Inland Revenue
Te Tari Taake
Policy Advice Division

THE TREASURY
Kaitohutohu Kaupapa Rawa

Tax Policy Report: Business Tax Review – Discussion of Targeted Tax Credits

Date:	16 June 2006	**Priority:**	**High**
Security Level:		**Report No:**	PAD2006/130 T2006/1010

Action Sought

	Action Sought	**Deadline**
Minister of Finance (Hon Dr Michael Cullen)	Discuss with officials and consider the recommendations.	For your meeting with officials on Monday 19 June.
Minister of Revenue (Hon Peter Dunne)	Discuss with officials and consider the recommendations.	For your meeting with officials on Monday 19 June.

Contact for Telephone Discussion (if required)

Name	**Position**	**Telephone**
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Tax Policy Report: Business Tax Review – Discussion of Targeted Tax Credits

Executive Summary

This report examines some key issues around the potential use of targeted tax credits to help give better incentives for productivity improvements and improved competitiveness with Australia, drawing on international experience with these tax credits.

Ministers have indicated that they are keen to raise the possibility of targeted tax credits in the areas of R&D, market development and developing skills in the workplace as options within the Business Tax Review discussion document. It will be important to provide some clarity about the key elements of the design of these tax credits, and the issues relating to these elements, in the discussion document – to help focus and shape the debate and response to these options.

There are three elements in the design of tax credits that are likely to be critical in ensuring they are effective, and that they do not undermine other government objectives:

- A pre-approval process that ensures the planned expenditure (by businesses) meets the eligibility criteria, including wider criteria around the nature or characteristics of the business, and ensures the original policy intent and wider government objectives are maintained (for example, being able to reject expenditure that is eligible under the letter of the criteria but is inconsistent with the policy objective).
- All eligible expenditure within an approved plan would receive the tax credit automatically. As a result, the definitions of eligible expenditure in each area will need to be clear and robust, to ensure businesses can easily determine eligible expenditure and that this can subsequently be audited.
- Given the potentially unlimited amount of tax credits being paid automatically, a relatively modest overall rate of assistance will be important to reduce pressures to game the system and to moderate the overall fiscal risks.

There are two further design issues that will be central to the operation of the tax credits, where the case between the different approaches is relatively evenly-balanced in principle, and where it would be valuable to consult in the discussion document – to elicit feedback on which approaches are likely to work most effectively and to test the relative importance of the different effects of the approaches. These design issues are:

- Whether the tax credits should be volume-based or incremental in design – an incremental design can target the incentives on increases in the level of activity at the margin, but international evidence is that it may be less effective at raising the level of activity in practice.
- How the tax credits are delivered through the tax system – different approaches can be more or less effective at maintaining the value of the credit for businesses in a loss position, tax-exempt entities, and through to different ultimate owners (e.g. resident shareholders through the imputation system, and non-resident shareholders).

An updated draft of the business tax review discussion document will be provided, incorporating a section to cover the tax credit options and to address these issues. Officials will continue to investigate these issues over the next few months, so that we can engage effectively and help to shape the debate around these tax credits once the discussion document is in the public domain.

Recommended Action

We recommend that you:

a. **Agree** that the Business Tax Review discussion document should discuss the possible options around targeted tax credits, highlighting the issues (pros and cons) around each of the following points:

- A pre-approval board model should be proposed for each of the tax credits, with the board approving both plans from larger businesses and approving providers to work with smaller businesses, outlining the key issues around this approach and inviting feedback.

Agreed/Not Agreed Agreed/Not Agreed

- The definition of eligible expenditure for each of the targeted tax credits will be a critical element in the overall design, and that further work will be needed to develop the detailed definitions.

Agreed/Not Agreed Agreed/Not Agreed

- The issues around the level of support should be raised, and possible levels of support should be discussed.

Agreed/Not Agreed Agreed/Not Agreed

- Both the incremental and volume based approaches should be raised, with the key issues around each approach discussed, to canvass opinions and feedback; the government could also indicate a preference between the two approaches.

Agreed/Not Agreed Agreed/Not Agreed

- The issues around the delivery mechanism should be outlined, recognising the case for delivery through Inland Revenue systems, and setting out the options on how these tax credits can be delivered through the tax system.

Agreed/Not Agreed Agreed/Not Agreed

b. **Discuss** this report and its contents with officials, at your meeting on 19 June.

Discussed

Benedikte Jensen
for Secretary to the Treasury

Keith Taylor
Policy Manager,
Policy Advice Division,
Inland Revenue Department

Hon Dr Michael Cullen
Minister of Finance

Hon Peter Dunne
Minister of Revenue

Tax Policy Report: Business Tax Review – Discussion of Targeted Tax Credits

Introduction

1. This report examines some key issues around the potential use of targeted tax credits to help give better incentives for productivity improvements and improved competitiveness with Australia, drawing on international experience with these tax credits.

2. Ministers have indicated that they are keen to raise the possibility of targeted tax credits in the areas of R&D, market development and skills as options within the Business Tax Review discussion document. This report also considers the appropriate content for the discussion of these tax credits and the related issues in the discussion document.

Policy context and rationale

3. Businesses can invest in a wide range of business activities that can contribute to productivity (for example, investing in plant, equipment, buildings or intangible assets; innovating to develop new products, process or markets; or recruiting, retaining or developing staff). Overall, businesses will respond to this profit signal and will invest appropriately in these different activities, reflecting their own particular strengths, needs and circumstances. As a result, the overall policy message is to minimise the costs of taxation in distorting these decisions.

4. In general, it is undesirable to differentiate or favour these different business activities: a neutral, broad-based tax system will minimise tax biases and provide the strongest basis for productivity and competitiveness. This is reflected in the Revenue Strategy, which sets a relatively high threshold to justify the use of tax exemptions or concessions. Tax concessions need to be considered in the context of the full range of policy options, and only pursued if the benefits can be shown to outweigh the costs for New Zealand.

5. The existence of significant externalities is a situation where there are wider benefits to New Zealand that are not captured in the private benefits and private decisions of businesses, resulting in under-investment in those areas. The existence of an externality is not enough of itself to justify government intervention, it is also necessary to demonstrate that government can intervene effectively and that the benefits of this intervention outweigh the costs.

6. R&D is a relatively rich source of externalities, because it is an important input into the processes of innovation and the development of knowledge. Businesses that innovate make advances that other businesses can benefit from, by copying them and also by applying them in other contexts. As a result, there is consistent evidence that the total benefit to the economy from R&D exceeds the private benefit to the business that undertakes the R&D.

7. While there is reasonably strong empirical evidence as to positive externalities in the case of R&D, the case for other forms of expenditure is less clear-cut. However, the government has accepted that important externalities exist for market development and for the enhancement of certain skills in the workforce. This is currently reflected in

government programmes which target support to these activities. These externalities may be of the following forms:

- Externalities can arise from the first New Zealand firm to successfully supply a new product to an existing market or an existing product to a new market, as this may provide subsequent firms with knowledge of comparative advantage, networks, processes/practices and international business skills. Furthermore the productivity gains achieved through foreign exposure can have subsequent spillovers for non-exporting firms through increased competition.
- An externality from training staff, for example to provide them with foundation skills (numeracy, literacy and language), because these skills also help those individuals to play a fuller role in society more widely, as well as lifting their performance in the workplace.

8. Ultimately, once the case for government to intervene has been established, the key questions are whether the activity can be targeted effectively in practice, and whether delivery of targeted support through the tax system is going to be more effective or efficient than delivery through other routes.

Targeted business assistance

9. Broadly, business assistance can either be discretionary or non-discretionary in terms of how government agencies deliver the assistance. In principle, either form of assistance can be delivered through the tax system or through a grant mechanism. In practice, non-discretionary support is almost always delivered through the tax system. There is a growing body of international experience with tax credits to deliver business assistance:
   - Broadly three-quarters of OECD countries provide non-discretionary support for R&D, and all do so through the tax system.
   - A number of countries provide tax incentives to employers for training, including Japan, Korea, Austria, France, Mexico, Malaysia and some US states.
   - A small number of countries provide tax-based assistance for market development, including Italy and Malaysia[1].
10. The international evidence suggests that non-discretionary support, typically delivered through the tax system, is more effective than discretionary support at increasing the level of R&D performed. However, work on effectiveness has not been considered for the New Zealand setting. The evidence also suggests that the two forms of support are in part substitutes rather than complements – as the effectiveness of discretionary support decreases in the presence of non-discretionary support. This suggests that the introduction of targeted tax credits (or other non-discretionary support) could, in part, replace existing grant-based business assistance.
11. The remainder of this report explores the broad dimensions and design issues that need to be considered in designing targeted tax assistance: the definition of eligible expenditure; whether the support is incremental or volume-based; the use of a pre-approval board; the level of assistance; and the delivery mechanism. In general there is more experience and more analysis around the use of tax credits for R&D, and we have drawn in particular on the Australian R&D tax credit.

[1] Spain also has tax-based assistance for skills and market development, but is in the process of moving away from targeted tax assistance in favour of a lower corporate tax rate.

Definition of eligible expenditure

12. Non-discretionary support places pressure on the definition of eligible expenditure as, broadly, all expenditure that meets the definition receives the support. In contrast, discretionary schemes have a scrutiny and approval process that can help ensure the policy intention is maintained, i.e. the discretion of those assessing applications can help reinforce the formal criteria. This pressure on the definition of eligible expenditure is particularly pronounced if the tax credit relies exclusively on the "black letter law" to determine who receives the credits. For example, in Canada, the high street banks were able to access R&D tax credits for upgrading their branch IT systems; and in Australia, their America's Cup syndicate was able to access R&D tax credits on the whole of the cost of their challenge. The end result tends to be an iterative process of legislation to set the definitions, exploitation of this definition by creative tax practitioners, further legislation to close the specific loopholes, and litigation to resolve the appropriate treatment of the previous years. As a result, non-discretionary schemes typically require very thorough and robust definitions of eligible expenditure.

Research and Development

13. Two definitions of R&D are used in New Zealand. Tax law (to determine immediate deductibility of R&D expenditure) is based on accounting standards set out in Financial Reporting Standard 13. The system of discretionary grants administered by the Foundation for Research, Science and Technology uses a definition which summarises the Frascati manual (an OECD manual written to assist in the collection and issue of R&D data).

14. Both the Frascati manual definition and accounting principles are used within the OECD. The Australian rules are aligned with the Frascati manual. The UK and Japanese concessions appear to be based on accounting rules. The Canadian rules seem to require a flavour of technical risk similar to the Frascati manual. Another common feature of these rules is a focus on R&D performed in the country, by resident businesses and researchers. As a result there are also detailed rules to cover the subcontracting of R&D.

15. Further work will be required to determine which of these two definitions, or another definition, would provide the best scope to target externalities in the New Zealand context. There are limiting factors with both definitions. For example, the Frascati manual requires the presence of an appreciable element of novelty and the resolution of scientific and/or technological uncertainty and therefore once that uncertainty is resolved further expenditure on the R&D project would not be eligible for the concession.

16. Another important eligibility issue is whether New Zealand firms carrying out R&D in foreign jurisdictions be eligible for the concession if they repatriate the benefits and outputs of the R&D to New Zealand (or only if the activity itself is relocated to New Zealand). The effect on externalities from these types of limitations will need to be determined. Currently, foreign-owned companies are eligible for direct grants, but they must show how the project will benefit New Zealand.

Developing skills in the workplace

17. There are particular concerns around the definition of eligible expenditure on skills development for any tax credit. In general, there may be an externality from generic training, but not firm-specific training. For example, broader business skills (such as management or marketing) and general research or scientific skills are easily portable from one employer to another. This externality arises because labour is mobile and

because labour market inefficiencies may mean that neither the employer nor the individual receiving the training can fully capture the benefits, and may mean that they cannot coordinate to share the benefits and costs between them. As a result, these generic skills are able to be used and exploited by a new employer, without paying the full cost for them, discouraging employers from investing in these skills. There is some international evidence of under-investment in generic skills.

18. There are two particular concerns around a broad definition of eligible expenditure on skills. First, subsidising training through tax credits would provide an incentive for students to study while working but not for full-time study, when it is hard to see why studying full-time should have any lower externality than studying part-time. There would be a high potential for study support by way of salary sacrifice. Employers and employees could agree to split the tax credit benefits on training that is beneficial to the employee and potentially of little interest to the employer. Second, research shows that New Zealand businesses, by and large, do invest in training at higher levels, so there would be a substantial deadweight effect from the government providing a tax subsidy for expenditure on training generally.

19. To reduce these concerns, a relatively narrow set of eligible expenditure could be defined to reflect the specific externality identified around foundation numeracy, literacy and language skills. An initial set of criteria could include: the costs of externally-provided, NZQA-approved, foundation (level 1 or level 2) numeracy, literacy or language courses, provided to employees who are New Zealand citizens or permanent residents. The language skills courses could also be restricted to the official languages of English, Maori and New Zealand Sign Language – to limit the scope for abuse.

20. The focus on key foundation skills would complement the Upskilling the Workforce initiative agreed to by Cabinet on 20 March 2006 and announced in Budget 2006. That initiative calls for 'the development of a strategy to upskill the workforce should focus on, amongst other matters, the literacy, numeracy and language skills of the workforce at the low-skilled end as one of the drivers for lifting New Zealand's productivity within the context of addressing wider workplace practices.' [CAB Min (06)9/3A refers].

21. Overall, there is a choice between a relatively narrow definition of skill development (foundation skills) where eligible expenditure can be identified reasonably easily, and a wider definition (of generic skills more broadly) which will be much more difficult to effectively operate. Officials could continue to investigate definition for generic skills. It would also be possible to raise this as an issue in the discussion document. For example, the government could indicate a preference for using a broader definition of generic skills development, could recognise the challenges around developing a workable definition of eligible expenses for this, and could seek feedback on possible definitions of eligible expenditure that might make this practicable.

Market development

22. The current Market Development component of the Enterprise Development Grant limits the type of businesses that qualify and has a definition of eligible expenditure that includes market visits, in-market representation, advertising and promotion, marketing materials, market research, and trade fairs. Officials are concerned that the definition of eligible expenditure for market development together with the provision of a non-discretionary credit through the tax system would open the government up to significant fiscal risk.

23. There are two broad options to address this. The first is to narrow the types of expenditure that come within the definition of eligible expenditure, for example,

specifying that only expenditure relating to trade fairs qualifies, at the exclusion of other forms of market development. This may be opposed by businesses who can currently apply for funding for a range of expenditure. The alternative is to rely on a pre-approval process undertaken by a Board with reliance being placed on the Board to reject expenditure on the basis of administrative guidelines aimed at preventing abuse of the system.

Conclusions

24. Ultimately there is a trade-off between greater certainty for businesses and better targeting of the tax credits on the intended targets. Adopting a pre-approval board model (discussed in more detail below) reduces and shifts these pressures on the definition of eligible expenditure, improving the targeting of the scheme. Introducing a degree of ex-ante compliance helps ensure the original policy intent is maintained through the application and approval process, and could be achieved in a way that improves clarity and certainty for businesses. Even with a pre-approval board it will still be necessary to have a clear definition of eligible expenditure (e.g. this has been the experience in Australia with their R&D tax concession).

25. Overall, officials believe that the discussion document should emphasise that definition of eligible expenditure will be clear and specified in detail, and that further work will be needed to develop these detailed definitions.

Incremental over a base year

26. There are two broad approaches to the design of non-discretionary support, incremental and volume based. A volume based credit provides tax relief in proportion to the total volume of eligible expenditure. An incremental credit provides tax relief in proportion to the increase in the volume of eligible expenditure. Incremental and volume based approaches each have different advantages and disadvantages, broadly:

- A volume-based scheme considers each year in isolation and rewards all eligible expenditure undertaken in any given year. Consequently, a volume-based scheme would be less complex to design and administer – tax relief can be calculated at the level of individual companies (rather than groups) and is neutral as to when the expenditure is incurred.
- Volume-based tax credits account for about half of the existing R&D tax credits (in OECD countries), including a majority of the more recently-introduced schemes; also most market development tax credits are volume-based.
- An incremental scheme concentrates assistance on increases in eligible expenditure relative to previous years. As a result, an incremental scheme can offer the same rate of relief (at the margin) for a lower cost. Hence, in principle, would offer the strongest incentive to increase eligible expenditure at the margin. But an incremental scheme creates winners and losers amongst firms, and the greater complexity can make the scheme more prone to avoidance behaviour. For example, an incremental scheme would need to establish a baseline, need to take account of group structures, and need to address annual fluctuations in eligible expenditure (e.g. to discourage manipulation of the timing of expenditure).
- Incremental schemes account for about half of the existing R&D tax credits (in OECD countries), and there is one example of an incremental market

development tax credit. Some countries (e.g. Australia for R&D) employ a combination of volume-based and incremental credits – to provide both a base level of support and a higher level for additional activity.

27. There are a number of different models for incremental schemes, reflecting different approaches to establishing the base. The main broad approaches are as follows:

- The level of eligible expenses in a base year – this is relatively easy to understand and apply, but it will become increasingly equivalent to a volume-based credit over time (for example, R&D expenditure is currently growing at around 10 percent per annum in New Zealand).
- A historic base intensity of eligible expenses (e.g. eligible expenditure as a percentage of sales, or of total expenditure) – this rewards firms whose R&D, or skills, or market development intensity in any year exceeds that in the reference period. This is the approach used for the US R&D tax credit, however it risks creating distortions and its complexity could inhibit effectiveness.
- The previous maximum yearly eligible expenditure – this rewards increases in expenditure over the previous highest yearly level and is the approach used for the R&D tax credit in Japan, but it risks offering no incentive to increase eligible expenses unless the previous best will be exceeded.
- A rolling average of eligible expenditure – this rewards increases in eligible expenditure over the rolling average, this is the approach used for the R&D tax credit in France (with a two-year rolling average), there is a trade-off between the complexity of a longer-base period and the risk of encouraging more volatile eligible expenditure.

28. By concentrating assistance on increases in eligible expenditure relative to previous years, an incremental system is able to offer a greater incentive at any given cost and reduces the deadweight costs associated with subsidising expenditure that would have occurred in any event (without any subsidy). However, an incremental scheme creates winners and losers amongst firms, and will be more complex. There is also evidence that incremental schemes can be less effective than volume-based schemes – in practice – at increasing the level of R&D performed by businesses. The main sources of complexity are around defining the base and reducing the scope for avoidance behaviour.

29. Setting a base from a future date creates incentives to game the system and create a favourable starting point. Setting the base on a past level of eligible expenditure would also be difficult, because these costs are not generally identified or reported in this degree of detail (e.g. they are not currently reported to Inland Revenue). It may be possible to require businesses to establish and verify their base level of eligible expenditure as part of the pre-approval process, but this will increase the costs of application and may still require them to make difficult or arbitrary judgements.

30. Incremental schemes also create perverse incentives for businesses in certain situations to reduce rather than increase their eligible expenses (and the underlying activity), and to shift eligible expenses between companies and across years. The following example illustrates this:

	Base year	Year 1	Year 2	Year 3	Year 4
(i) Level expenditure *Incremental R&D credit*	100 *20%*	100 *0*	100 *0*	100 *0*	100 *0*
(ii) Lumpy expenditure *Incremental R&D credit*	100 *20%*	0 *0*	200 *20*	0 *0*	200 *20*

31. Using a simple base year option, maintaining a constant level of eligible R&D expenditure receives no tax credit, but shifting the same eligible R&D between years does receive a tax credit – even though the total amount of eligible expenditure is unchanged. This problem is particularly acute for incremental schemes that use a rolling average base, as recognising eligible expenditure in the current year reduces the tax credit available in subsequent years. These pressures create a degree of inefficiency and require a variety of anti-avoidance rules to protect the policy intent and the tax base. More generally, incremental schemes tend to work better where there is a stable, rising profile of eligible expenditure, and less well where expenditure is lumpy and can vary significantly from year to year.

32. Officials believe the discussion document should raise both options – incremental and volume based – outline the key issues around each approach, and canvass opinions and feedback. It would also be possible for the government to signal a preference for one approach or another in the discussion document, perhaps outlining the reasons for this preference[2].

Pre-approval board and approved partners

33. Each targeted tax credit should be overseen by a pre-approval board. The board would approve plans of expenditure, for example an R&D plan. Once approved, businesses would have automatic (non-discretionary) access to the tax credits on eligible expenditure within their plan. The plans could cover a number of years and would need to meet a minimum threshold – to keep compliance costs in proportion and to prevent the pre-approval board from being swamped with large numbers of small applications. The boards would ensure that the planned expenditure met the eligibility criteria and would have a gatekeeper role in that they have the authority to deny approval if planned expenditure is not consistent with the Government's policy goals and intent, even if the expenditure met the letter of the criteria. This is superior to a purely legislative approach, as the board can change their operational guidelines more quickly than it would be possible to achieve legislative change (for example, by adopting a new interpretation of a particular criterion, or by closing consideration of new applications for a period of time).

34. This pre-approval model would be sympathetic to the needs and capabilities of larger and smaller businesses. Large businesses could submit significant plans (that exceed the threshold) for approval. For example, the Australian R&D tax concession has a minimum threshold of AU$20,000; Ireland and the UK have similar thresholds at €50,000 and £10,000 respectively. Smaller businesses with more modest needs could work directly with pre-approved providers, for example accessing approved literacy, numeracy and language programmes from accredited providers (e.g. their local training provider). The provider would have already had these programmes approved by the

[2] For example, the UK government favoured an incremental credit in the consultation on the design of their R&D tax credit.

board, so each small business could automatically receive the tax credit against the approved training (without having to apply themselves). In addition, the boards could produce operational guidelines to give businesses clarity about how the boards will interpret and apply the criteria (and the sorts of information the boards require).

35. The key drawback with this pre-approval model is that it could undermine some of the advantages of a non-discretionary approach. In particular, it introduces an element of ex-ante compliance into the initial part of the process, rather than relying on ex-post compliance (audit). This may reduce certainty and predictability if the boards were inconsistent in their approach or application of the criteria (and if the boards did not produce clear guidelines), with the result that businesses may be less able to take the tax credit into account in planning and implementing projects because they cannot be sure the project will still be eligible for the tax credit every year. It may also reduce the reach and visibility of a tax credit – every business has to pay tax, but some may not want to go through the extra effort of developing and submitting a plan for approval or finding an approved provider.

36. Overall, it is likely that the ex-ante compliance through the pre-approval process will be crucial in supporting the definition of eligible expenditure and the ex-post audit process, to ensure the intended targets receive the tax credits and to ensure the original policy intent is delivered. With clear operational guidelines and guidance, this could also be achieved in a way that improves clarity and certainty for businesses[3].

37. This pre-approval model would be particularly important in the area of market development, as it is likely that it may not be possible to establish a sufficiently robust definition of eligible expenditure. Hence, in this case, there would be a significant reliance placed on the Board in rejecting planned expenditure on the basis of administrative guidelines aimed at preventing abuse of the system. The position on skills development is an intermediate case where we consider a sufficiently narrow definition of eligible expenditure (as suggested) would act to limit most applications to cases consistent with government policy.

38. The Foundation for Research, Science and Technology would be well-placed to provide the bulk of the approval board system for R&D, as this has some overlap with their work helping businesses develop R&D investment strategies, administering, monitoring, and evaluating the effectiveness of government grants for R&D. In a similar way, New Zealand Trade and Enterprise would be well-placed to provide the bulk of the approval board for market development. The approval board for skills development could involve some combination of the Ministry of Education, the New Zealand Qualifications Authority and the Tertiary Education Commission. Inland Revenue should also be involved in the approval boards, reflecting the interface with the tax system. Another option would be to have a single board covering all the tax credits, this would reduce compliance costs as businesses would have a single point for all applications, but it is likely that the boards will need specific, detailed expertise in the particular areas.

39. Officials believe the discussion document should propose a pre-approval board model for any targeted tax credits, with the board approving both plans from larger businesses and approving providers to work with smaller businesses. Again, it should also outline the key issues around this approach and invite feedback.

[3] For example, a business that has received ex-ante approval from the board for their planned expenditure has greater certainty than if they had assessed their eligible expenditure themselves and had to wait for an ex-post audit by Inland Revenue to confirm whether they had done so correctly.

Level of assistance and fiscal impact

40. In general, the level of assistance is usually expressed as the rate of government support relative to the total expenditure on the activity. This is important to ensure consistent comparison of tax-based assistance as different approaches can have quite different headline rates – e.g. a 120% enhanced deduction equates to a tax credit or grant of just under 7% of the total cost, assuming a 33% tax rate.

41. There is international evidence around the level of assistance in the context of R&D. This found that the effectiveness of total government support for business R&D declines at levels beyond 14% of business R&D, though the optimal rate of support will vary across countries depending on their particular characteristics (e.g. size and industrial composition of businesses). There is also evidence that discretionary and non-discretionary forms of R&D support are in part substitutes – depending on the design of each scheme and the overlap between them – and that the effectiveness of (discretionary) grants declines in the presence of (non-discretionary) tax credits. Given the rationale for the support is to internalise the externality around R&D – to counter under-investment and achieve an efficient level of R&D – it is also important that the subsidy rate is proportionate to the size of the externality.

42. Incremental tax credit designs can support higher rates of subsidy, across the narrower incremental base, while maintaining an efficient aggregate rate of support. This is the main justification for having very different rates of support in the different areas – e.g. perhaps 7% for a volume-based R&D tax credit, compared to the current 50% for market development – as the current market development grants only support a relatively narrow, incremental subset of all market development activity.

43. If there were concerns about the ability to define and maintain a narrow definition of eligible expenditure, this would suggest using a lower subsidy rate to help ensure the overall costs are consistent with the benefits to the economy. There may also be a case for applying similar rates of subsidy in each of the three areas, for example if it were felt that the externalities were of a similar size. Both of these may be reasons for considering a somewhat lower subsidy rate for market development (or for ensuring eligible expenditure in this area is tightly defined), if it were delivered as a tax credit rather than a grant.

44. Making some reasonably bold assumptions, the cost of the different tax credits might be: $50m to $200m for R&D, and $25m to $75m for market development per annum. It will be particularly difficult to develop any costing for a tax credit for skills development, as most available information focuses on the supply of these skills rather than the demand[4]. A tax credit for developing foundation skills could cost around $20m per annum, and broader definitions of generic skills development would increase the cost significantly. In each case, the net cost should be somewhat lower as there is existing funding for current support that could, in part, be reduced and replaced by the tax credits.

45. Officials believe the discussion document should raise the issues around the level of support, and set out the broad options around the rate and level of support (i.e. a low rate across a broad base or a higher rate on a narrower base).

[4] Information supplied by the Tertiary Education Commission suggests that demand from employers for literacy, language and numeracy training is limited, though the recent policy initiatives should help reveal more information in this area.

Delivery mechanism

46. The tax system provides a potentially efficient mechanism for providing targeted tax credits in that the vast majority of those wanting to claim a targeted tax credit will have some interaction with the tax system and Inland Revenue. Even non-taxable entities are likely to have regular contact with Inland Revenue through the GST system (and to a less relevant extent through the PAYE system). Targeted tax credits will be more visible, which may enhance take-up relative to alternative delivery mechanisms. They will also be considered by tax advisors who will play a role in reminding taxpayers of their availability.

47. The tax system already has monitoring and dispute processes in place as well as processes for delivering education material. Further, there are a number of existing mechanisms in place for payment of tax credits which could potentially be utilised.

48. The efficient delivery of targeted tax credits relies on meeting four key tax-related tests:

- The tax credits should be available to entities in a loss position. Using a mechanism which did not provide full value to entities in a loss position would not encourage investment by a significant subset of businesses, for example including investment in R&D by start-ups.
- The tax credits should be available to those who are tax-exempt. For example, business R&D can be sub-contracted to tax-exempt entities such as universities. Charities could provide skills training to their staff. Any delivery mechanism should not affect take-up of the tax credit as a result of the recipient's tax status.
- The tax credits should not be clawed-back by other parts of the tax system. Tax credits given to companies can be clawed back through a reduction in the company's tax payable which, in turn, can lower the imputation credits available when dividends are paid to shareholders. This would result in disparate treatment of resident and non-resident shareholders because the claw-back would depend on marginal tax rates (typically 15% NRWT for non-resident shareholders). Any delivery mechanism should not be impacted by the legal structure, so any tax credit needs to be integrated with the imputation regime (and NRWT) to ensure that tax paid income and associated imputation credits remain in alignment.
- The tax credits should retain their value for non-resident owners of New Zealand businesses. Similarly to the imputation issue, non-residents could receive a lower foreign tax credit for New Zealand tax paid and therefore face a higher tax liability in their home country.

49. The tax system could be used to deliver tax relief for eligible expenditure in a number of ways:

- Deductions could be enhanced to say 120% of actual expenditure;
- A credit could be given against year end income tax liability; or
- A refundable credit could be given.

50. An enhanced deduction is simple, but would only benefit taxable businesses that are also in profit. Non-taxpayers would not benefit, while taxpayers in a loss situation would only benefit to the extent they can set the excess deductions against future net income. Similar issues arise with the possible approach of a credit against a taxpayer's year end income tax liability.

51. A refundable credit would benefit businesses in loss and to non-taxpayers, as a cash payment (refund) could be made to those who for whatever reason cannot utilise the tax credit. However, this approach does not address our concern that tax credits lower New Zealand tax liability and could result in foreign companies facing a higher tax liability in their home country.

52. To address these concerns, the refundable tax credit could be treated for tax purposes as a government grant. This would result in the tax credit increasing taxable income and hence also the tax paid and imputation credits created. The level of the credit would need to reflect that it is being paid pre-tax. However, the treatment of the credit is still likely to influence the foreign tax treatment, as there is a risk of claw-back in the foreign jurisdiction if it is a credit against tax liability.

53. This further issue suggests that it could be simpler to make the tax credit payment by way of cash in all cases. This would have the added benefit around flexibility of payment timing, avoid significant complexities around interaction with the provisional tax system and would be administratively simpler. For example, payments of the cash credit could be made at agreed times throughout the year.

54. Officials are still researching the foreign shareholder situation to attempt to understand how much of a concern this really is. We do not envisage being able to report definitively before the text of the discussion document is finalised so we recommend that all the options for delivering the tax credit be kept open at this stage.

55. Officials believe the discussion document should outline these issues around the delivery mechanism for the tax credit, and should set out the different options on how these tax credits can be delivered through the tax system.

Other considerations

56. Export subsidies are banned under the World Trade Organisation. This is a particular issue for market development – and was carefully addressed in the design of the market development assistance scheme – but can also be relevant to other business assistance, e.g. for R&D. We will need to notify the WTO of any new or amended subsidy programme. Export subsidies are also prohibited in the Australia-New Zealand CER and, as a result, the current market development grants do not apply to developing markets in Australia.

57. A tax–based skills development initiative should avoid duplication with existing and prospective work-based skills development initiatives. The government funds workplace training, literacy, language and numeracy support through a number of funds administered by the Tertiary Education Commission. Across government work on “Upskilling the Workforce” is building evidence and developing proposals to encourage employers to expand workplace training. If needs become targeted, for example, selected industries, employees within certain regions of New Zealand or employees of certain ethnicities; then employer behaviour may be impacted by other avenues, such as by increasing existing and proposed grant initiatives and through communication channels, as well as by tax credits.

58. A tax-based R&D initiative should also avoid duplication with existing grant-based R&D assistance. There are risks in creating uncertainty amongst businesses over continued government support, as recent evidence suggests this may result in lower expenditure by businesses. Hence, decisions to reduce existing grant-based business assistance

should be considered carefully taking account of evidence on their effectiveness in New Zealand.

59. The contents of this report have discussed with officials from the Ministry of Economic Development; the Ministry of Research, Science and Technology; the Ministry of Education; and the Ministry of Foreign Affairs and Trade.

Proposed direction of further work

60. Officials will continue to investigate and explore these issues over the next few months, so that we are well-placed to engage on these targeted tax credits with businesses in the consultation and debate around the discussion document.