Taxation (KiwiSaver, Student Loans, and Remedial Matters) Bill

Bill Number 158-1

Regulatory Impact Assessments

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Prepared by Policy and Strategy, Inland Revenue

June 2019

Impact Summary: Business Transformation related KiwiSaver refinements

Section 1: General information

Purpose
Inland Revenue is solely responsible for the analysis and advice set out in this Regulatory Impact Statement, except as otherwise explicitly indicated. This analysis and advice has been produced for the purpose of informing final decisions to proceed with policy changes to be taken by or on behalf of Cabinet.

Key Limitations or Constraints on Analysis

Timing

To maximise the administrative efficiencies of the proposals, changes need to align with Inland Revenue's Business Transformation timelines for transferring KiwiSaver into its new administrative system. KiwiSaver is scheduled to be transferred into START on 1 April 2020.

To ensure that policy decisions are taken, and legislation passed in this timeframe, this has created a constraint on the time available to analyse options. Despite this, officials are confident that the proposed approach would be the most effective option to address the problem definition.

Consultation and testing

Inland Revenue has undertaken targeted consultation with KiwiSaver scheme providers. However, as a result of time constraints, wider public consultation has not been carried out. Due to the largely technical administrative nature of the changes proposed, they are unlikely to have generated public interest. Moreover, taken as a whole, the package of options proposed would be beneficial to KiwiSaver members.

There would be some compliance costs for employers, although these are expected to be small (they would be required to communicate information that they already hold to Inland Revenue, on a one-off or infrequent basis). While not consulted on directly, the RIA has been informed by employer feedback generated as part of public consultation undertaken on similar requirements that were introduced as part of the wider Business Transformation work programme.

Assumptions underpinning impact analysis

In relation the proposal to guarantee employer contributions, additional funding is not expected to be required. The primary caveat to this is that it assumes static behaviour. If the introduction of the proposal created a behavioural change amongst employers (that is it results in more unpaid employer contributions), this would increase the fiscal cost of the proposed approach. However, given that levels of employer contribution debt are currently comparable to levels of employee contribution debt (which are already guaranteed), this suggests that the proposal should not have a significant impact on employer's behaviour.

Responsible Manager (signature and date):
Chris Gillion Policy Manager Policy and Strategy Inland Revenue 1 March 2019

Section 2: Problem definition and objectives

2.1 What is the policy problem or opportunity?

As part of Inland Revenue's Business Transformation programme, the administration of KiwiSaver is scheduled to be transferred from its current system to its new administration system on 1 April 2020. This provides an opportunity to make refinements to KiwiSaver settings to improve administrative efficiency and enhance members' experience with the scheme. The following are areas that would assist in achieving these outcomes:

- facilitating the faster transfer of contributions from Inland Revenue to KiwiSaver scheme providers (and between scheme providers); and
- improving information flows between members, employers, scheme providers and Inland Revenue.

Transfer of contributions

Part of Inland Revenue's role as the central administrator for KiwiSaver, involves receiving KiwiSaver employer and employee contributions from employers and then forwarding these contributions on to KiwiSaver scheme providers. A reduction in the time taken to transfer contributions would improve the efficiency of the central administration of KiwiSaver.

Payday filing reforms, which become compulsory from 1 April 2019, will result in Inland Revenue having employer information sooner after a payday (within 2 days of a payday for large employers and with 10 days for smaller employers). This will include information about KiwiSaver employee and employer contributions. The reforms will allow KiwiSaver employee contributions to be passed to scheme providers sooner after a member's payday. This is because current KiwiSaver settings permit the use of Crown funds to pay employee contributions to scheme providers before contribution amounts have been paid to Inland Revenue by employers (effectively creating a Government guarantee of employee contributions). This Government guarantee does not currently extend to employer contributions.

To ensure that the benefits of Inland Revenue being in receipt of earlier payday information are fully realised in relation to KiwiSaver, this RIA considers how to enable Inland Revenue to forward employer contribution amounts to scheme providers as soon as payday reporting information from employers has been received, rather than having to wait until the employer has actually paid the amount of the contribution to Inland Revenue (the current state).

This RIA also considers other refinements that would facilitate the faster transfer of contributions.

Improving information flows

Inland Revenue is in the unique position of having on-going contact with KiwiSaver scheme providers and employers. This means Inland Revenue is able to facilitate the flow of information between relevant KiwiSaver parties (employers, providers and members) and also should have access to information to ensure that members are receiving the correct KiwiSaver contribution entitlements.

Currently, in some instances, Inland Revenue does not have access to sufficient information to effectively police the accuracy of contribution amounts received from employers. For example, Inland Revenue does not receive information from employers about the employer superannuation contribution (ESCT) rates they are taxing employees at (ESCT is the tax payable on employer contribution amounts). However, based on ESCT amounts paid to Inland Revenue, potentially up to 63% of employers could be incorrectly calculating their employees' ESCT rate.[1]

This RIA considers refinements that could be made to improve existing KiwiSaver information flows, to help ensure that KiwiSaver members are receiving their correct contribution entitlements. Consideration is also given to how information flows could be utilised to give members increased flexibility (for example whether the application process for changing an employee contribution rate could be simplified for members).

2.2 Who is affected and how?

KiwiSaver members

Taken as a whole, KiwiSaver members would benefit from the package of proposals – the changes would result in them earning market investment returns on contributions sooner, help ensure they are receiving the correct contribution amounts and give them additional flexibility in respect of how they can change their contribution rate.

KiwiSaver scheme providers

KiwiSaver scheme providers would benefit from the faster transfer of contributions, as it would result in them having more funds under management. Schemes have also indicated enabling KiwiSaver contribution rates to be changed through providers, would enhance member-provider relationships.

Employers

Helping to ensure members are receiving correct contribution amounts, would result in employers being required to communicate some additional information they should already hold to Inland Revenue. Employers would not be directly affected by any other proposals.

Inland Revenue

The proposals would enhance Inland Revenue's central administration of KiwiSaver and create administrative savings. As implementation of the proposals would be aligned with Business Transformation, there would be no additional implementation costs.

[1] Figure based on analysis of early adopters of payday filing reforms for the month of June 2018.

2.3 Are there any constraints on the scope for decision making?
There are no constraints on the scope for decision making.

Section 3: Options identification

3.1 What options have been considered?

The following criteria were used to assess the options considered:

- *Compliance*: compliance costs should be minimised as far as possible.
- *Administration*: administrative costs should be minimised as far as possible.
- *Equity*: the option should ensure that KiwiSaver members are receiving the correct contribution amounts.
- *Sustainability*: the option should be consistent with wider KiwiSaver settings.

Option One: Status quo

Administration: The status quo would not reduce administrative costs.

Compliance: The status quo would not reduce compliance costs.

Equity: The status quo results in some KiwiSaver members not receiving employer contributions that other members are receiving (as a result of employers not paying the correct contribution amounts or not paying employer contribution amounts at all).

Sustainability: As far as practical, the KiwiSaver regime settings are intended to facilitate administrative efficiency. The problem definition identifies that there are some aspects of the regime that would be more efficient if subject to further refinements.

Option Two: build on payday filing reforms

This option would build on the improved information available through payday filing reforms to facilitate the faster transfer of employer contributions to scheme providers and to improve the accuracy of contribution entitlements passed to scheme providers. Specifically, it would involve passing employer contribution amounts to scheme providers based on payday information received by employers, before Inland Revenue had received the contribution amount (essentially a Government guarantee, that would align with the existing treatment of employee contributions). Based on the improved information received through payday filing, this option would also align the commencement of interest paid while contributions are held by Inland Revenue with a member's payday.[2]

Administration: This option would increase administrative efficiency, as employer contributions could be passed to scheme providers sooners. However, as it does not include other administrative enhancements to KiwiSaver, savings may not be maximised.

Compliance: This option should make it easier for members to reconcile the amounts in their KiwiSaver accounts with the KiwiSaver contributions recorded on their payslips (as employer contributions would be passed in full to KiwiSaver providers sooner after the member payday). Consequently, this should also reduce the level of contacts from members to scheme providers.

Equity: This option would ensure that all KiwiSaver members receive the employer

[2] Currently, interest on employee contributions commences on the 15th of the month the amount was deducted from the member's salary or wages and interest on employer contributions commences on the 1st of the month the contribution amount was paid to Inland Revenue.

contributions amounts they are entitled to. It would also improve the accuracy of interest paid on contributions by Inland Revenue (the current rules result in under and over payment of interest on employee contributions and under payment of interest on employer contributions). However, this option would not address situations where a member's employer is incorrectly calculating contributions amounts.

Sustainability: This option would ensure that the benefit of information obtained via payday filing reforms were fully utilised in the KiwiSaver context. It would also align the treatment of employer contributions with employee contributions and other PAYE deductions (which are guaranteed).

Option Three: Additional transfer, information and administrative refinements

In addition to the changes proposed under option 2, this option would use the opportunity created by Business Transformation, to make further refinements to KiwiSaver settings.

Refinements aimed at facilitating faster transfers would be to reduce the initial KiwiSaver provisional period from 3-months to 2-months (this would mean initial contributions could be transferred to providers a month earlier) and to reduce the period schemes have to send funds and member information, when a member decides to transfer to a new scheme from 35 to 10 days. The later change would only impact non-default providers, as arrangements with default providers already require them to complete transfers in 10-days.

Information flows would be utilised to ensure members were receiving their correct contribution amounts, by requiring employers to provide information to Inland Revenue about the income KiwiSaver contributions have been calculated from[3] and the ESCT rate used. This information would be provided in respect of new employees and existing employees where the information had changed. To recognise that members will have different first points of contact for information on their KiwiSaver account, this option also proposes that members should be able to apply to change their contribution rate through their scheme provider or Inland Revenue (in addition to their employer).

As a further administrative refinement, is also proposed that the 3-month grace period – that a person who has been incorrectly enrolled in KiwiSaver has to gain New Zealand residence before their account is shut – be removed. This period has not operated as intended and is not utilised by members.

The below analysis of this option against the assessment criteria, identifies impacts that are additional to those set out in the analysis of option 2 above.

Administration: Reducing the provisional period and the removing the 3-month grace period would increase administrative efficiency.

Compliance: The option would reduce compliance costs for members looking to change contribution rates. There would be some additional compliance costs for scheme providers and employers (relating to the proposals to reduce the period schemes have to send funds and information to a new provider when a member transfers schemes and the additional employer information requirements, respectively). These compliance costs are expected to

[3] Some amounts that are treated as income for PAYE are exempt for the purposes of calculating KiwiSaver contribution amounts. Examples includes the value of accommodation and a benefit from an employer share scheme.

be small.

Equity: The additional employer information should make it easier for Inland Revenue to identify situations where contribution amounts have been calculated or taxed incorrectly. Based on this information it would be possible to follow-up with employers, so these issues could be resolved sooner and would not arise again.

Sustainability: This option identifies enhancements to KiwiSaver administrative settings in addition to the changes proposed in option 2 – to maximise improvements to KiwiSaver it would be logical to implement all changes. Implementing a package of changes is also more sustainable in terms of the legislation (as opposed to making singular refinements to KiwiSaver legislative settings on an on-going basis).

Other options not considered

Aligning payment of KiwiSaver contributions with an employee's payday

As part of the work on the payday filing reforms, consideration was given to the option of employers being required to pay PAYE and other deductions from salary or wages (including KiwiSaver employee and employer contributions) to Inland Revenue to align with an employee's payday. If employers were required to pay KiwiSaver contribution amounts to Inland Revenue sooner after their employees' payday, this would facilitate the faster transfer of these contributions to scheme providers.

However, the decision was made only to require employers to file information sooner after a member's payday, as feedback from employers was that requiring them to pay the actual monetary amounts of deductions (including KiwiSaver contributions) in a shorter timeframe would be too onerous comply with.

3.2 Which of these options is the proposed approach?

The proposed approach is option 3. This package of refinements is comprised of the following proposals:

- the Crown funding the payment of employer contribution amounts passed to KiwiSaver scheme providers until these amounts are received from the employer (essentially a Government guarantee of employer contributions);
- changing the date the calculation of interest on employer and employee contributions commences, to align with the pay date a member's employer has reported;
- reducing the KiwiSaver provisional period from 3-months to 2-months;
- reducing the maximum period an old scheme provider has to share information and transfer funds to a new provider when a member transfers schemes, from 35-days to 10-days;
- allowing members to change contribution rates through their scheme provider or Inland Revenue, rather than only through their employer;
- removing the 3-month grace period for members who have been incorrectly automatically enrolled in KiwiSaver, to gain New Zealand residence; and
- requiring employers to provide Inland Revenue with KiwiSaver information about a member's employer superannuation contribution tax rate and the income their contributions are calculated from.

Of the options considered this package would be most effective in facilitating the faster transfer of contributions to (and between) KiwiSaver scheme providers, and reducing on-going administrative costs for Inland Revenue.

It is also the most coherent and equitable option for KiwiSaver members as it will help ensure members are receiving the correct contribution amounts and these contribution entitlements are being passed to scheme providers.

The proposed approach is not incompatible with the Government's '*Expectations for the design of regulatory systems*'.

Section 4: Impact Analysis (Proposed approach)

4.1 Summary table of costs and benefits

Affected parties	Comment	Impact
Additional costs of proposed approach, compared to taking no action		
Regulated parties (*KiwiSaver members, scheme providers and employers*)	*KiwiSaver members* Aligning KiwiSaver interest payments to a member's payday would result in a reduction in interest paid on employee contributions for some members with paydays after the 15th of the month. The impact of this would be small given interest is paid at a rate of 0.91% per annum and would be offset by their contributions earning market investment returns sooner and an increase in interest on employer contributions in many cases.[4]	Low.
	Scheme providers Reducing the time scheme providers have to send members' information and funds to a new provider in scheme transfer situations from 35-days to 10-days would have compliance costs for non-default providers, who are not already required to comply with the 10-day transfer time. Feedback from providers indicates this would be manageable and would align with industry best practice.	Low.
	Employers Employers would need to provide information on KiwiSaver income and employee's ESCT rates to Inland Revenue. Compliance costs should be small, as employers would already need to hold this information to accurately calculate contribution amounts and the information would only need to be provided about new employees or existing employees where the	Low.

[4] A decrease in interest payable on employee contributions would be expected to be offset by an increase in interest on employer contributions for employees with a payday between the 15th and 23rd of the month.

	information has changed. For new employees the information would be provided as part of employee on-boarding processes and it is expected that updates to this information for existing employees would be infrequent.[5]	
Regulators (*Inland Revenue*)	The proposals do not require additional funding. Inland Revenue already writes-off amounts of unpaid employer contributions. For the financial year ending 30 June 2018 the write-off of employer contributions was $2.6 million. The only change would be Inland Revenue would pass on contribution amounts to scheme providers, in addition to writing them off. System changes to implement the proposals would be absorbed as part of Business Transformation baselines.	Nil.
Wider government	None identified.	Nil.
Other parties	None identified.	Nil.
Total Monetised Cost		Nil.
Non-monetised costs		*Low.*

Expected benefits of proposed approach, compared to taking no action		
Regulated parties (*KiwiSaver members, scheme providers and employers*)	*KiwiSaver members* The package of proposals would have a number of benefits for members. It would result in members earning market investment returns sooner, mean their savings are with their scheme of choice sooner in transfer situations, help ensure they are receiving the correct contribution entitlements (including addressing current interest underpayment issues) and give them additional flexibility in respect of how a contribution rate change can be made. *Scheme providers* The proposals would result in	Medium. Medium.

[5] Differences between amounts treated as income for PAYE purposes and amounts treated as income for KiwiSaver purposes generally do not change over the course of an employment relationship and ESCT rates apply for the full income tax year (and employees' rates will not change each year).

	contributions being transferred to scheme providers sooner (from Inland Revenue and potentially from other schemes not currently subject to the 10-day transfer rule), which would increase the funds under their management and fees chargeable. *Employers* Most of the changes would not directly impact employers. The additional employer information requirements may reduce employer contact time with Inland Revenue. (Currently, where it appears employers may have calculated contributions incorrectly, Inland Revenue will contact the employer to obtain the relevant information).	Low.
Regulators (*Inland Revenue*)	The package of proposals would increase the efficiency of Inland Revenue's administration of KiwiSaver and create on-going administrative savings. The faster transfer of employer contributions to KiwiSaver providers and reduction of the holding period for initial contributions would decrease KiwiSaver interest payable by Inland Revenue.	Medium (the proposal to guarantee employer contributions would result in an estimated $260,000 in savings per annum). Under $500,000 per annum.[6]
Wider government	None identified.	Nil.
Other parties	None identified.	Nil.
Total Monetised Benefit		$760,000.
Non-monetised benefits		*Medium.*

[6] This savings is after the reduction in interest payable due to faster transfer of employer contributions to scheme providers has been offset by the increase in interest payable on employer contributions with interest calculations commencing from a member's payday. Costs associated with calculating employee contributions from a payday would be negligible (as current under and over payments would broadly offset).

4.2 What other impacts is this approach likely to have?

There is the potential that the proposal to guarantee employer contributions could have a behavioural impact on employers - that is employer's may be less likely to pay employer contributions. (While only $2.6 million in employer contribution debt was written-off for the financial year ending 30 June 2018, approximately $2 billion in employer contributions were passed to KiwiSaver scheme providers during this same year).

Current levels of employer and employee contribution debt are broadly comparable (as at 30 June 2018, employer contribution debt since the commencement of KiwiSaver was $18 million, while employee contribution debt was $24 million). This suggests that the existing guarantee of employee contributions has had limited behavioural impact on employers and that introducing a guarantee of employer contributions would also have a minimal behavioural impact. Moreover, Inland Revenue has processes to monitor and recover unpaid amounts of employer contributions from employers, which would remain in place after the introduction of this proposal. These include interest and penalties available under the Tax Administration Act 1994.

Section 5: Stakeholder views

5.1 What do stakeholders think about the problem and the proposed solution?

The Ministry of Business Innovation and Employment and the Treasury have been consulted on the proposals and support them. The proposals also reflect feedback on the operation of the KiwiSaver regime from the Financial Markets Authority.

Inland Revenue has undertaken targeted consultation with KiwiSaver scheme providers (in the form of Business Transformation focused co-design workshops). Providers are supportive of the proposals.

General consultation with KiwiSaver members has not been undertaken. On a whole, the package of changes should be beneficial for KiwiSaver members and given the technical nature of the proposed changes, they are unlikely to have generated public interest.

The only proposal to directly impact employers would be for them to communicate to Inland Revenue the income amounts a member's KiwiSaver contributions are calculated from and the member's ESCT rate. This is information the employer already needs to hold, and they would only be required to provide it to Inland Revenue in relation to new employees or existing employees where the information has changed. While consultation with employers has not been carried out on these specific requirements, the proposal has been informed by the extensive public consultation that has been undertaken as part of the wider Business Transformation programme. In particular, feedback on the discussion document *Making Tax Simpler – Better administration of PAYE and GST: a Government discussion document* which was released in November 2015 and sought feedback on the payday filing reforms. This included, proposals aimed at refining the new employee on-boarding process, by merging PAYE and KiwiSaver reporting requirements and requiring employers to provide Inland Revenue with additional information about new employees – such as date of birth and other employee details. Although not universally supported, in consultation these new information requirements received majority support from employers. The additional

information requirements proposed in this RIA, would support the shifts in employee on-boarding processes.

Before the proposals are implemented there will be the opportunity for public consultation, as employers and KiwiSaver members would be able to make submissions on the omnibus taxation Bill the legislative changes are included in.

Section 6: Implementation and operation

6.1 How will the new arrangements be given effect?

The proposals would require amendment to the KiwiSaver Act 2006. Amendments would be included in the next available omnibus taxation Bill. To align with the transfer of the administration of KiwiSaver from its current operating system into its new operating system, the changes would come into effect from 1 April 2020.

The Minister of Revenue would make an announcement, on the contents of the proposed omnibus taxation Bill (including these proposals) when it is introduced in the House.

Inland Revenue would be responsible for the on-going administration of the new arrangements. Aligning implementation of the proposals with Inland Revenue's Business Transformation programme, would mean the cost of system changes would be absorbed into Business Transformation.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?
Inland Revenue would monitor the outcomes of the proposals pursuant to the Generic Tax Policy Process (GTTP) to confirm that they match the policy objectives. Inland Revenue collects KiwiSaver data which could be used to assess the effectiveness of the changes in facilitating the faster transfer of employer contributions and enhancing information flows.

7.2 When and how will the new arrangements be reviewed?
No formal review is planned. However, the final step in the GTTP is the implementation and review stage, which involves post-implementation review of legislation, and the identification of remedial issues. Post-implementation review is expected to occur around 12 months after implementation. All KiwiSaver scheme providers have an on-going relationship with Inland Revenue, which includes an annual meeting to discuss policy and operational issues that have arisen over the past year. This would provide an opportunity for scheme providers to give feedback about the effectiveness of the proposed approach.

Impact Summary: *Student Loans: Limiting Student Loan Scheme rules relating to the 2013 and prior years*

Section 1: General information

Purpose
This analysis and advice informs key policy decisions to be taken by the Minister of Revenue ahead of final decisions by Cabinet on whether to proceed with a policy change to reduce the need to amend pre-2013 student loan obligations after April 2020. Inland Revenue is solely responsible for the analysis and advice set out in this Regulatory Impact Summary.
Key Limitations or Constraints on Analysis
The key limitations on the analysis are as follows. **Time to enact legislation** As part of Inland Revenue's Business Transformation programme, the Student Loan Scheme will be moved to new systems and processes with effect from April 2020. This transfer provides an opportunity to reduce the current complexity of the scheme caused by having to administer rules for previous years that have subsequently been repealed. Any legislative changes that are to apply from 2020 would need to be introduced into Parliament by mid-2019. The timeframe to enact legislation has reduced the time available to develop and analyse the options and to consult with stakeholders. **No consultation with external stakeholders** Inland Revenue has not consulted with affected borrowers as the number of borrowers likely to be impacted by the proposed option is small and the legislative process provides an opportunity for the public to make submissions on the proposals as the Bill progresses through Parliament. **Scale of the problem** The scale of the problem in terms of the impact of the status quo on borrower compliance has not been accurately identified. Research suggests that borrowers do not understand how the student loan rules for previous years impact any changes their loan obligations. **Impact of proposals on the student loan valuation** Proposals that have a material impact on the valuation require a Budget bid and would need to be prioritised alongside other bids for Government funding. In order to proceed with reducing the complexity of changes to prior years' repayment obligations, officials focussed on options that would not materially impact the student loan valuation. None of the limitations materially affect the analysis.
Responsible Manager (signature and date):
Melody Guy Policy Manager Policy and Strategy Inland Revenue 31 January 2019

Section 2: Problem definition and objectives

2.1 What is the policy problem or opportunity?

The underlying problem is the complexity of the student loan rules relating to previous years that no longer feature in the current scheme. This complexity means there is a lack of understanding by borrowers of the rules prior to 1 April 2013.

As part of Inland Revenue's Business Transformation programme, the Student Loan Scheme will move to new systems and processes in April 2020. This transfer process provides an opportunity to make legislative changes to reduce the complexity of the student loan rules prior to April 2013, make it cheaper and easier to make changes to the scheme in the future, reduce compliance costs (by increasing understanding of rules) for borrowers, and increase consistency between tax and student loans. April 2013 has been chosen as this date captures 93% of all changes to student loan obligations for previous years and is the point where the rules are largely the same as apply today.

The Student Loan Scheme was introduced in 1992 and is governed by the Student Loan Scheme Act 2011, and loan contracts between the government and each borrower. A significant number of changes have been made to the Student Loan Scheme since its introduction with changes being made in 21 of the last 26 years. Under current legislation, the importance of accurate borrower's obligations outweighs compliance and administrative costs. For example, either the borrower or Inland Revenue can seek to amend a prior year's loan obligation, regardless of the amount of money involved.

A repayment obligation is changed where an error is identified in the calculation of a borrower's repayment obligation for a year. Unlike income tax, which generally has a period of 4 years from the date a return is filed to make changes to a tax obligation, student loan obligations can be changed back to the date the loan was taken out, which could be as far back as 1992 when the loan scheme was introduced. Therefore, where a student loan obligation for a previous year changes, the rules relating to that year apply. This requirement to retain rules for previous years has increased the complexity of the Student Loan Scheme administration, reduced the overall customer experience by making it difficult for borrowers to understand changes to their loan balance, and increased the administration costs. A significant number of the rules relating to previous years have since been repealed.

Decisions on whether to simplify the Student Loan Scheme are required by March in order for any legislative changes to be enacted in time for an April 2020 application.

2.2 Who is affected and how?

Borrowers affected are those whose obligations prior to 2013 are amended. In the 2018 year, of the 700,000 student loan borrowers, less than 0.2 percent had their repayment obligations prior to April 2013 amended (1,314) resulting in increased repayment obligations of $1.2 million. The number of borrows affected is expected to reduce significantly by 2020 due to Inland Revenue's efforts to reduce the number of outstanding tax returns and to contact non-compliant overseas based borrowers.

2.3 Are there any constraints on the scope for decision making?

The major constraint on our analysis is the time to enact legislation.

Inland Revenue is part way through a multi-year transformation programme to modernise New Zealand's revenue system. Business transformation is enabled by a combination of changes to policy, processes, technology and the organisation design of Inland Revenue. It is far more than an upgrade of technology and has provided the opportunity to fundamentally review how the revenue system is administered and consider what changes may be needed.

Options to simplify the prior years' student loan rules require a legislative change. For legislation to be enacted by April 2020, changes would need to be introduced into Parliament in mid-2019 and therefore Cabinet decisions on policy changes are required in March 2019.

The timeframe to enact legislation has reduced the time available to consult with stakeholders. Inland Revenue does not intend to consult separately with affected borrowers. However, mitigating factors are that the number of borrowers likely to be impacted by the preferred option is small and public submissions can be made on the proposals at the Select Committee stage as the Bill progresses though Parliament.

Another constraint is the impact on the student loan valuation. Options that have an impact on the valuation would require a Budget bid as part of Budget 2019. These options would have to be prioritised together with other Government initiatives. Officials do not propose pursuing options that materially impact on the student loan valuation.

Section 3: Options identification

3.1 What options have been considered?

Transferring the Student Loan Scheme to the new systems and processes provides an opportunity to reduce the administrative complexity of the Student Loan Scheme. Reducing the complexity of the Student Loan Scheme can only be resolved through legislative changes. Officials have considered non-legislative options, such as manually undertaking changes to prior year obligations, but these options may reduce but will not resolve the complexity issue. Therefore, the options proposed to simplify the Student Loan Scheme are legislative only.

The options considered are retaining the status quo and two options to simplify the Student Loan Scheme rules relating to the 2013 and prior years.

The policy objective is to implement the Student Loan Scheme into the new systems and processes within the timeline (April 2020) and reduce the complexity of the scheme, whilst ensuring equity among borrowers, and no material impact on the student loan valuation.

In considering the options, officials evaluated the options against the following criteria:

- equity between borrowers (current versus past borrowers, compliant versus non-compliant borrowers, and New Zealand based versus overseas based borrowers);
- the impact of the complexity of the scheme on both the compliance costs of borrowers and administrative costs for Inland Revenue;

- the impact of the options on the valuation of the Student Loan Scheme; and
- the cost and time to make policy changes in the future.

Option One: Status quo – implement the rules back to 1992
This option involves implementing all the prior years' student loan rules back to 1992 into new systems and processes. However, as student loans repayments for New Zealand based borrows are based on income for tax purposes, and as income tax generally has a period of 4 years for making changes to tax obligations, there will be no income generated student loan changes prior to 2013. Changes to loan obligations prior to 2013 would be those where fraud or non-filing of tax returns is involved and it is cost effective to do so, changes in residence status, or changes due to other student loan rules such as repayment holiday entitlement, or entitlement to the voluntary repayment bonus.

This option would have no material impact on the student loan valuation and retains the current equity among borrowers. However, it retains the current complex rules prior to April 2013 which would need to be built into new systems and processes. This complexity imposes administration costs on the government and would impact very few borrowers.. Also, future policy changes should still accommodate the rules prior to 1 April 2013.

This option is not preferred by officials.

Option Two: No new changes to repayment obligations prior to April 2013
Under this option the student loan rules would only be incorporated into new systems and processes back to 1 April 2013. This date was chosen as it captures almost all changes to student loan repayment obligations and the rules applying from April 2013 are largely the same as apply today. The rules relating to policy changes prior to 2013 will not be built into new systems and processes. Changes to repayment obligations prior to this date would only occur in exceptional circumstances such as cases of tax or student loan fraud or non-filing of tax returns showing a significant liability. These cases would be processed manually.

This option simplifies the current rules, removes the need to build the rules prior to 1 April 2013 into the new systems and processes, and reduces both compliance and administrative costs. However, there are instances where equity between compliant and non-compliant borrowers would not be retained, such as where a borrower who Inland Revenue considers is New Zealand based is found to have gone overseas prior to April 2013 without notifying Inland Revenue as required in their loan contract. Under this option the borrower would only have interest imposed back to 1 April 2013 not the earlier date when they became overseas based.

This option would reduce the cost and time to implement policy changes in the future as changes would not have to accommodate rules prior to April 2013. However, it would also have a material impact on the student loan valuation and for this reason is not preferred by officials.

Option Three: Limited changes to loan obligations in relation to the 2013 and prior years (preferred option)
This option would incorporate the student loan rules into new systems and processes back to 1 April 2013. For periods prior to 1 April 2013, changes to repayment obligations would only occur where a borrower changes their residence status, for example, Inland Revenue receive new information that a borrower had gone overseas, or in cases of unfiled returns where it is cost effective to do so, or fraud.

Where a borrower's residency status changes, interest would be calculated on their loan balance from the date the borrower's status changed at the interest rates that applied in the relevant years. Changes in the borrower's repayment obligation for the period up to 1

April 2013 would be ignored. However, changes to obligations from 1 April 2013 onwards would be assessed as they are now.

In cases of fraud, or unfiled tax returns where the obligation is material, a simplified calculation would be used by applying the student loan repayment rate to the amended income figure. A one-off penalty may also apply to penalise the non-compliant action. Late payment interest will only be imposed on adjusted repayment obligations from 1 April 2013 onwards.

Imposing late payment interest on repayment obligations for the period 1992 to 2013 can disproportionately increase the debt owed to Inland Revenue to the point where the borrower cannot repay the debt and disengages with the Student Loan Scheme.

Adjustments to residency status and the associated interest impact together with situations where under-declared income or fraud is involved have the greatest impact on the loan balance and time to repay the loan. This option incorporates these situations.

This option simplifies the calculation of repayment obligations prior to April 2013, removes the need to build these rules into the new systems and processes, reduces the complexity of the scheme and therefore reduces both compliance costs and administrative costs.

As this option takes account of residency changes and applies the historical loan interest rates, equity between compliant and non-compliant overseas-based borrowers would be preserved. Also, the inclusion of borrowers who fail to file returns of a material value or commit fraud also retains equity between compliant and non-compliant borrowers.

This option has no material impact on the student loan valuation and reduces the time and cost of making policy changes in the future as changes would not have to accommodate rules prior to April 2013. This option is preferred by officials.

How each option would work

The following examples illustrate the differences in treatment of a borrower under each option.

Example 1

A borrower went overseas in 2008, did not advise Inland Revenue and was not picked up through the passenger movement match with NZ Customs. The borrower has been treated as New Zealand-based and therefore not charged loan interest. In 2021 the borrower returns to New Zealand. Inland Revenue identifies that the borrower has been overseas for the preceding years and updates the borrower's residency status for the time they were away.

Under Option One, the borrower's residency status will be changed with effect from the date they went overseas in 2008 and loan interest, repayment obligations and late payment interest would be imposed from that date.

Under Option Three, the borrower's residency status will be changed with effect from the date they went overseas in 2008 and loan interest will be imposed from that date. However, repayment obligations and late payment interest would only be imposed from 1 April 2013 onwards.

Under Option Two no changes would be made to the borrower's residency status prior to April 2013 but loan interest, repayment obligations, and late payment interest would be imposed from 1 April 2013 onwards.

Example 2

In 2009 the voluntary repayment bonus feature was introduced which rewarded borrowers for making voluntary repayments above what they were required to repay. The bonus applied for 5 years (2009-2013) before being repealed.

In 2020 a borrower identifies an error in the calculation of their voluntary repayment bonus for the 2010 year although their income remains unchanged. They apply to have the voluntary repayment bonus recalculated for the 2010 year. Under Option One, the borrower would be able to receive the bonus but under Options Two and Three, they would not. We do not expect lack of retrospective entitlement to the voluntary repayment bonus to be a significant issue, given that few people took it up and there has been a long period during which any affected borrowers could have sought a recalculation of their entitlement.

Example 3

A taxpayer has committed fraud through not declaring a large source of income for the 2008 year. This has implications for both their income tax and student loan obligations. The four-year period for making changes to an income tax obligation after a return is filed does not apply where fraud is involved. Therefore, the Commissioner amends the taxpayer's income tax liability for the 2008 year. Under Options One, Two, and Three, the student loan repayment obligation would also be changed. Under Options One and Two, the student loan repayment obligation would be calculated on both the adjusted income for the year and the relevant student loan rules for that year. Under Option Three, the repayment obligation would only be calculated on the adjusted income and late payment interest would only apply from 1 April 2013 onwards.

3.2 Which of these options is the proposed approach?

Officials consider Option Three to be the preferred option. This option addresses the policy problem set out in 2.1 and has advantages in terms of ensuring equity between compliant borrowers and non-compliant overseas borrowers, those who under declare income, or those who commit fraud. It also reduces the complexity of the scheme and therefore makes it easier for borrowers to understand their loan obligations and reduces the administration costs for Inland Revenue over the status quo. This option has no material impact on the student loan valuation and reduces the time and cost of making policy changes in the future.

Section 4: Impact Analysis (Proposed approach)

4.1 Summary table of costs and benefits

Affected parties *(identify)*	**Comment**: nature of cost or benefit (eg ongoing, one-off), evidence and assumption (eg compliance rates), risks	**Impact** *$m present value, for monetised impacts; high, medium or low for non-monetised impacts*
Additional costs of proposed approach, compared to taking no action		

Regulated parties (*affected borrowers)*[1]	The cost to borrowers in reduced accuracy of prior years' obligations may increase or decrease a borrower's repayment liability and reduce or increase the time period to repay the loan accordingly. Changes to repayment obligations by Inland Revenue would tend to increase a borrower's repayment liability. Borrowers not being able to receive the voluntary repayment that they may have been entitled to prior to this change (pre-April 2020).	The extent of the impact is dependent on the amount of the assessed obligation, but any impact on a borrower's repayment time period is expected to be low. Low
Regulators (*Inland Revenue)*	None	None
Wider government	None	None
Other parties	None	None
Total Monetised Cost	Financial impact for borrowers	Borrowers face either an increased or decreased repayment obligation
Non-monetised costs	Compliance costs for borrowers	*Low*

Expected benefits of proposed approach, compared to taking no action		
Regulated parties *(affected borrowers)*	Ongoing compliance costs savings for borrowers affected by a prior year's repayment obligation. The proposal reduces the need for affected borrowers to understand how the old rules impact their student loan liability. By way of example, borrowers with changes to prior year's obligations will no longer be required to understand the impact of the voluntary repayment bonus or 3-year repayment holiday on their loan balance. However, they may have had a higher loan balance through not receiving the voluntary repayment bonus. Borrowers who may have been required to pay late payment interest due to a changed repayment obligation prior to 1 April 2013 would not be required to pay this after this change (April 2020)	Low/Medium depending on the extent of the changes to repayment obligations and number of years involved Low

[1] In the 2018 year, of the 700,000 student loan borrowers, less than two percent had their repayment obligations prior to April 2013 amended (1,314). This number is expected to reduce significantly by 2020 due to Inland Revenue's efforts in recent years to reduce the number of outstanding student loan returns and to contact non-compliant overseas based borrowers.

Regulators *(Inland Revenue)*	Reduced implementation costs for IR. Reduced ongoing costs of changing prior years' obligations, training staff and retaining administrative processes. These costs will form part of the savings from Inland Revenue's Business Transformation Programme.	Low/Medium
Wider government	None	None
Other parties	None	None
Total Monetised Benefit	None	None
Non-monetised benefits	Reduced compliance costs for borrowers and administrative benefits for Inland Revenue	*Low/Medium*

4.2 What other impacts is this approach likely to have?

Two different borrowers may be treated differently in the same situation, depending on when the change is identified. For example, assuming no fraud or non-filing of a material amount is involved, a change in a borrower's income that occurred prior to April 2013 would be included in the borrower's repayment obligation if the change was identified last year but would not occur if the change was identified after April 2020. The amended repayment obligation would result in the time to repay the loan being varied slightly either earlier (if the repayment obligation increases) or later (if the repayment obligation reduces). The greater the adjustment in repayment obligation the greater the impact on the loan repayment period. Most changes to borrowers' obligations occur in the first 3-4 years following the tax year. After that the number of changes falls dramatically. In the 2018 year the number of borrowers who had changes to their repayment obligations for the 2013 or prior years was 1,314, and the total increased repayments obligations was $1.2 million (although the amount expected to be collected is less than this). These figures are expected to reduce significantly by 2020 due to Inland Revenue's continued efforts to reduce the number of outstanding tax returns and to contact non-compliant overseas based borrowers.

Section 5: Stakeholder views

5.1 What do stakeholders think about the problem and the proposed solution?

The timeframe to enact legislation and implement student loans into the new systems and processes has limited Inland Revenue's ability to consult with those borrowers affected by the preferred option. This means that the problem identification, options identification, and impacts have been generated by officials based on the information available. It is recognised that consultation with those affected by a change is an important part of the Generic Tax Policy Process.

However, mitigating factors are that the number of borrowers likely to be impacted in future by the preferred option is small and expected to reduce in future. Also, there will be an opportunity for the public to submit on the measure during the Select Committee process and feedback will be considered at that point.

The Ministry of Education have been consulted in developing the options and agree with the recommended proposal.

Section 6: Implementation and operation

6.1 How will the new arrangements be given effect?

It is intended that the preferred option be included in the next available taxation bill which is expected to be introduced into Parliament later in the year.

Inland Revenue will be responsible for the operation of this preferred option and this will form part of its business as usual function. The preferred option will reduce the implementation risks associated with transferring the Student Loan Scheme from the current computer platform to the new systems and processes.

It is proposed that legislation apply to limit changes in repayment obligations for the 2013 or prior years where the change occurs on or after April 2020. This will enable sufficient preparation time for Inland Revenue to implement the changes.

The proposed approach will be included in the commentary on the taxation bill and consultation by select committee is expected to provide an opportunity for interested parties to express their views on this proposed change.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

Inland Revenue would monitor the effectiveness of the proposed legislation in the first 12 months of operation. If we identify anything that suggests the legislation is not operating as intended, then we will undertake a review.

Inland Revenue currently have metrics to monitor the administration of the Student Loan Scheme. Work is progressing on designing the new system and processes and although work on the metrics to enable ongoing monitoring of volumes of changes to repayment obligations prior to 2013 has not commenced yet, officials expect the new systems and processes to replicate the existing metrics.

7.2 When and how will the new arrangements be reviewed?

The final step in the Generic Tax Policy Process is the implementation and review stage, which involves post implementation review of legislation, and the identification of remedial issues. Post implementation review is expected to occur around 12 months after implementation. Opportunities for external consultation are built into this stage.

Any necessary changes identified from the review would be recommended for addition to the Government's tax policy work programme.

Coversheet: Research and Development Tax Incentive - Refundability

Advising agencies	Ministry of Business, Innovation and Employment (MBIE) Inland Revenue (IR) The Treasury Callaghan Innovation
Decision sought	Broader refundability for the R&D Tax Incentive
Proposing Ministers	Hon Dr Megan Woods (Minister for Research, Science and Innovation) Hon Stuart Nash (Minister of Revenue)

Summary: Problem and proposed approach

Problem Definition

What problem or opportunity does this proposal seek to address? Why is Government intervention required?

The Taxation (Research and Development Tax Credits) Act (the Act), implements an R&D Tax Incentive in New Zealand. The R&D Tax Incentive applies from 1 April 2019 for most businesses. Under the scheme, firms can receive a tax credit equal to 15% of their eligible R&D expenditure. Profitable firms will be able to use this tax credit to reduce their income tax liability. The Act allows for certain firms that have little or no income tax to pay to receive a R&D tax credit refund of up to $255,000 per income year. Credits that are not refunded can be carried forward to future income years provided shareholder continuity criteria are met.

The limited refundability rules in the Act are based on the R&D Tax Loss Cash Out scheme. Under these rules, eligibility for refunds is restricted to unlisted companies that meet a 20% R&D wage intensity test and do not derive non-dividend exempt income.

These criteria mean that many businesses will not be eligible for refundable tax credits under the R&D Tax Incentive. Partnerships, trusts, listed companies, and companies who receive some exempt income or do not meet the wage intensity test will be excluded. Additionally, certain atypical organisations, such as levy bodies, some Māori entities, charities, and local authorities, will be excluded. It is desirable to ensure the law provides clarity as to whether these entities should benefit from the R&D Tax Incentive through the design of a more comprehensive refundability policy.

The limited timeframe for developing the Act meant it was not possible to design broad refundability rules for year one. The Government has committed to developing a more comprehensive policy for refundability to apply from year two of the Tax Incentive.

The rationale for the R&D Tax Incentive and the importance of raising business expenditure on R&D (BERD) was explained in the previous Regulatory Impact Statement (RIS) for the R&D Tax Incentive (http://taxpolicy.ird.govt.nz/publications/2018-ria-rdtc-bill/overview).

This RIS is focused on options to broaden the refundability of the R&D Tax Incentive. If refundability is not broadened, it is expected that the Tax Incentive will not be as effective as intended at incentivising additional R&D.

Proposed Approach

How will Government intervention work to bring about the desired change? How is this the best option?

Broadening eligibility for refundability

The proposed approach is to change the existing limited refundability rules so that R&D tax credit refunds are available to more businesses.

It is proposed that all businesses would be eligible for refundability, irrespective of their legal form or whether they are listed. The 20% wage intensity test would also be removed.

We expect that making the tax credit available to more R&D-performing firms (and higher incentives for firms to engage in R&D) will increase the amount of R&D undertaken, which will in turn result in an increase in knowledge creation, employment, and labour productivity growth. Knowledge created by R&D flows between firms because of worker mobility, product imitation and reverse engineering.

This means firms do not capture the full benefits of their R&D and so they underinvest relative to the socially optimal level. This is why most governments have a policy that will stimulate firms to undertake more R&D.

Providing refundable tax credits will enhance the effectiveness of the R&D Tax Incentive at stimulating growth in BERD, because it provides cash closer to the point when firms, particularly R&D intensive firms in the early stages of their development, are undertaking their R&D.

This means the tax credit is more likely to incentivise the performance of additional R&D by businesses, which is the goal of the policy.

Broadening the refundability available from that provided for year one of the R&D Tax Incentive has always been the intent, and will broaden the reach and effect of the R&D Tax Incentive.

Ensuring integrity and managing fraud risk

In addition to extending refundability to all businesses, it is proposed to remove the existing $255,000 cap on refundability. Instead, it is proposed to limit the amount of credits refundable to businesses through a cap based on the amount of payroll taxes paid by each business. This payroll cap would include PAYE, fringe benefit tax (FBT), employer superannuation contribution tax (ESCT) and withholding tax on schedular payments (WT) paid by a business.

A payroll cap will help ensure the integrity of the scheme is maintained. It is necessary to reduce the risk of fraudulent claims for R&D tax credit refunds which have been problematic (along with an associated fiscal risk) in other jurisdictions with refundable R&D tax credits.

The payroll cap would not apply to limit refundability of R&D tax credits resulting from payments to Approved Research Providers because it will be easy to verify that these payments have been incurred by a business.

The payroll cap would not apply to limit the R&D tax credits refunded to levy bodies. Levy bodies are empowered to collect levies by statute, definitely have an economic presence in New Zealand, and consequently pose a reduced risk that refunded R&D tax credits will be unrecoverable.

Exempt income recipients

Recipients of exempt income are currently ineligible for limited refundability, unless the only exempt income they receive is from dividends.

Without refundability, entities that only derive exempt income, such as charities, are unable to receive any cash benefit from the R&D Tax Incentive. This is because they do not have any income tax to pay. As these entities are outside the tax system, it is proposed that they should not benefit further from incentives provided from within the tax system and that they should be ineligible for the R&D Tax Incentive.

It is proposed that an exception apply for levy bodies, however, which do not receive the same tax concessions as charities (such as donee tax credit status, GST and FBT concessions). The R&D performed by and funded through levy bodies is fundamentally business R&D. Accordingly, it is proposed that levy bodies are eligible for the R&D Tax Incentive (including refundability), even if they receive exempt income.

Further details and the implications of this proposal for particular atypical organisations (including charities, Māori businesses, and local authorities) are discussed further at 3.2.

Section B: Summary impacts - benefits and costs

Who are the main expected beneficiaries and what is the nature of the expected benefit?

Businesses in tax loss, or with insufficient income tax liability to fully utilise non-refundable tax credits, will be the main beneficiaries from broader refundability. Refundability can be particularly beneficial for young, innovative firms, at the stage of investing in developing and launching their products (Appelt et al., 2016).

The population of firms performing R&D and in a tax loss position is estimated at 750-1200. These are the expected beneficiaries. Under current rules only 350-650 firms are expected to qualify for refundability, and of those 65-130 are expected to hit the cap on refundability.

Partnerships, trusts, listed companies, companies who receive some exempt income or do not meet the wage intensity test, and atypical organisations such as levy bodies and some Māori business entities will also benefit from the R&D Tax Incentive through the design of a more comprehensive refundability policy.

Where do the costs fall?

Fiscal costs

The budget for the Tax Incentive provides for the fiscal cost of full refundability. In Budget 2018 the Government appropriated $1,020 million over the first four fiscal years for the R&D Tax Incentive. On 10 September 2018, Cabinet agreed to reprioritise the remaining funding ($528 million) already allocated for Growth Grants over the same period [CAB-18-MIN-0434 refers].

We anticipate that allowing broad refundability will increase the take-up of the Tax Incentive compared to limited refundability. This in turn will increase the R&D expenditure performed by firms, and the amount claimed under the Tax Incentive. These fiscal costs will be borne directly by Government and indirectly by the taxpayer.

Additional fiscal cost due to broader refundability, compared with the limited refundability available in year one of the R&D Tax incentive, could be for the below reasons:

- Increased R&D activity from existing R&D performers
- Firms new to R&D enter the scheme

We have estimated the fiscal costs of the R&D Tax Incentive with full refundability to be approximately $1,345 million over the first four fiscal years for the R&D Tax Incentive (from when it comes into effect on 1 April 2019 through until 30 June 2022). The model used to prepare these estimates assumed that firms claim the full amount of the eligible R&D expenditure to which they are entitled in the year in which it is incurred. More specifically, it assumes that firms in loss claim the full amount of the Tax Incentive, even without full refundability.

Anecdotal evidence from overseas jurisdictions shows that those that have allowed more generous refundability have experienced much greater rise in the costs of their R&D tax incentives. In Australia, R&D in the part of the scheme that was refundable (which applied to small-and-medium enterprises) grew at approximately 15 percent per annum whereas R&D in the non-refundable part experienced no growth.

We cannot extrapolate exactly from the Australian experience to New Zealand because in New Zealand broad refundability will be available to all businesses, regardless of size (subject to exclusions discussed above). Moreover, without further analysis, it is not possible to conclude that the presence of refundability drove all the higher growth in Australia; a number of other factors are likely to have also contributed. Nevertheless, if New Zealand were to experience R&D growth equivalent to the refundable part of the Australian scheme, we have estimated that it might add approximately $40 million (over the period of the appropriation) to our estimates of the fiscal costs of the R&D Tax Incentive.

Administration costs

The increased attractiveness of the regime will increase legitimate claims but may also increase fraudulent claims. The increased risk of fraudulent claims may mean more administrative costs to ensure the legitimacy of claims. However, as the R&D Tax Incentive scheme has already been designed with relatively thorough checks on the R&D activities that are the subject of the claims, it is expected that any increase in administrative costs resulting from broader refundability will be negligible.

Compliance costs

Compared with the limited refundability rules in year one, compliance costs to firms

under broader refundability should either decrease or stay the same. The year one refundability rules use the existing corporate eligibility and wage intensity criteria from the R&D tax loss cash-out rules, which are relatively complex. The proposed eligibility rules from year two are simpler, so compliance costs could decrease under the proposals. In addition, more firms will have their credits fully refunded rather than carrying them forward. This reduces the complexity of tracking historic credits and testing for continuity breaches.

What are the likely risks and unintended impacts, how significant are they and how will they be minimised or mitigated?

Risks

There are three main risks associated with broader refundability which must be considered as part of the design. These are fiscal risk, fraud risk, and integrity risk.

Fiscal risk

Overseas experience indicates that R&D and hence fiscal cost growth is faster for the refundable parts of R&D tax credit schemes. This is not a risk in and of itself, because an increase in expenditure because of increased R&D would go towards achieving the objective of the incentive. A 'payroll' cap is proposed to help mitigate fiscal risk associated with illegitimate R&D tax credit claims. If the Government decided to constrain expenditure on the incentive in future, the tax credit rate of 15% could be adjusted downwards.

Fraud risk

This is the risk of a person deliberately attempting to extract money from the tax system dishonestly. Broader refundability provides additional incentives to perpetrate fraud and allows additional opportunities to perpetrate fraud. It is more difficult to recover money paid out in cash via a refund than to cancel a tax credit.

To minimise the risk of fraudulent claims, the proposed 'payroll' cap ensures the existence of a business and its economic presence are verified before a R&D tax credit refund is paid to the business.

The risk of fraudulent claims will also be mitigated through the following steps:

- An in-year approval process (included in the Act), which requires claimants to obtain approval of their R&D activities before they file a claim for their R&D tax credits.
- A $50,000 minimum threshold of eligible expenditure[1] (included in the Act). Experience in other countries, such as the United Kingdom, indicates that without a minimum threshold there can be a flood of smaller, lower-quality tax credit claims.

Integrity risk

This is the risk that compliance with the R&D Tax Incentive scheme may deteriorate if it is perceived to be abused by some claimants. This risk can be mitigated by ensuring the Tax Incentive is seen to be robust. In-year approval (included in the Act) and the proposed 'payroll' cap should help mitigate this integrity risk.

Learning from overseas experience

Most overseas R&D tax credit schemes with refundability have some constraints,

[1] There is an exception for R&D activities carried out by an Approved Research Provider.

such as capping the amount of refundable tax credit to the amount of other taxes paid by a business (such as PAYE paid on behalf of employees). Appendix 1 summarises the policies applied in other OECD countries that provide refunds and describes the strengths and drawbacks of each policy.

There is no uniformity as to how constraints are applied, but some broad observations are:

- Some constraint on refundability is the norm. A system with no restrictions on refundability would be an outlier amongst OECD countries.
- The different ways in which refundability is limited often reflect differences in the underlying tax incentive scheme.
- Some countries limit refundability to SMEs and start-ups.
- It is relatively common to limit refunds by reference to other taxes paid by the firm.

A common approach in other jurisdictions is to limit refunds to the amount paid in other taxes such as PAYE.[2] This ensures a firm has a tangible economic presence in the country where the claim is being made, the amount refunded is commensurate to activity in the jurisdiction and it reduces the risk that the claim is made by a non-existent entity. Considering the risks associated with refundability and learnings from overseas, we propose broadening the refundability available in year one but having some constraints to mitigate risk.

Constraints to mitigate the risks associated with broader refundability

The proposal to broaden eligibility for refundability includes a 'payroll' cap on refunds to mitigate the fraud, fiscal, and integrity risks associated with paying out cash.

It is proposed that all firms are entitled to a full refund of their R&D tax credits, to the extent their R&D tax credits are equal to or less than the amount of 'payroll' taxes paid by a firm in the relevant income year (proposed payroll cap).[3]

The proposed payroll cap would not apply to limit tax credits resulting from payments to Approved Research Providers.

The proposed payroll cap would not apply to R&D tax credits refunded to levy bodies.

The proposed payroll cap is designed to prevent refundable tax credits being paid out to firms who are fraudulently claiming the tax credit. Limiting R&D tax credit payments to the amount of PAYE paid by a firm, as is done in many overseas jurisdictions, is a simple and unobtrusive measure but overlooks that some firms may legitimately pay little PAYE.[4] Consequently, it is proposed that additional payroll taxes paid be included to reduce the impact of this constraint.

Payments to Approved Research Providers will not be capped as it will be easy to verify that these payments have actually been incurred by a firm. That is, R&D credits generated from eligible expenditure on Approved Research Providers will be refundable, even if a business has not paid any payroll taxes.

Levy bodies may have low 'payroll' taxes where R&D is largely contracted out, but

[2] For most firms, the amount of PAYE they pay on behalf of employees will exceed 15% of the amount of R&D they undertake because all employees in the firm will contribute to the PAYE total whereas R&D is usually only one part of the firm's activities. There will, however, be some firms that (quite legitimately) do not pay PAYE.

[3] Payroll taxes would include PAYE, FBT, employer superannuation contribution tax (ESCT) and withholding tax on schedular payments (WT).

[4] For instance, many start-up firms will limit their financial risk by employing staff on contract rather than recruiting them as permanent members of staff. These staff employed on contract may choose to have withholding tax (WT) paid by the firm on their behalf.

they are not subject to the cap due to reduced risk that refunded R&D tax credits will be unrecoverable.

Conclusion

The above constraint is not anticipated to restrict refunds for the vast majority of R&D performers. It means that all firms would have some immediate benefit and a few would have less than full refundability. Given the R&D Tax Incentive scheme is relatively broad and accessible, the proposed refundability restrictions do not fundamentally alter the incentives of the scheme. Overall, and compared with most other jurisdictions, the proposed policy for New Zealand represents a comprehensive approach to refundability.

Identify any significant incompatibility with the Government's "Expectations for the design of regulatory systems".

There is no incompatibility between this regulatory proposal and the Government's 'Expectations for the design of regulatory systems'.

Section C: Evidence certainty and quality assurance

Agency rating of evidence certainty?

We are confident of the evidence that refundable R&D tax credit schemes are effective at increasing business R&D. This is based on a range of international studies. It is difficult to predict the actual level by which R&D will increase as a result of broader refundability. Written and oral submissions on the Act emphasised the importance of refundability for supporting R&D. Consultation recently undertaken with businesses on broader refundability has reaffirmed the importance of refundability for incentivising R&D intensive firms to continue to invest in and grow their R&D activities.

To be completed by quality assurers:

Quality Assurance Reviewing Agency:

MBIE's Regulatory Impact Analysis Review Panel has reviewed this Regulatory Impact Statement.

Quality Assurance Assessment:

The Panel considers that the information and analysis summarised in the Regulatory Impact Statement meets the criteria necessary for Ministers to make informed decisions.

Impact Statement: R&D Tax Incentive - Refundability

Section 1: General information

Purpose
This analysis and advice has been produced to inform key policy decisions to be taken by Cabinet around broadening the refundability available under the R&D Tax Incentive. MBIE and IR are solely responsible for the analysis and advice set out in this Regulatory Impact Assessment, except as otherwise explicitly indicated.
Key limitations or constraints on analysis
Estimating the impact of broader refundability on the amount of R&D undertaken and its overall impact on the economy is complicated. Evidence on the impact on both of these is imprecise. There has been no analysis on or impact evaluation of the R&D tax incentive implemented in New Zealand in 2008 (which was fully refundable). So there is no New Zealand evidence to guide our analysis of the impacts of refundability. As a result, the estimates of the anticipated response are based upon evidence from international studies that may not correspond to the situation in New Zealand. Nevertheless, this is the best information available.
Responsible Managers (signature and date)
   Kirsty Hutchison Manager – Innovation Policy Ministry of Business, Innovation and Employment 10 / 05 / 2019      Keith Taylor Policy Manager Inland Revenue 10 / 05 / 2019

Section 2: Problem definition and objectives

2.1 What is the context within which action is proposed?
New Zealand has a low overall expenditure on R&D[5] primarily due to low business investment in R&D in New Zealand. New Zealand's low business investment in R&D can be explained, in part, by its industrial structure. New Zealand firms have low R&D intensity (Mazoyer, 1999); the size of traditionally R&D intensive industries (such as pharmaceuticals and aircraft manufacturing) in New Zealand is small (Di Maio and Blakeley, 2004); and there are few very large firms, who tend to be more research-active (OECD, 2017). Evidence suggests that there are other reasons for the low business investment in R&D. These include returns to innovation being relatively low in New Zealand

[5] New Zealand's R&D spending in 2018 was equal to 1.37 percent of gross domestic product.

(Wakeman and Conway, 2017), which means New Zealand firms do not have the same incentive to invest in activities that will increase their innovative output. The average rate of public support for business R&D is also "well below the socially efficient level indicated by international empirical studies" (OECD, 2017). This evidence indicates that there is scope for productivity gains from increasing the overall level of support for R&D expenditure.

The Government announced a goal of increasing New Zealand's R&D expenditure to 2 per cent of GDP by 2027. To reach this target, a significant amount of the growth in R&D expenditure is expected to come from business.

New Zealand BERD is relatively low and remains concentrated among a small set of firms. To achieve a further boost in BERD, as well as to transform the economy to become more knowledge intensive, requires broadening the base of R&D performing firms within New Zealand while continuing to increase the R&D expenditure of existing R&D-performing firms.

R&D performing firms, particularly at the early phase of their development, will often be loss-making. Therefore, providing refundable tax credits to businesses in tax loss is a key element of the effectiveness of the R&D Tax Incentive in achieving significant growth in BERD. Without a refundable tax incentive businesses in tax loss will have minimal incentive to invest in additional R&D.

2.2 What regulatory system, or systems, are already in place?

The Taxation (Research and Development Tax Credits) Act (the Act), introduced in October 2018, implements an R&D tax incentive in New Zealand. The R&D Tax Incentive scheme applies from the beginning of the 2019/20 income year. The Act allows for firms that make a loss for tax purposes and satisfy certain criteria to receive a refund of up to $255,000 of tax credits per income year. Credits that are not refunded can be carried forward to future income years provided shareholder continuity criteria are met.

Appendix 2 provides examples that illustrate how without refundability, firms do not receive a cash benefit from a tax credit if they are in loss or have insufficient income tax liability.

The Act also includes an in-year approval process, which requires claimants to obtain approval of their R&D activities before they file a claim for their R&D tax credits.

In addition to the R&D Tax Incentive, there are Callaghan Innovation grants which provide R&D subsidies.

These grants include:

- Growth Grants: A non-discretionary grant paid to all businesses that spend more than $300,000 and 1.5 per cent of revenue on R&D over the prior two years. The grant funds 20 per cent of a business R&D programme up to a limit of $5 million per year (i.e., $25m of R&D spending), initially for a period of three years with automatic two-year extensions conditional on continuing to meet the criteria. The aim is to provide experienced R&D performers with the funding certainty and stability they need to grow their R&D spending in the long term. There were 316 recipients in 2017/18 at an (estimated) fiscal cost of $172.2M. The Growth Grant scheme will cease on 31 March 2021. No new applications can be made, but existing Growth Grant recipients can extend their Growth Grants until the scheme end date.

- Project Grants: A discretionary grant, allocated to less-experienced R&D performers that do not meet the conditions for a Growth Grant for R&D. It funds 40 per cent of the first $800,000 of the eligible costs of a pre-specified project and 20 per cent of the remainder. There were 344 recipients in 2017/18 at an estimated fiscal cost of $20.3M.

There are restrictions on the availability of the R&D Tax Incentive for recipients of existing grants.

New Zealand also provides support for businesses performing R&D through the R&D loss tax credit (also known as the R&D tax-loss cash out). New Zealand-resident businesses are able to apply for 28 per cent of their losses associated with eligible R&D expenditure (up to a cap) to be paid out in cash, rather than carrying forward those losses until future years. 350 firms currently claim R&D loss tax credits.

There are also tax deductions available for R&D expenditure, and the ability to defer these tax deductions so as not to lose them due to a breach of the shareholder continuity rules.

2.3 What is the policy problem or opportunity?

The objective of the R&D Tax Incentive is to address New Zealand's low levels of R&D, specifically by increasing BERD, which has a central role in driving innovation and economic growth.

The R&D Tax Incentive as introduced in the Act has limited refundability. Limited refundability is available to unlisted companies who satisfy corporate eligibility and wage intensity criteria, up to a cap of $255,000. Any remaining R&D tax credits can be carried forward to the next income year provided shareholder continuity requirements are met.

Entity eligibility

Limited refundability is not available for entities, such as levy bodies, which receive tax exempt income (other than dividends). Discussions of the proposals with levy bodies has indicated that should levy bodies be ineligible for refundable R&D tax credits, this could lead to some levy body members preferring to fund their own R&D. The incentive is not intended to change business behaviour in this way.

Limited refundability is also not available for listed companies, partnerships, or trusts. This is problematic, because it is likely that – without refundability – some of these businesses will have insufficient income tax liability to benefit from their R&D tax credits. The Tax Incentive is intended to have broad application and treat all businesses the same, irrespective of their legal form. However, excluding some types of firm from the Tax Incentive biases it toward firms in traditional arrangements (particularly, limited liability companies).

Capped refundability

Some businesses may be eligible for limited refundability but unable to cash out all of their R&D tax credits because of the $255,000 cap. These businesses will have to carry their R&D tax credits forward into future years until they have sufficient income tax liability to utilise their credits. The ability to carry the credit forward is subject to a shareholder continuity rule that requires a minimum of 49% shareholder continuity to be maintained in order for R&D tax credits to be carried forward. This is problematic, because R&D intensive start-ups are more likely to undergo a significant change in their shareholder base when they seek to raise capital through new investors.

2.4 Are there any constraints on the scope for decision making?

The Government has introduced the R&D Tax Incentive and indicated that it wants to expand the coverage of refundability.

The Government has committed to developing a more comprehensive policy for refundability from year two of the Tax Incentive (corresponding to businesses' 2020/21 income year). There is a need to use existing legislative vehicles to achieve enactment of policy changes in time for them to apply from year two of the Tax Incentive.

2.5 What do stakeholders think?

This proposal has been informed by input from a wide array of private sector organisations.

The importance of broad refundability in incentivising business investment in R&D was a strong theme from the consultation conducted by MBIE, Inland Revenue and Callaghan Innovation following the release of the Government Discussion Document on the R&D Tax Incentive in mid-2018. The need for broader refundability was also emphasized in submissions received by the Finance and Expenditure Select Committee on the Bill, and through additional stakeholder meetings.

MBIE, Inland Revenue and Callaghan have discussed refundability proposals with the Corporate Taxpayers' Group; Chartered Accountants Australia and New Zealand; representatives from PwC, KPMG, Deloitte and EY; approximately 25 representatives from R&D performing businesses in tax loss or with insufficient taxable income to fully use non-refundable R&D tax credits; levy bodies; charities; and Māori business representatives. These discussions have helped shape the broader refundability proposals, and have highlighted the desirability of broad eligibility and an accessible process.

Agencies asked stakeholders to consider the impact of a $5 million cap and a PAYE cap (used as a proxy to test tangible economic presence).

Feedback on $5 million cap

Stakeholder engagement revealed that there were a small number of established R&D performers who would be constrained by a $5 million cap. For example, a business in a loss making position undertaking around $80 million of R&D annually would be eligible for $12 million of R&D tax credits. Under a $5 million cap the business would receive a $5 million refund and would have to carry forward the remaining $7 million of R&D tax credits into future years. Because the business spends a large amount of R&D on an on-going basis they are unlikely to be able to fully cash out their accumulation of R&D credits carried forward.

There were also a number of established R&D performers who valued the security refundability would bring to their R&D programmes. These businesses are mainly in a tax-paying situation but depending on market fluctuations they could be in a temporary loss-making position in future. Refundability would give these firms surety, allowing them to continue their R&D investment during market down-turns. Some of these established R&D performers would also be constrained by a $5 million cap.

The proposal for broader refundability removes the previously proposed $5 million cap on refundability.

Feedback on PAYE cap

The PAYE cap, which would limit the amount of R&D tax credits refunded to a firm to the amount of PAYE paid by the firm in the relevant year, was seen as problematic.

Stakeholders advised that a PAYE cap would significantly constrain the benefit that loss-making start-ups would get from the credit. Many start-ups that perform R&D have few employees and rely on contractors to develop their business because of the comparative flexibility afforded by contracting arrangements. R&D intensive start-ups may have fewer non-R&D employees (compared with larger firms), and may also have a higher proportion of non-employee R&D expenditure (such as expenditure on capital assets or consumables).

Tangible economic presence test

As a result of the stakeholder feedback on the two options above, officials explored a tangible economic presence (TEP) test. The TEP test developed would have allowed firms that did not satisfy a PAYE cap to be verified for TEP from either an external certifier (such as a chartered accountant or lawyer), or directly from Inland Revenue through additional checks.

Stakeholders preferred the availability of alternatives to the PAYE cap, and thought that multiple ways of establishing tangible economic presence were preferable to a one-size-fits-all approach.

Payroll taxes cap

Discussions with United Kingdom (UK) officials found that the risks of fraud in relation to refundability are more pervasive than previously considered.[6] UK officials suggested that relying on a chartered accountant or practising lawyer for certification of TEP may not be robust, and that additional Inland Revenue checks might lead to administration resources being focused on audit rather than the approval of R&D activity.

As a result of this feedback, we have included an option that would include a 'payroll' taxes cap based on PAYE and other taxes paid by firms (including fringe benefit tax (FBT), employer superannuation contribution tax (ESCT) and tax voluntarily withheld from contractor payments (WT)) in order to lessen the impact on affected firms. It is also proposed that any tax credits resulting from payments to Approved Research Providers be fully refundable (so not subject to the 'payroll' taxes cap).

Stakeholder engagement on including additional payroll taxes (such as FBT, ESCT and WT) in the cap indicated that this would be an improvement over a PAYE cap. Although only a small proportion of contractors have opted into the voluntary withholding scheme, more may decide to opt into it if the payroll taxes cap were implemented.

Other mechanisms for providing support to R&D intensive start-ups will also be considered as part of further policy work, including reviewing the R&D tax loss cash-out and the Callaghan Innovation Project Grants.

[6] In the UK, HM Treasury and HMRC have released a consultation document 'Preventing abuse of the R&D tax relief for SMEs', April 2019, which proposes that a PAYE-related cap is reintroduced to the R&D tax credit scheme for SMEs. This policy has been driven by a concern over growing levels of fraud within the scheme since the removal of the PAYE cap.

Section 3: Options identification

3.1 What criteria, in addition to monetary costs and benefits, have been used to assess the likely impacts of the options under consideration?

The framework for assessing the key policy elements and trade-offs of the options under consideration is captured by the following criteria:

Criteria for which entities will be eligible for a refund

- Incentivise business expenditure on R&D.
- Tax-exempt organisations that sit outside the tax system (do not pay income tax) should not benefit further from incentives provided from within the tax system.
- Provide clarity about which organisations are eligible for the R&D Tax Incentive.

Criteria for constraining the amount that is refundable

- Increased business R&D expenditure
- Mitigation of fraud risk/maintaining the scheme's integrity
- Minimise compliance costs for firms
- Maximise business certainty over time
- Administratively feasible
- Minimise fiscal costs/risk

3.2 What options are available to address the problem?

There are a range of options for how refundability could be broadened, including the types of entities that are eligible and the constraints that are placed on the scheme to manage risks that refundability creates, particularly to the integrity of the Tax Incentive.

Options for which entities will be eligible for a refund

The main options available are:

- The status quo
- General business entities
- Levy bodies
- Charities
- Local authorities
- Other tax-exempt organisations

Status quo

Under the status quo, limited refundability rules restrict eligibility for refunds to unlisted companies that meet a 20% R&D wage intensity test and do not derive non-dividend exempt income. These criteria mean that many businesses will not be eligible for refundable tax credits, including partnerships, trusts, listed companies, and companies who receive some exempt income or do not meet the wage intensity test. Additionally, certain atypical organisations, such as levy bodies, some Māori entities, charities, and local authorities, will be excluded.

General business entities

This change would make listed companies, partnerships and trusts eligible for refundability, and there would be no wage intensity requirement. This change will allow most Māori organisations to be eligible.

Levy bodies

Levy bodies would be eligible for refundability under this option.

Charities

Under this option charitable organisations that perform eligible R&D activities would be ineligible for refundable tax credits. Charities are currently treated as carrying on a business in New Zealand for the purposes of being eligible for the R&D Tax Incentive. Excluding charities means that this rule would be removed for consistency to ensure they are excluded from being eligible for the R&D Tax Incentive.

Excluding charities means that businesses wholly-owned by charities are excluded, because these are also considered charities. However, this option does not exclude other associated entities. This means if a tax paying business donates to a charity, even one controlled by that business, this would not invalidate the business's access to the R&D Tax Incentive. It would also mean that a charity could set up a partially controlled business entity, subject to the rules within the constitution of the charity, which could be eligible for the R&D Tax Incentive.

In relation to Māori organisations, a small number of post-settlement governance entities have registered as charities. As discussed above, businesses that are wholly-owned by these charitable entities would also be ineligible. Businesses that are partially controlled by these charities would be eligible for the R&D Tax Incentive.

Local authorities

Under this option local authorities would be ineligible for the R&D Tax Incentive. However, council controlled organisations would be eligible.

Other tax-exempt organisations

This option excludes tax-exempt organisations from being eligible to receive refunds. The exclusion would not apply to entities that receive exempt income from dividends (no change from the status quo) or to levy bodies.

Options for constraining the amount that is refundable

The main options available are:

- The status quo
- A PAYE cap
- A tangible economic presence (TEP) test
- A 'payroll' taxes cap

Status quo

The status quo limited refundability rules allow firms with eligible R&D expenditure that meet the corporate and wage-intensity eligibility rules to claim a maximum refund per year of $255,000.

A PAYE cap

A PAYE cap would allow firms with eligible R&D expenditure to have their R&D tax credits refunded up to a maximum amount equal to the amount of PAYE paid by the firm in the relevant income year.

A TEP test

A TEP test would allow firms with eligible R&D expenditure to have their R&D tax credits refunded as long as they satisfied a test of tangible economic presence, up to a maximum of $5 million per year. A TEP test would be designed to ensure that a

firm has 'skin in the game', and that it physically exists with premises and staff, rather than just existing on paper as a shell company.

A TEP test would be met where at least one of the following applied:

- A business's PAYE for the year is equal to or greater than their R&D tax credit claim. This ensures a proportionate TEP because the firm is paying tax on behalf of its employees and cannot take out more than it puts in to the tax system.
- A chartered accountant or practising lawyer has certified that a business has TEP. The certifier would testify to the firm's TEP, having actually met the staff/seen the premises.
- Inland Revenue has completed a review (for example, checking the tax-paying history of a business; visiting a business's site; and/or confirming the identity of shareholders or directors) and is satisfied that a business has TEP.
- A business's R&D tax credit claim only includes amounts paid to an approved research provider to perform R&D activities on their behalf. This provides an easily verified audit trail to determine TEP.
- If an organisation is established under statute (such as a levy body), the organisation would be deemed to have TEP.

The proposal – a 'payroll' taxes cap

Under the Proposal, firms that have insufficient tax liability would have their credits fully refunded, subject to the following constraint:

- R&D tax credits are refundable to the extent they are equal to or less than the amount of 'payroll' taxes paid by a firm in the relevant income year.[7]
- The proposed cap would not apply to limit tax credits resulting from payments to approved research providers.
- The proposed cap would not apply to R&D tax credits refunded to levy bodies.

Excess credits that are not refunded in a particular year can be carried forward subject to the continuity rules and can be refunded in future years, subject to the same conditions.

3.3 What other options have been ruled out of scope, or not considered, and why?

We have assumed the continuation of the R&D Tax Incentive with at least its existing limited refundability, so we have not considered the option of no tax incentive or no refundability.

[7] Payroll taxes would include PAYE, FBT, employer superannuation contribution tax (ESCT) and withholding tax on schedular payments (WT).

Section 4: Impact analysis

Entity eligibility for refunds

	General business entities	Levy bodies	Charities	Local authorities	Other tax-exempt organisations
Incentivising BERD	(++) This change would remove limitations on refundability by entity type, except for the existing exclusion of tax-exempt organisations. This would allow listed companies, partnerships and trusts to be eligible for refundability, and there would be no wage intensity requirement. This will allow most Māori organisations to be eligible. Making refundability broadly available to these entities would have a significant impact on incentivising BERD.	(++) The R&D performed by and funded through levy bodies is fundamentally business R&D and may result in benefits that are not fully captured by the relevant industries. Providing levy bodies with refundability is expected to positively impact BERD by encouraging industry-wide collaboration through levy bodies.	(0) Charities may perform R&D as part of their charitable purposes. The Tax Incentive is focussed on incentivising BERD, rather than all R&D generally. Charities that perform R&D already receive support from the tax system for their activities. A charity could set up a partially controlled business entity, subject to the rules within the constitution of the charity, which could be eligible for the Tax Incentive. This would also apply to a small number of post-settlement governance entities that are registered as charities. The exclusion for charities is not expected to have a significant impact on BERD.	(0) Although local authorities would not be eligible, council controlled organisations would be eligible. The exclusion for local authorities is not expected to have a significant impact on BERD.	(0) Although other tax-exempt organisations would not be eligible, they could still participate in joint ventures with other businesses that could be eligible. The exclusion for other tax-exempt organisations is not expected to have a significant impact on BERD.

	General business entities	Levy bodies	Charities	Local authorities	Other tax-exempt organisations
Tax-exempt organisations that sit outside the tax system (do not pay income tax) should not benefit further from incentives provided from within the tax system	(++) These entities generally sit within the tax system.	(0) Levy bodies receive levy payments from their members, which are generally taxable businesses.	(--) Charities sit outside of the tax system so do not pay income tax, receive GST concessions, and are exempt from FBT. These benefits mean that charities' cash flow is already enhanced by provisions in the tax system. They also benefit from the donor tax credit regime (which provides tax credits to those who donate to charities), so already receive government support.	(--) Apart from receiving tax exempt income, local authorities have the ability to raise the revenue required to perform R&D activities through rates.	(--) These entities generally sit outside of the tax system and do not pay income tax.
Clarity about which organisations are eligible	n/a	(+) Provides clarity that levy bodies are eligible for refundable R&D tax credits. Levy body members will not be disincentivised to fund their R&D through their levy body.	(+) Provides clarity that charities and their wholly-owned entities will be ineligible for the Tax Incentive, while partially controlled business entities could be eligible.	(+) Provides clarity for local authorities, as well as entities controlled by or associated with local authorities. Excluding local authorities was part of the original policy intent of the Tax Incentive, but this exclusion was not included in the Bill.	(+) Provides clarity that other tax-exempt organisations will be ineligible for the Tax Incentive.

Constraints on refundable amount

	Status quo	A 'payroll' taxes cap	TEP test	PAYE cap
Increased BERD	This is expected to limit refundability in year one to approximately 350-650 firms of whom 65-130 are expected to hit the cap on refundability and not be able to claim the full amount of the credit.[8] Evidence from overseas schemes indicates that refunds provide a more powerful incentive for firms to undertake R&D.	(++) A 'payroll' taxes cap would allow for broader refundability with wider coverage. It could constrain the benefit that some loss-making start-ups get from the credit, where a firm has a higher proportion of non-staff R&D expenditure (such as expenditure on capital assets or consumable). If applicable to year one, it would be expected to enable approximately 750-1200 firms to benefit from a full or partial refund.[9] The wider coverage and increased cash flow to businesses performing R&D is expected to lead to increased investment by those firms in R&D.	(++) A TEP test would provide a pathway for all genuine businesses to access refundability. This would have a positive impact on business expenditure on R&D. If applicable to year one, it would be expected to enable approximately 750-1200 firms to benefit from a full refund. The wider coverage and increased cash flow to businesses performing R&D is expected to lead to increased investment by those firms in R&D.	(+) A PAYE cap would allow for broader refundability with wider coverage, but would significantly constrain the benefit that loss-making start-ups would get from the credit. Many start-ups that perform R&D have few employees and rely on contractors to develop their businesses, because of the comparative flexibility afforded by contracting arrangements. R&D intensive start-ups may have fewer non-R&D employees (compared with larger firms), and may also have a higher proportion of non-employee R&D expenditure (such as

[8] The numbers of firms potentially eligible for refundability, and the amount of firms expected to hit the cap under the limited refundability rules are based on extrapolated numbers from multiple sources of data including the 2016 R&D Survey, the 2017 Business Operations Survey, information from Callaghan Innovation about Growth Grant recipients, and information from Inland Revenue about firms that access the R&D tax-loss cash out.

[9] The numbers of firms potentially eligible for refundability are based on extrapolated numbers from multiple sources of data including the 2016 R&D Survey, the 2017 Business Operations Survey, and information from Callaghan Innovation about Growth Grant recipients.

	Status quo	A 'payroll' taxes cap	TEP test	PAYE cap
				expenditure on capital assets or consumables). This would limit the impact on business R&D expenditure undertaken by this sector.
Mitigation of fraud risk / maintaining the scheme's integrity	Limited refundability mitigates some risk of large, one-off fraud, but does not provide protection against potentially high numbers of smaller fraudulent claims.	(++) A 'payroll' taxes cap would significantly mitigate the risk of fraudulent claims, as firms could not take out more from the tax system than they put in.	(0) A TEP test would mitigate some of the risk of fraudulent claims. However, overseas experience suggests that certification of TEP by external professionals may not be sufficiently robust, and that requiring Inland Revenue to conduct additional checks for TEP might lead to administration resources being focused on audit rather than the approval of R&D activity.	(++) A PAYE cap would significantly mitigate the risk of fraudulent claims, as firms could not take out more from the tax system than they put in.
Minimise compliance costs	The year one refundability rules use the corporate eligibility and wage intensity criteria from the R&D tax loss cash-out rules, which are relatively complex.	(0) Compliance costs to firms under a 'payroll' taxes cap should either decrease or stay the same. The proposed constraint on refunds will not apply to the majority of claimants and is easy to understand. Overall, compliance costs are likely to	(-) A TEP test with a range of measures that businesses could choose from would mean they could select the one that imposes the least additional compliance costs. However, if a firm chose to obtain professional certification or undergo	(0) A PAYE cap would be simple and have low compliance costs for firms. Overall, compliance costs are likely to decrease, but this effect is likely to be small.

	Status quo	A 'payroll' taxes cap	TEP test	PAYE cap
		decrease, but this effect is likely to be small.	additional checks by Inland Revenue there would potentially be material compliance costs. Overall, compliance costs may be higher.	
Maximise business certainty over time	Provides some uncertainty as firms' eligibility for refundability depends on meeting the wage intensity criteria each year. It also generates uncertainty about ability to take advantage of the Tax Incentive because the low cap on refundable amounts means more credits must be carried forward to future years and may be lost due to shareholder continuity breaches.	(+) A 'payroll' taxes cap would provide increased business certainty, with broad and simple eligibility for refundability. Receipt of cash refunds each year rather than having to carry forward credits that may be lost due to continuity breaches will increase business certainty.	(+) A TEP test would provide business certainty that refundability could be accessed by pursuing one of the available options. Receipt of cash refunds each year rather than having to carry forward credits that may be lost due to continuity breaches will increase business certainty.	(+) A PAYE cap would provide relative business certainty, with the refundable amount changing based on what a firm pays to its employees. Receipt of cash refunds each year rather than having to carry forward credits that may be lost due to continuity breaches will increase business certainty.
Administratively feasible	Based on high-level estimates, Inland Revenue's cost of administering the R&D Tax Incentive is forecast to be up to $6m per annum.	(0) A 'payroll' taxes cap would be easy to administer and is expected to have no or negligible additional effects on administrative feasibility.	(-) Most options under a TEP test would be easy to administer, but completing Inland Revenue reviews could increase administrative costs and timeframes. Administrative resources may	(0) A PAYE cap would be easy to administer, and is expected to have no or negligible additional effects on administrative feasibility.

	Status quo	A 'payroll' taxes cap	TEP test	PAYE cap
			also be required to focus more on audits rather than approving R&D activity.	
Minimise fiscal costs/risk	Fiscal costs are forecast to be $1,345 million (direct costs) plus $19.5 million (administration costs) from 1 April 2019 to 30 June 2022. In Budget 2018 the Government allocated $1,020 million for the R&D Tax Incentive, in addition to the $528 million already allocated for Growth Grants.	(-) We anticipate that allowing refundability under a 'payroll' taxes cap will increase the uptake of the Tax Incentive. This in turn will increase the R&D expenditure performed by firms, and the amount claimed under the Tax Incentive. An increase in claims lends itself to increased fiscal costs. However, the appropriation for the Tax Incentive in Budget 2018 already allows for the fiscal cost of full refundability. This is because the existing fiscal cost model assumed no constraint on refundability. As discussed previously, if New Zealand were to experience R&D growth equivalent to the refundable part of the Australian scheme, we have estimated that it might add approximately $40 million (over the period of the	(-) We anticipate that allowing refundability under a TEP test will increase the uptake of the Tax Incentive. This in turn will increase the R&D expenditure performed by firms, and the amount claimed under the Tax Incentive. An increase in claims lends itself to increased fiscal costs. The increased potential for fraudulent claims leads to a potentially higher fiscal risk. The $5 million cap would provide a limit on refundable tax credits, but would not constrain the amount of eligible tax credits that could be carried forward and would still be a fiscal cost. However, the appropriation for the Tax Incentive in Budget 2018 already allows for the fiscal cost of full refundability. This is because the existing fiscal cost model assumed no	(-) We anticipate that allowing refundability under a PAYE cap will increase the uptake of the Tax Incentive. This in turn will increase the R&D expenditure performed by firms, and the amount claimed under the Tax Incentive. An increase in claims lends itself to increased fiscal costs. However, the appropriation for the Tax Incentive in Budget 2018 already allows for the fiscal cost of full refundability. This is because the existing fiscal cost model assumed no constraint on refundability. As discussed previously, if New Zealand were to experience R&D growth

	Status quo	A 'payroll' taxes cap	TEP test	PAYE cap
		appropriation) to our estimates of the fiscal costs of the R&D Tax Incentive. If this $40 million were added to the forecast costs of full refundability, it would still be within the existing appropriation (which has an approximate buffer of $200 million). Therefore, no further appropriation is being requested.	constraint on refundability. As discussed previously, if New Zealand were to experience R&D growth equivalent to the refundable part of the Australian scheme, we have estimated that it might add approximately $40 million (over the period of the appropriation) to our estimates of the fiscal costs of the R&D Tax Incentive. If this $40 million were added to the forecast costs of full refundability, it would still be within the existing appropriation (which has an approximate buffer of $200 million). Therefore, no further appropriation is being requested.	equivalent to the refundable part of the Australian scheme, we have estimated that it might add approximately $40 million (over the period of the appropriation) to our estimates of the fiscal costs of the R&D Tax Incentive. If this $40 million were added to the forecast costs of full refundability, it would still be within the existing appropriation (which has an approximate buffer of $200 million). Therefore, no further appropriation is being requested.

Key:

++	much better than doing nothing/the status quo
+	better than doing nothing/the status quo
0	about the same as doing nothing/the status quo
-	worse than doing nothing/the status quo
- -	much worse than doing nothing/the status quo

Section 5: Conclusions

5.1 What option, or combination of options, is likely best to address the problem, meet the policy objectives and deliver the highest net benefits?

Which entities will be eligible for a refund

Based on the above analysis, the preferred combination of options is for general business entities and levy bodies to be eligible for refundability, and for charities, local authorities, and other organisations that receive (non-dividend) exempt income to be ineligible. The effect of these options is that many more business entities would be eligible for refundability, while not bringing in entities that already receive substantial benefits from operating outside of the tax system. This would be a positive change for listed companies, partnerships, trusts, levy bodies and Māori businesses, and would explicitly exclude charities, local authorities, and other tax-exempt organisations, providing clarity in the law.

Constraints on refundable amount

Based on the above analysis, the two leading options are a 'payroll' taxes cap and a PAYE cap. Both options would significantly mitigate the risk of fraudulent claims, as firms could not take out more from the tax system than they put in. They would be simple, have low compliance costs for firms, and be easy to administer. They would provide increased business certainty, with broad and simple eligibility for refundability. The preferred option is to constrain refundability by a 'payroll' taxes cap, because this would have a greater impact on BERD, with a comparatively lesser constraint imposed on the benefit received by loss-making start-ups in particular.

Benefits of proposed broader refundability

The broader refundability proposed will better support the Government's objectives of incentivising increased BERD. Providing refundable tax credits to businesses that have insufficient tax liability is a key element of the effectiveness of the R&D Tax Incentive in achieving significant growth in BERD.

Broadening the refundability available from that provided for year one of the R&D Tax Incentive will broaden the reach and effect of the R&D Tax Incentive. Businesses will receive the financial support of the R&D Tax Incentive earlier or, in some instances, will actually get a benefit where they previously would not have.

The key advantage to a refundable tax credit is it provides cash closer to the point when firms, particularly R&D intensive firms, are undertaking their R&D. Broader refundability will provide increased certainty to businesses, with broad and simple eligibility, and receipt of cash refunds each year rather than having to carry forward credits that may be lost due to continuity breaches.

The refundability available in year one is expected to be limited to approximately 350-650 firms, and 65-130 of those are expected to hit the cap on refundability. The proposed broader refundability has simpler eligibility criteria, and would be available to a larger number of firms, estimated at 750-1200 firms in 2019 (or 550-1100 firms, after allowing for some firms to remain on the Callaghan Innovation Growth Grant).

The wider coverage and increased cash flow to businesses performing R&D is expected to lead to increased R&D investment by those businesses.

Increased coverage of R&D-performing firms (and higher incentives for firms to engage in R&D) is expected to result in an increase in innovative activity,

employment, and labour productivity growth, particularly among firms that did not qualify for limited refundability. A higher level of R&D expenditure will result in greater spillover benefits to other participants in the economy.

The proposed constraint on refundability is not anticipated to restrict refunds for the vast majority of R&D performers. It means that all firms would have some immediate benefit and a few would have less than full refundability. Given the R&D Tax Incentive scheme is relatively broad and accessible, the proposed refundability restrictions do not fundamentally alter the incentives of the scheme. Overall, and compared with most other jurisdictions, the proposed policy represents a comprehensive approach to refundability.

5.2 Summary table of costs and benefits of the preferred approach

Affected parties	Comment: *nature of cost or benefit, risks*	Impact	Evidence certainty
Additional costs of proposed approach, compared to taking no action			
R&D performing firms	Compliance costs	No need to quantify because negligible.	
Administering agency	Administration costs	No need to quantify because negligible.	
Wider government	Higher fiscal costs because of wider coverage of firms and more incentive to claim. The cost of the Tax Incentive will continue to be met from Vote: BSI and managed by MBIE in a similar way.	Potentially higher fiscal costs of R&D Tax Incentive, up to approximately $40 million (over the period of the appropriation). No change required to appropriation which includes full refundability and covers additional $40 million 'estimate' (within an approximate buffer of $200 million).	Low
Other parties	No anticipated costs.	$0	
Total monetised cost		Higher fiscal costs of R&D Tax Incentive, of up to approximately $40 million (over the period of the appropriation). No change required to appropriation which includes full refundability and covers additional $40 million 'estimate' (within an approximate buffer of $200 million).	Low
Non-monetised costs		n/a	

Expected benefits of proposed approach, compared to taking no action			
R&D performing firms	Eligible firms will receive a refundable tax credit equivalent to 15% of their eligible R&D expenditure, up to a cap of the amount of 'payroll' taxes paid per year, plus tax credits resulting from payments to approved research providers[10]. For existing Growth Grants this is roughly equivalent to a 20% pre-tax subsidy (as per the Growth Grant),[11] all else being equal.[12] For non-recipients of a Growth Grant this will be an increased subsidy. These benefits are equivalent to the costs to wider government (as above). In addition, firms receiving new or additional funding are expected to employ more staff and increase labour productivity growth, but effects have not been monetised.	Higher R&D up to potentially an additional $250 million, with corresponding spillovers.	Medium Medium
Administering agency	None	0	n/a
Wider government	Higher investment in R&D and resulting business innovation expected to result in more productivity growth over time, leading to higher incomes and hence tax paid, but effects have not been monetised.	Medium	Low
Other parties	Higher investment in R&D is expected to generate positive spillovers to rest of the economy (other firms,	Medium	Low

[10] The cap will not apply to organisations established by statue.

[11] Given a 28% corporate tax rate, a 20% subsidy pre-tax corresponds to 14.4% subsidy after tax, which is less generous than a 15% tax credit for firms that have a sufficient tax liability (or will have in the future) against which to apply the tax credit. Firms with insufficient tax liability will be able to refund their 15% tax credit, up to the proposed cap amount. The maximum amount paid under a Growth Grant to firms in tax loss is $5 million per year.

[12] Assuming eligible R&D expenditure is the same.

	researchers, etc.), but effects have not been monetised.		
Total monetised benefit		Higher R&D up to potentially an additional $250 million, with corresponding spillovers.	Low
Non-monetised benefits		High	
General business entities	Listed companies, partnerships and trusts will be eligible for refundability, and there will be no wage intensity requirement. This will allow most Māori organisations to be eligible. This provides clarity and will support investment in business R&D.	Medium	Medium
Levy bodies	Levy bodies will be eligible for refundability. This will support investment in business R&D and provides clarity that ensures levy body members will not be disincentivised to fund their R&D through their levy body.	High	High
Charities	Clarity is provided that charities and their wholly-owned entities will be ineligible for the Tax Incentive, while partially controlled business entities could be eligible.	0	
Local authorities	Clarity is provided that local authorities, as well as entities controlled by or associated with local authorities, will be ineligible for the Tax Incentive.	0	
Other tax-exempt organisations	Clarity is provided that other tax-exempt organisations will be ineligible for the Tax Incentive.	0	

5.3 What other impacts is this approach likely to have?

There is a potential risk that by providing broader refundability, businesses are motivated to recharacterise non-R&D expenditure as R&D expenditure or make fraudulent claims.

The Tax Incentive has been designed to reduce the likelihood of, and opportunities to recharacterise non-R&D expenditure. This includes requiring a close nexus between the R&D activity and the expenses claimed.

The proposal to broaden eligibility for refundability includes a 'payroll' taxes cap on refunds to mitigate the fraud, fiscal, and integrity risks associated with paying out cash.

Businesses would be entitled to a full refund of their R&D tax credits, to the extent their R&D tax credits are equal to or less than the amount of 'payroll' taxes paid in the relevant income year.[13]

Payments to Approved Research Providers are not included in the cap as it will be easy to verify that these payments have actually been incurred by a firm. Levy bodies are not subject to the cap due to reduced risk that refunded R&D tax credits will be unrecoverable, and some may have low 'payroll' taxes where R&D is largely contracted out.

Additional measures to mitigate risk include a sample of claims being audited each year, and an in-year approval process (included in the Act), which requires claimants to obtain approval of their R&D activities before they file a claim for their R&D tax credits. The $50,000 minimum threshold of eligible expenditure (included in the Act) is also an important measure in preventing a flood of smaller, lower-quality claims.

5.4 Is the preferred option compatible with the Government's "expectations for the design of regulatory system"?

There is no incompatibility between this regulatory proposal and the Government's 'Expectations for the design of regulatory systems'.

Section 6: Implementation and operation

6.1 How will the new arrangements work in practice?

Legislation will need to be enacted to give effect to broader refundability. It is proposed that broader refundability come into effect from businesses' 2020/21 income year. Therefore, it is proposed that the legislative changes needed to give effect to broader refundability be included in a tax bill scheduled to be introduced in June 2019, which would make changes to the Income Tax Act 2007 and the Tax Administration Act 1994.

Inland Revenue is leading implementation of the R&D Tax Incentive through the tax system, and will also be responsible for implementing broader refundability. Inland Revenue will identify and mitigate operational risk so that broader refundability can be delivered successfully. Inland Revenue has the necessary capabilities and capacity to implement broader refundability through its systems.

[13] Payroll taxes would include PAYE, FBT, employer superannuation contribution tax (ESCT) and withholding tax on schedular payments (WT).

It is expected that broader refundability will pose minimal compliance and administrative costs. No material change is expected for the R&D supplementary return. Instead of carrying forward non-refundable R&D tax credits, most firms will be able to receive R&D tax credit refunds. Any increase in administrative costs would be negligible, because Inland Revenue intends to carry out checks and reviews on claims from year one. The existing core team of Inland Revenue and Callaghan Innovation officials will continue to work on claims after broader refundability is introduced.

Inland Revenue, working with the other agencies, will develop guidance material on the broader refundability proposals and the impact of these on business. Since broader refundability expands on the new R&D Tax Incentive, there are no particular transition issues. Credits not refunded in respect of the 2019/20 tax year, and carried forward to the 2020/21 tax year, may be refunded in that latter year or subsequent years.

The proposed eligibility criteria for broader refundability are simpler than the existing eligibility criteria that apply to limited refundability in year one. This may result in a simpler process that is easier for businesses to comply with, so may in fact lead to reduced compliance costs.

Officials from all agencies (MBIE, Callaghan Innovation, and IR) have engaged, and will continue to engage, with interested stakeholders. This includes accounting firms, businesses, and Chartered Accountants Australia and New Zealand (CAANZ).

For some taxpayers, the legislation is expected to receive Royal Assent after the beginning of their 2020/21 income years. This is unlikely to create significant issues, however, because claims will be submitted with taxpayers' income tax returns which are due after the end of their income year, by which point it is anticipated the legislation will have been enacted. No credits will be refunded under the broader refundability rules until legislation has been enacted.

6.2 What are the implementation risks

In submissions on the R&D Tax Incentive, a clear theme was the need for low compliance costs, to the extent this is possible. Feedback highlighted the need for clear guidance and education material. Businesses engaged with on the broader refundability proposals reaffirmed the need for simple rules and low compliance costs.

As mentioned above, the broader refundability proposals contain eligibility criteria that are simpler than the year one limited refundability criteria. The proposed broader refundability rules do not require corporate eligibility and wage intensity tests to be satisfied, and rely on the existing (easier) rules of the R&D Tax Incentive. Allowing for broader refundability also reduces the need for continuous tracking of shareholder continuity, because once refunded credits are no longer at risk of being extinguished through breaches of shareholder continuity rules. This is particularly beneficial for smaller, R&D intensive start-ups which may regularly seek new investors to boost funding for their R&D projects.

Implementation risks arise where businesses re-characterise non-R&D expenditure as R&D expenditure in order to claim a larger tax credit. The incentive for re-characterisation is greater with broader refundability, because firms can receive cash refunds (rather than having to wait until they come into profit to utilise their R&D tax credits). The policy and legislation has been developed to manage this risk, although

it cannot be eliminated. The proposed 'payroll' taxes cap on refunds will be backed up by existing administrative processes, such as in-year approval and IR audits.

There needs to be strong uptake of the R&D Tax Incentive by businesses for the incentive to be successful. As indicated by the submissions received on the Bill, broader refundability is an important part of ensuring businesses transition to the scheme. Inland Revenue, Callaghan Innovation and MBIE officials have engaged with stakeholders on the broader refundability proposals. Guidance will also be developed by Inland Revenue, which will sit alongside the tax legislation, to provide claimants with more information about the broader refundability proposals.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

The impact of the broader refundability proposals will be monitored as part of the system-level monitoring of the R&D Tax Incentive. The R&D Tax Incentive will be monitored as part of the Research, Science and Innovation portfolio (for example, through publication of the annual System Performance Report).

As part of the R&D Tax Incentive, the Government is required to commission an evaluation of the incentive every five years from the commencement of the scheme. This evaluation would include an evaluation of broader refundability.

In addition to the 5-year evaluation of the incentive, the business R&D surveys run by Statistics New Zealand can also be used to evaluate the R&D Tax Incentive scheme (which would include broader refundability). This will provide additional information to measure the impact of the R&D Tax Incentive and the broader refundability proposals.

7.2 When and how will the new arrangements be reviewed?

In addition to the legislated 5-year evaluation of the R&D Tax Incentive, MBIE and IR will monitor the policy in the shorter term. This is so that any issues associated with broader refundability that could compromise the integrity of the Incentive can be quickly identified and remedied.

The R&D Advisory Group (RDAG) is a consultative committee comprising representatives from accounting firms and other businesses that functions as a forum for identifying and resolving problems with the R&D Tax incentive. RDAG had its first meeting in January 2019. Officials also have regular meetings and discussions with a broader range of stakeholders, at which policy and implementation issues are discussed. It is expected that RDAG and these regular stakeholder discussions will enable officials to conduct on-going monitoring and review of the impact of broader refundability.

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Appendix 1

The following table sets out key features of how refundability is applied in key OECD countries.

Country	Refundability policy	Other relevant factors
Australia	Limits refundability to: • firms with turnover less than A$20m & • subject to a A$4m annual cap.	The cap is proposed but legislation not yet passed. It is designed to reduce the costs of the scheme. The cap equates to A$10m eligible expenditure.
UK – SMEs	Firms in loss can cash out their tax credit at a discount to their value.[14] The UK government is currently consulting on introducing a cap relating to PAYE payments.	The SME scheme is more generous than the large firm scheme. SMEs must have: • fewer than 500 employees and • turnover less than EUR 100m.
UK – large firms	For non-SMEs, the tax credit is paid before tax, so loss making firms benefit equally with profitable firms, subject to not exceeding the amount of PAYE and National Insurance Contribution paid.	
Norway	Full refundability for tax paying entities.	The tax credit operates with a very low cap. The maximum credit is (approx.) NZ$2m, and in most cases is NZ$1m. The tax credit is not available to non-taxpayers.
Ireland	Full refundability, but paid in instalments over 3 years, and subject to limits relating to amounts of corporate income tax paid or amounts of payroll tax paid.	
Netherlands	Full refundability but limited to a firm's payroll tax liability.	
Canada	The credit is fully refundable for Canadian Controlled Private Corporations up to an expenditure limit of CAD 3 million. Higher expenditure is only 40% refundable.	The tax credit rate is 35% up to eligible expenditure of CAD 3 million, and 15% for higher amounts.

[14] Firms in loss can cash out 14.5% of surrenderable losses (these are the lesser of their trading loss and 230% of the R&D spend).

The table above demonstrates different mechanisms can be used for constraining refundability. Here are some brief comments on each of them:

Eligibility for refundability based on firm characteristic (generally a measure of size such as turnover)

- can target refundability to firms that, potentially, benefit most from it – ie, smaller or early stage firms
- creates boundaries which might disincentivise desired behaviours – eg, a firm may choose not to grow to keep turnover below the threshold
- relatively simple to understand but measurement would introduce complexity

Refundability applies up to a cap; credits above cap carried forward

- refundability addresses cash flow needs
- less of a boundary issue so less likely to impact on firm behaviours (though incentive to increase R&D spend may diminish above cap)
- relatively easy to understand and apply

Limit refundability based on other taxes paid

- if based on PAYE paid, more like a backstop rather than a fiscal cap as for most businesses the amount of PAYE across the whole firm will exceed 15% of the cost of R&D
- useful as a possible fraud deterrent as it should ensure a firm has a tangible economic presence, and may also prevent exploitation of a loophole if that involved claiming credits for high non-wage costs
- operates as some form of integrity and fiscal constraint measure, in that a firm cannot "take out" more than it is "putting in" to the tax system.
- some firms may not pay PAYE – eg, staff are not employees and are either shareholders who are paid a shareholder salary, contractors or provide sweat equity. This suggests either using a wider definition of taxes paid[15] or making a provision for firms to apply for an exemption
- administratively easy to understand and apply (subject to exceptions for firms without employees)

Refund credits at a discount

- supports loss making firms while providing an incentive to become profitable
- provides firms with a choice whether to refund the credit or carry it forward
- perhaps less easy to understand but relatively easy to apply

Spread refundability over several years

- more complex to track a firm's position
- for a firm in a long-term loss making position, will produce similar results to full year refundability after a few years
- creates a tail of Government liability

Target refundability based on R&D intensity

This mechanism is not used by any other country for targeting refundability (though in Australia R&D intensity influences the credit rate for large enterprises) but is worth considering as it is the basis of the year one scheme.

- can target refundability to those most deserving of it

[15] One possibility would be to include adding withholding taxes paid.

- creates a boundary that might give rise to perverse behaviours
- different measures of R&D intensity may favour different types of R&D performing firms
- though relatively easy to understand, adds complexity to compliance and administration.

Appendix 2

The examples below provide a practical illustration of how without refundability, firms do not receive a cash benefit from a tax credit if they are in loss or have insufficient income tax liability.

This table provides a simple example of how a profitable firm uses a tax credit to reduce the amount of tax it has to pay in a year:

Profitable firm (refundability makes no difference)	
Income	400
Expenses (includes 100 of eligible R&D)	300
Net profit/(loss)	100
Income tax liability (28% x Net profit)	28
R&D tax credit (15% x eligible R&D)	15
Net tax to pay	13

This table shows how a loss-making firm does not receive an immediate benefit from a tax credit without refundability:

Loss making firm (without refundability)	
Income	300
Expenses (includes 100 of eligible R&D)	400
Net profit/(loss)	(100)
Income tax liability (28% x Net profit)	0
R&D tax credit (15% x eligible R&D)	15
Unused R&D tax credits to carry forward to future years	15

This table provides a simple example of a profitable firm that has insufficient income tax liability to receive the full benefit of a tax credit without refundability:

Profitable firm with insufficient income tax liability (without refundability)	
Income	310
Expenses (includes 100 of eligible R&D)	300
Net profit/(loss)	10

Income tax liability (28% x Net profit)	2.8
R&D tax credit (15% x eligible R&D)	15
Unused R&D tax credits to carry forward to future years	12.2

This table shows how a loss-making firm receives an immediate benefit from a refundable tax credit:

Loss making firm (with refundability)	
Income	300
Expenses (includes 100 of eligible R&D)	400
Net profit/(loss)	(100)
Income tax liability (28% x Net profit)	0
R&D tax credit (15% x eligible R&D)	15
R&D tax credits refunded in cash	15