million**): Updated future interest rate assumptions (including changes to the loan repayment thresholds due to CPI) increased the Scheme's value by $9 million, and higher salary inflation assumptions in HYEFU increased the value by $33 million.

- *COVID-19 model changes to reflect worse economic scenarios* (**no change from 2020**): To capture worsening earnings expectations, the 2020 valuation classified more borrowers as being in partial employment or unemployed, rather than in full employment. This was done to account for forecast increases to unemployment and to allow for the border being closed until April 2022. The size of the adjustment was based on Treasury's BEFU 2020 economic forecasts. This reduced the Scheme's value by $276 million in 2020. PwC will update this adjustment for the final valuation using BEFU 2021. This will likely increase the Scheme's value, but there will still be some allowance as economic outlooks are improving but remain worse than pre COVID-19.

- *COVID-19 provision to cover a potential deterioration in overseas compliance* (**no change from 2020**): This is to capture the expected impact of overseas payments reducing due to worse economic conditions overseas. This provision reduces the Scheme's value by $100 million.

- *Discount rate* **(increase of $537 million)**: Changes to the discount rate have increased the Scheme's value by $537 million. The discount rate is made up of the risk-free rate and a risk premium:

  i. Adopting the risk-free rate from Treasury at 1 Jan 2021 **decreased the Scheme's value by $105 million**.

  ii. The risk premium has decreased from 2.66% to 1.62% as markets have settled following the immediate shocks of COVID-19. The change to the risk premium has **increased the Scheme's value by $602 million**.

  iii. Updating the Scheme from 30 June 2020 to 30 June 2021 caused an interest unwind that **increased the Scheme's value by $40 million.**

Impact on Vote Revenue

4. Changes in the Scheme's value are classified as either:
    - remeasurements (changes outside of government control due to moving macroeconomic forecasts and changes in the discount rate); or
    - changes to appropriations (changes that are not considered remeasurements e.g. policy decisions).

5. Remeasurements do not require funding. The principle underlying remeasurements is that where events not under the control of the Crown cause a reduction in the value of student loans, it is not appropriate for Government to require prior approval for such events.

6. Changes to appropriations require additional funding when they decrease the Scheme's value. The experience variance, the data and modelling changes and the expense assumption are classified as changes to appropriations but together they increased the Scheme's forecast value by **$64 million**. This means that we anticipate no additional funding will be required from changes in the Scheme's value for 2021. This will be confirmed in the final valuation in August.

Data differences with previous years

7. The valuation model for the Scheme uses education, loan and tax data linked by Stats NZ and made available in the Integrated Data Infrastructure (IDI).
8. Each year IR extracts and transfers updated data to Stats NZ. This year the data has come from the new IR system (START) that has replaced the previous system (FIRST).
9. PwC has identified significant differences in the IDI loan data compared to data provided in previous years. Because of this, they were not able to update their models for 2021 in time for this forecast valuation.
10. Student loan data in START is structured differently than in FIRST. IR undertook extensive testing and reconciliation of data migrated from FIRST to START and is confident the information they previously held in FIRST has been maintained and is accurate within the new START system.
11. IR and the Ministry is working with PwC to better understand the new IDI data coming from START. Gaps in the data supply have been identified and corrected with new data loads into the IDI. Work is continuing to test the robustness of this data and may identify further issues. We will still be able to prepare a final valuation that will meet audit expectations even if some issues are not fully resolved in time.

Updating the Risk Premium formula

12. PwC are currently preparing advice on updating the risk premium. The Ministry of Education, Inland Revenue and the Treasury are contributing to this process and it is expected PwC will have a draft proposal for the Student Loan Scheme working group and the auditors to consider before the end of the financial year.
13. Following this review, the updated risk premium may be included in the final valuation. However, the review may not be complete in time for 2021 due to the extra time being given to resolving the data transfer issues.
14. Due to the long time-horizon of payments, changes to discount rates (including the risk premium) can have a significant impact on the Scheme's value.

Proactive Release

15. We recommend that this report be proactively released following Budget 2021. Any information which may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.